

The Global Talent Competitiveness Index 2013



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Bruno Lanvin and Paul Evans, Editors

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PREFACE

Welcome to this first edition of the Global Talent Competitiveness Index (GTCl), which we are proud to bring to you.

During the course of the past decade, INSEAD has been involved in developing two major global indices, on Global Information Technology and on Innovation.¹ Both have become world renowned benchmarks in their respective fields. While doing the research related to those two indices, we have been constantly reminded that the human factor was the most critical resource for national economies to improve their competitiveness and innovativeness in a sustainable way. In our work as educators and researchers, we are regularly struck by the importance of talented individuals and teams who make things happen, turning problems into opportunities and solutions.

Today's economy benefits from being *global* and *mobile*. The clothes that we wear, the phones that we use, and the planes that we fly are all the result of combining elements and factors of production that may come from a dozen or more countries. The deployment of information networks around the planet, and the convergence of broadband communications with mobile telephony, have contributed to making such combination not only feasible (e.g., through global supply chains) but also more affordable for the majority of humankind. Mobility has been redefined. Ideas, know-how, and innovative and entrepreneurial people routinely cross borders and generate value locally and globally; projects (such as this report) involve people collaborating across different continents, all of whom are living outside their respective countries of birth.

The engine of this global and mobile world is talent. In all regions of the world, a growing number of countries have recognised the importance of talent competitiveness, focusing on educational reform, reducing gender and other gaps, and attracting qualified and entrepreneurial people from abroad. Others are eager to learn how they can adopt similar strategies, and fit them to their specific needs and requirements. All can benefit from being able to access simple and credible tools to monitor current efforts, identify best practices, and chart the course ahead.

In development economics, as well as in most social sciences, it is often underlined that “*you cannot improve what you cannot measure*”. The ambition of the GTCl is to be an action tool for continuous improvement in linking talent to economic development, and an instrument to stimulate dialogue between governments, business, academia, professionals and their associations, and other ordinary citizens.

This report is the result of a strong partnership between the business sector, government and academia. We are immensely grateful to Singapore's Human Capital Leadership Institute

(HCLI) and to Adecco for having accepted to join and support this unprecedented effort. The GTCl reflects the professional skill and expertise of our research team led by Martina Mettgenberg Lemièrre, with Nurina Merdikawati and Aung Myint Thein. We also want to express our gratitude to the individuals and institutions who contributed to enhance our own thinking in the field of talent competitiveness by providing analytical chapters to this first edition, namely the World Bank and The Conference Board. We also want to associate in these thanks the Joint Research Centre of the European Commission (JRC), which performed a rigorous audit of the GTCl model, including its structure, variables and analytical foundations.

The GTCl team also owes a lot to the encouragement of our distinguished Advisory Board, whose members are listed in this report. And we are also indebted to INSEAD's academic network, notably Professors Javier Gimeno, Maria Guadalupe and Rose Xiaowei Luo, and also Professors Phil Anderson, Henrik Bresman, Pushan Dutt, Antonio Fatas, William Maddux, Andrew Shipilov, Narayan Pant, and Douglas Webber, for their inputs and advice on the model and measures. An ambitious project such as this needs the inputs and constructive critique of economists, demographers and sociologists as well as those in the HRM, strategy and labour economics areas. To guide the development of the GTCl, this academic network is being broadened to an Academic Council of leading scholars in such disciplines across the world.

This first edition of the GTCl report must be seen as a first step of a work in progress. In the coming years, subsequent annual editions of the report will include improvements on the GTCl methodology, a broadening of its array of variables, and increases in its country coverage. Analytical chapters will continue to offer state-of-the-art views on some of the frontier areas of talent competitiveness. The dedicated GTCl website (globalindices.insead.edu/gtci) and linked social network fora will offer a continuous basis for further dialogue between GTCl authors and readers. We hope to see you out there very soon!

Bruno Lanvin

Executive Director for Global Indices, INSEAD

Paul Evans

The Shell Chaired Professor of Human Resources and Organisational Development, Emeritus, INSEAD

Notes

¹ Since 2001, INSEAD has been collaborating with the World Economic Forum to publish the Global Information Technology Report (GITR), based on the Networked Readiness Index (NRI); since 2007, INSEAD has been co-producing the Global Innovation Index (GII), which is now co-edited by INSEAD, Cornell University and the World Intellectual Property Organization (WIPO).

TACKLING ASIA'S TALENT CHALLENGES, TOGETHER

The war for talent between organisations has been much researched and written about, but today, we see countries, not just companies, engaged in this competition. With Asia leading the way in terms of global growth and therefore driving much of the increase in talent demand, coupled with greatly increased global connectivity and talent mobility, we see today's highly mobile workforce seeking employment opportunities beyond their country of origin.

In an attempt to stem the talent outflow, increasingly we see countries taking action, be it regulations, policy changes, or incentives, to better attract and retain talent in-country. But just how effective and efficient are they in doing so?

The quest for answers led the Singapore Human Capital Leadership Institute (HCLI) to partner with INSEAD to create the Global Talent Competitiveness Index. Based on rigorous measurement and analysis, it seeks to inform policy and business decision-makers on the relative strengths of different countries across a host of talent-related factors. This index and its associated scores can hopefully help identify critical issues and prioritise actions.

At HCLI, it is our strong belief that countries can best increase talent competitiveness when the different constituents work together to attract, grow and retain talent. These constituents may include multiple players in the ecosystem: business, government, academia, consulting, and thought leaders.

With this in mind, we have evolved the ecosystem concept to be core to HCLI's modus operandi. It is our aim to help organisations accelerate human capital and leadership development in Asia, for a globalised Asia. Rather than attempting to do this alone, we foster rich networks between the many parties in the ecosystem, manifested through our various executive development programmes and research platforms.

As an example, in our annual flagship Singapore Business Leaders Programme, we seek out the best minds from business, academia, government and consulting to identify key trends and share insights on doing business in Asia, and what this means for leadership and human capital strategies. We specially created the Consortium Platform – where integral groups of four to five business leaders from at least five global/regional organisations across various industries come together – to stimulate cross-learning of best practices and co-creation of novel solutions to drive growth in Asia. Our research roundtables, with participation from senior executives, academia and thought leaders, bridge the gap between theory and practice in the leadership and human capital arena.

In today's world of global connectivity and talent mobility, we believe the solution to a country's talent competitiveness lies not with one entity but with a multitude of parties in the ecosystem working together, involving business, government and academia. Chapter 2: "Business ecosystems: developing employable talent to meet Asia's needs" details our view of how this can be done.

It is our sincere hope that this inaugural Global Talent Competitiveness Index will be useful as a benchmark for countries, cities and organisations as they compete for talent in this global marketplace.

Kwan Chee Wei

*Chief Executive Officer
Human Capital Leadership Institute*

ADECCO | FOREWORD

Adecco is honoured to be partnering with INSEAD and the Human Capital Leadership Institute (HCLI) to produce this first edition of the Global Talent Competitiveness Index.

The first study of its kind, the GTCI will help decision-makers, businesses and governments to better match talent with jobs.

Companies, countries and cities are indeed increasingly competing for talent, and seeking to attract, develop and retain it. Talent has become the key resource of the global economy and therefore one that decision-makers need to understand in depth.

As the leading provider of HR solutions and one of the largest employers in the world, Adecco is confronted with the realities and challenges of labour markets on a daily basis. Present in over 60 countries, working with over 100,000 companies, and employing more than 850,000 people every day, we see that talent becomes increasingly scarce in many regions, due to demographics, but also due to the mismatch between skills available and open positions.

The GTCI confirms what we see on the ground: countries apply very different strategies to develop and retain talent. The result is that some countries are talent champions, others underperformers, and there seems to be a clear correlation with their respective economic and labour market performances.

Talent champions foster and develop locally available talent by making their labour markets more flexible, by investing in lifelong learning and by promoting geographical mobility. The availability of “labour and vocational skills” (LV) and “global knowledge skills” (GK) seem to be other crucial elements to do well in today’s talent economy.

Countries in the Northern Hemisphere are struggling to match talent with market demand. In the US, for example, millions of jobs in manufacturing and agriculture have shifted to the services and creative sectors. Germany, Europe’s economic powerhouse, is struggling to find enough talent with MINT (mathematics, IT, natural sciences, and technical) training to match the more than 90,000 technical and engineering vacancies. Even the “talent champion” Switzerland faces a serious talent mismatch, for instance in healthcare, where 40% of hospital roles need to be filled by foreign nationals.

The growing importance of talent comes at a time when the global labour market is suffering from high unemployment in many, especially European, economies. Youth unemployment, in particular, stands at unacceptably high levels: across Europe, nearly eight million young people are out of work, education and training. That is almost one in four. Over 55% of young people are jobless in Spain, over 60% in Greece.

The mismatch in the need for and availability of talents with the right skills is muddying the waters even further with many unfilled vacancies. In the US and Europe, up to eight million jobs are left vacant each year, with different countries requiring different skills. While in Asia, the demand for highly-skilled workers now far exceeds the talent pool. China, as an example, may face a skills gap of more than 20 million college-educated workers by 2020; Indonesia’s need for skilled workers could rise from 55 million to 113 million by 2030.

As the GTCI score exemplifies, China, which still exhibits solid economic growth rates, achieves 47th position in the ranking. Could this fact threaten the country’s prospects for sustainable growth? To make matters even more complex, businesses and job seekers are increasingly looking for novel, more flexible ways of working.

All this emphasises that it is more important than ever to understand talent. Governments and companies need to work together to create labour markets that are based on an understanding of what employers need and the skills required to meet those needs in an efficient labour market, now and in the future, taking into account labour mobility and education systems.

We are confident that with this first edition of the GTCI the foundation stone has been laid for further research in coming years; for example, by looking into the role of cities and sectors in their quest for talent. Our aim is to provide an even deeper understanding of talent: how we can nurture, attract and retain the workforce of the future.

Patrick De Maeseneire

Chief Executive Officer, Adecco Group

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CHAPTERS

CHAPTER 1

GLOBAL AND MOBILE: TALENT IS RESHAPING THE WORLD ECONOMY

**Bruno Lanvin, Paul Evans, Martina Mettgenberg Lemière and
Nurina Merdikawati**

INSEAD¹

From the end of the Second World War until the end of the 20th Century, the world has known a period of almost uninterrupted growth, which has translated into higher living standards, a rapid expansion of international trade and longer lives. Initially concentrated in the advanced mature economies of North America, Europe and Japan, this positive wave found additional momentum in technological progress (especially on the information technology side), turning into another episode of rapid globalisation. New large economies started to emerge (China, India), while mass poverty kept regressing (according to the World Bank, 22% of the world lived below the poverty line in 2008, down from 52% in 1981). However, with the beginning of the 21st century, it became clear that reducing inequalities among countries was not necessarily synonymous with reducing inequalities within countries.

In mature industrial economies, unemployment (and more spectacularly youth unemployment) has returned to centre stage. While unemployment across Europe averaged 12% in late 2012, youth unemployment hit a 24% average, even exceeding 50% in Greece and Spain.² The challenge is no less daunting in developing countries. Whereas globalisation has often been described (or caricatured) as the source of displacement of jobs toward “low-wage economies” and a breeding ground for “social dumping”, it is important to keep in mind that in many emerging economies, demography also puts pressure on policymakers to focus on job creation. To take only one example, more than half of the population of Nigeria (i.e., almost 90 million people out of 160 million) is younger than 20.³

MOBILITY REDEFINED

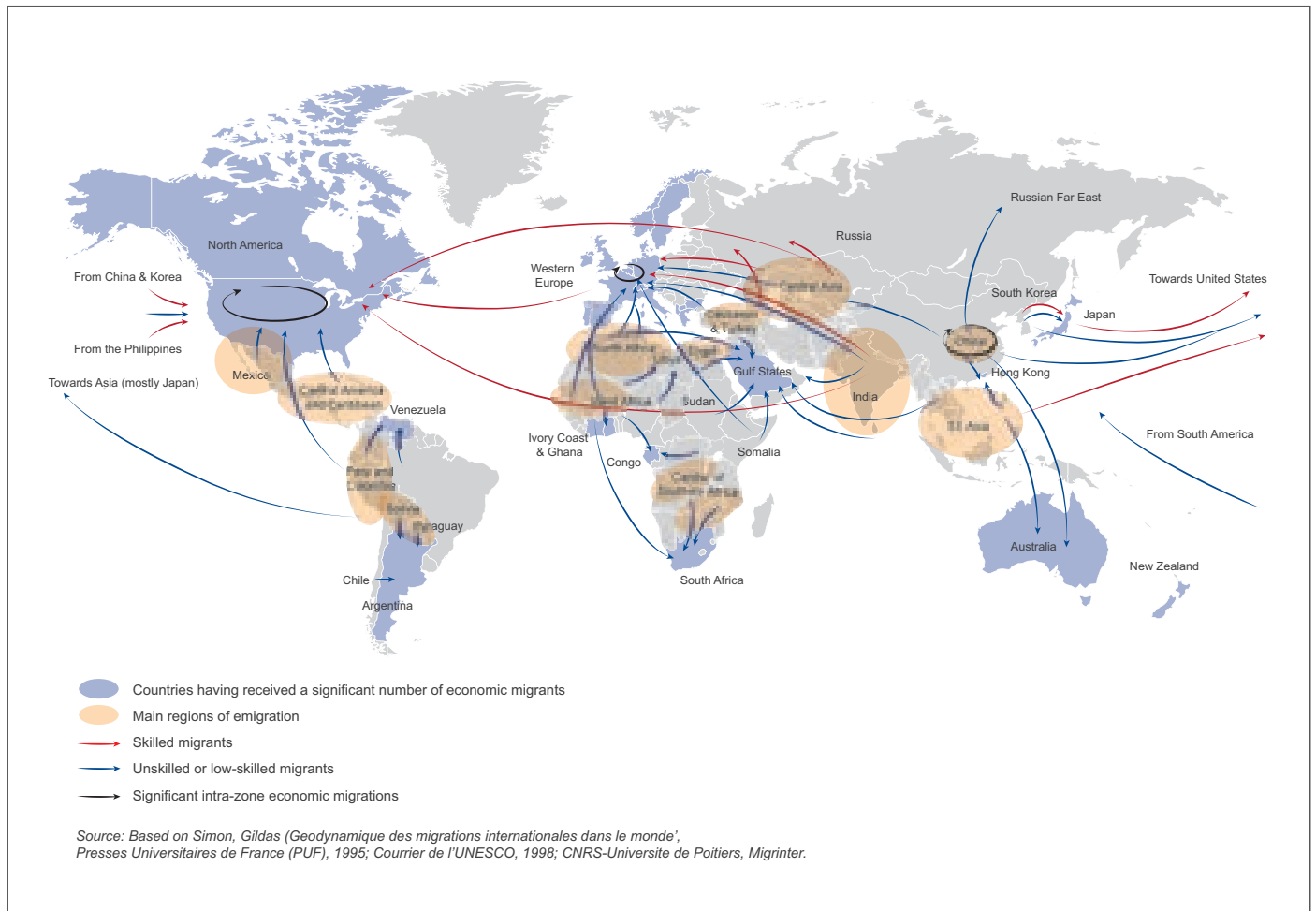
At the same time, production factors have become increasingly mobile across borders, generating new production models in all sectors from manufacturing to telecommunications, health and education. Human resources do not escape this trend: during any given week, or even day, millions of workers cross national borders (see Figure 1 below). In 2012, remittances from migrant workers were estimated at US\$550 billion; in some countries such as Lesotho, Nepal and Moldova they represent 25% or more of GDP.⁴ On the other hand, information technologies and networks allow high-skilled workers to deliver their services from remote locations, and to collaborate seamlessly with teams scattered across continents.

All this provides a complex and fast-moving picture of how human resources contribute to production, growth, development and innovation around the planet. There are immediate challenges, as well as longer-term ones. In the short-term, for example, it is striking to note that, while in 2012 the European Union had some 26 million unemployed citizens,⁵ it is expected that there will be 900,000 unfilled positions in the ICT sector by

2015.⁶ At the same time, in the demographic arena the World Bank forecasts that Africa will have more inhabitants than India by 2035. So governments, businesses and individuals have important choices to make: How to create jobs? How to mobilise the best talents? How to choose an education or vocational training framework that will bring both fulfilment and economic stability?

On their side, many governments have started to respond to the need to ensure the growth of the workforce; for example, by extending opportunities to women, older people, and those who were too often ignored in the past. The possibility of attracting workers from abroad is also often considered, but immigration poses major social and political challenges, especially in times of slower growth and uneven demographics. At the same time as Europe (and to a lesser extent other countries such as the US or even Singapore) struggles with youth who do not have the skills for an economy with fewer low-skill factory jobs, the biggest demographic divide in history between contiguous regions looms large – the Mediterranean divide between the diminishing and ageing population of Europe and the fertile but unschooled populations of Africa and the Middle East, recently symbolised by

Figure 1: Migration of skilled and unskilled labour between regions of the world



the Lampedusa tragedy. From the lack of economic opportunities in demographically dynamic economies such as in Africa to the need to restore growth in older ones, for example in Europe, the talent equation spans a large array of social, economic and political concerns.

Contrary to some of the visions popular in the 1950s and 1960s, robots will not replace humans. Yet, automation and higher levels of technological intensity in the production of goods and services will continue to allow higher productivity per employee, and to foster innovation. Behind the software codes that steer robots in an automated factory, behind the communication tools and virtual networks that have become part of our everyday lives, lie increasing numbers of talented individuals, teams of skilled people, and collaborative networks. Studies for the European Union and the United States show business investment in knowledge-based capital contributing 2% to 34% of average labour productivity growth.⁷ How well do societies equip their human capital for the innovation that a knowledge society demands? How well do they equip people for a world where not just jobs but entire careers are characterised by continuously shorter lifecycles? Over the last few decades, the world has started to measure the basics of employability, using statistics on literacy and numeracy.⁸ But we are just beginning to understand how we could measure the basics of the new requirements of a world of innovation, demanding qualities like initiative, entrepreneurship, teamwork, and the ability to learn.⁹

CONSIDERING SKILLS GAPS IN A GLOBAL CONTEXT

The well-known notion of “skill gap” is one of the most visible facets of the current global talent debate. By itself, it could constitute a valid justification for the production of the Global Talent Competitiveness Index (GTCl).

With the rapid attrition of farm and manufacturing jobs in the developed world, the opportunities are now in the business services, health care, scientific and green sectors of the economy. The need here is for creative and well-trained knowledge workers that are in short supply. As underlined earlier, there is a widespread mismatch in Europe between what companies need in terms of skills and what local labour markets can offer. But this situation is far from unique: in all parts of the world, businesses big and small insist that they are unable to recruit because of a lack of qualified candidates.

Educational institutions are under pressure to supply the employable skills that the new global knowledge economy demands (the GTCl calls these Global Knowledge, or GK, skills). A dangerously high number of young people leave secondary education without the literacy, numeracy, social and team skills, and problem solving ability that are needed today, let alone the flexibility to cope in a world where already most individuals will change career many times in their life. Beyond formal training, labour markets also need to offer opportunities for growth through experience. One of the reasons why youth unemployment is so high in developed countries is that enterprises often look for highly

skilled people and do not provide sufficient apprenticeships and training opportunities.

Talent shortages threaten growth in emerging countries. Half of India’s GDP is dependent on the service sector, and the shortage of global skills in such emerging economies is exacerbated by a shortage of people with the necessary mid-level professional and vocational skills (the GTCl calls these Labour and Vocational, or LV, skills). A recent study estimates there will be a potential shortage of about 40 million high-talent people across the world in the next two decades, or 13% of the demand for such workers, with a shortage of nearly 45 million with mid-level vocational skills for the needs of the emerging countries of India, South Asia and Africa.¹⁰ On the other hand, there will be a potential surplus around the world of more than 90 million low-skilled workers, roughly 10% of the supply of such workers.

This is confirmed by the strong correlation between GTCl scores and GDP per capita (see below in this chapter). Many other economic and social challenges that relate to various types of skills gaps emerge from this global picture and will be addressed in this first edition of the GTCl (and most probably in subsequent editions). They include in particular the following:

- The need for greater cross-border mobility of talent, guided by appropriate immigration policies, to balance surpluses and deficits of skills across the world. The US in the past has been known for its openness to immigration (17% of STEM (science, technology, engineering and mathematics) workers in the US in 2008 were foreign born), whereas in Europe immigration is dominated by low-skilled workers from neighbouring regions of Africa and the Middle East that may add to the surplus of low-level skills. The necessity of expanding the labour supply and talent pool is also fuelled by demographics, with ageing populations in Europe, Japan, and even China in the near future.
- Access to education and opportunities of members of the potential talent pool who may have been at the fringe of labour markets in the past – women, people of a different ethnic background than those predominant in a particular country, people with handicaps, those with an underprivileged background who could not access mainstream educational systems.
- Part of the skills gap may arise from the reluctance (or the inability) of companies to invest in talent development, expecting to find people on the marketplace with the high level of skill and knowledge that they require. This leads to the need to rediscover or reinvent apprenticeship schemes and life-long development programs, possibly accompanied by appropriate retention policies to encourage skilled individuals (and possibly the firms that employ them) to stay and contribute to creating local value and local jobs.¹¹

To address such complex (and inter-connected) challenges, who should be responsible for action? Obviously, this has to be a collaborative effort: government, business, organised labour, educational establishments and individuals all have key and complementary roles to play. All will join with their own baggage, often based on decades of successes and failures, their own

vocabulary and their own philosophy. One should not expect that such approaches will be uniform (or even compatible) across various economic systems and cultures around the world. This is typically the kind of situation in which the provision of fact-based quantitative indicators can help identify options and facilitate action.

A brief history of talent and competitiveness

While football and baseball teams as well as the world of music have long realised that talent is vital to success, the notion of talent is relatively new in the economic arena, emerging during the last 20 years. That of the talent competitiveness of a country is even more recent. Economists' views have come a long way since the days of Smith and Ricardo, when wealth and competitiveness were mainly linked to land, natural resources and labour. Technological change and innovation have since become areas of critical attention to enhance the productivity and competitiveness of nations. Neo-classical economists argued that skills could be treated as a durable investment good acquired in part through education and on-the-job training. Developmental investment by a business only had a clear return if that training nurtured firm-specific skills that an employee could not sell for a higher wage elsewhere. This meant that the development of generic skills was the responsibility of the state-guided educational system and the individual.

It was the Japanese, poor in natural resources but rich in people, who first began to argue in the 1950s that people were resources, fuelling the birth of the Human Resource Management movement in the 1970s in the United States, before it spread to the rest of the world. Early concerns with talent focused on strategic manpower planning, projecting the needs for engineers or scientists into the future and working backwards to fill the predicted gaps. But the turbulence and unpredictability of an increasingly global world quickly discredited this – a major oil corporation predicted in the early 1970s that it alone would need more chemical engineers than were supplied by all the universities in the United States, only to experience a surplus of such engineers a few years later after the first oil shock. The concern focused on “strategic” human resources – above all, the leaders responsible for the organisation. Capital-intensive industries such as petroleum were acutely aware of the enormous power of business leaders who needed to have global perspectives and mindsets, pioneering the focus on leadership development that was the precursor of the talent focus.

The shift of our societies towards a global, knowledge-based economy was becoming apparent in the late 1980s. Social observers such as Peter Drucker and Thomas Stewart argued that knowledge workers and the intellectual capital of the firm would be the keys to the future. The resource-based view of the firm that was then becoming a paradigm in corporate strategy reinforced this view.

Various events in the 1990s and 2000s increased this focus on talent and competitiveness. First, the shortage of IT professionals in the dot.com boom of the late 1990s sharpened and broadened the concern for talent. Second, there was growing awareness of the future impact of demographic trends in Europe, the United States and Japan as the bulge of experienced baby boomers headed for retirement, leaving a thin pyramid of younger people as a result of declining birth rates. Third, there were suggestions that the performance returns from selecting highly talented individuals for key roles were much greater than those from average individuals. A best-selling book by McKinsey authors on “The war for talent” brought the importance of talent to the attention of the broader public.

As China, India and other emerging countries were moving far more rapidly into the manufacturing and business services sectors than anyone had expected, the concern for talent became even more acute. With the hollowing of the traditional manufacturing sector in the West, the economies of the developed countries were becoming much more dependent on both highly skilled people and innovation as a source of competitive advantage. More “skills gaps” started to emerge. Simultaneously, while China, India and Brazil had an ample supply of low-skilled and cheap labour for the expanding factories, they were plagued by a limited supply of vocational skills, and especially the managerial and leadership talent with the experience to run global enterprises. Managerial salaries in Shanghai, Bangalore and Sao Paulo started to rise to reach the levels of New York and London.

INTRODUCING THE GLOBAL TALENT COMPETITIVENESS INDEX

Today, countries are competing globally to grow better talents, to attract the talents they need, and to retain those that bring them competitiveness, innovation and growth, while seeking to put economic and social policies in place that will facilitate this. In such a context, governments, business and the various components of civil society need quantitative instruments that can inform their decisions (as investors, employers, employees or job seekers) and help them to design and implement better policies in areas such as education, human resource management, and immigration, to name a few. This is the purpose of the GTCI.

Rationale, purpose and value of the Global Talent Competitiveness Index

The challenges mentioned above touch on the livelihoods of people in all types of countries. To understand the issues at hand, to mitigate the risks that they trail in their wake, and to provide the grounds for rational and well-informed policies and decisions, there is a need for a widely recognised and analytically rigorous way of measuring the performance of countries across the world on talent competitiveness. While a significant number of composite indices concerning skills, talent and human capital have been developed in recent years¹² both private and public players in the field see a need for a neutral, global and respected index that would enable them (1) to assess the effectiveness of talent-related policies and practices; (2) to identify priorities for action in relevant areas; and (3) to inform international and local debate in this arena.

It is in this context that INSEAD and the Human Capital Leadership Institute of Singapore have decided to join forces to build and disseminate the Global Talent Competitiveness Index, to be issued and updated on an annual basis. Adecco, as the world's leading corporate player in the scene of professional talent supply, has also decided to join the partnership. INSEAD built on its expertise and experience in developing two other global indices – the Global Information Technology Index¹³ and the Global Innovation Index (GII). These indices are now widely recognised by the international community, respectively in the domains of information technology and innovation. The Global Information Technology Index is in its twelfth year, while the GI's sixth annual edition was launched in 2013 at the Economic and Social Council of the United Nations.¹⁴ The development of the GTCI model was facilitated by dialogue with academics from many disciplines at INSEAD, now being anchored in an Academic Council of leading scholars across the globe, and complemented by an expanding Advisory Board of government and business leaders who feel that vital issues are at stake.

What do we mean by 'talent'?

The Economist noted in 2006 that “companies do not even know how to define ‘talent’, let alone how to manage it. Some use it to mean people like Aldous Huxley’s alphas in *Brave New World* – those at the top of the bell curve. Others employ it as a synonym for the entire workforce, a definition so broad as to be meaningless.”¹⁵

Indeed, academics have only begun to focus on talent management, even at the level of the firm, in the recent past.¹⁶ A growing body of literature argues that attracting and growing talent should focus on the skill requirements of strategic positions requiring firm-specific tacit knowledge and industry experience that cannot be found easily in the external labour market.¹⁷ This follows more general calls for greater differentiation among roles within organisations and a greater focus on strategic resources.¹⁸

The GTCI is an input-output model, in the sense that it combines an assessment of what countries do to produce and acquire talents (input) and the kind of skills that are available to them (output).

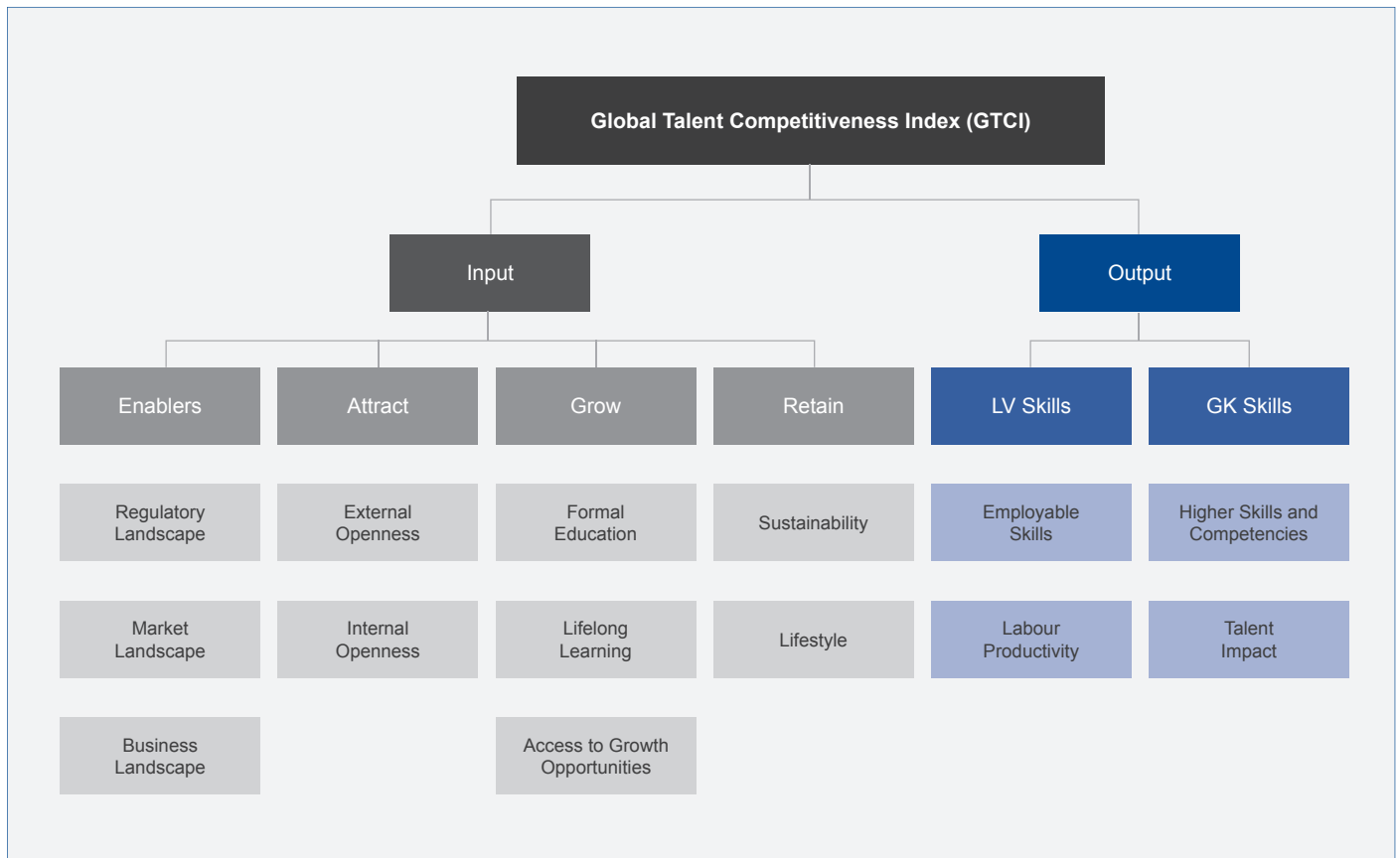
On the output side, the GTCI differentiates between two levels of talent, which can be broadly thought of as mid-level and high-level skills. Mid-level skills, labelled Labour and Vocational Skills (or LV skills) describe skills acquired through vocational training and skills relevant to technical roles in the workforce. The economic impact of LV skills is measured by labour productivity and by the relationship between pay and productivity. High-level skills, labelled in the GTCI as Global Knowledge Skills (or GK skills) deal with knowledge workers in professional, managerial or leadership roles; their impact is evaluated by indicators related to innovation and entrepreneurship. With its focus on talent, we do not measure a third type of human capital, unskilled labour, although discussions will sometimes embrace lower-level skill. Together, LV skills and GK skills constitute the two output pillars of the GTCI.

The input parameters of the GTCI are based on the Attract-Grow-Retain framework used by corporations to steer talent management. Multinational corporations frame talent management in these terms, defining talent management as an organisation's efforts to attract, select, develop and retain key talented employees.¹⁹

In the context of national competitiveness, attracting talent should be viewed in terms of the growth of the talent pool – external attraction involving encouraging appropriate immigration, and internal attraction focused on removing the barriers to entering the talent pool for groups such as those with an underprivileged background, women and older people. Growing talent has traditionally meant education but should be broadened to include apprenticeships, training and continuous education, as well as access to experience or growth opportunities. (While we may acknowledge that most skill development occurs through

experience, much remains to be done to conceptualise and measure its role.) The more talented the person, the wider the global opportunities they can find elsewhere. Retaining talent is necessary to ensure sustainability; one of its main components is the quality of life. In addition, the regulatory, market and business landscapes within a country facilitate or impede talent attraction and growth; the GTCI calls these elements “Enablers”. Together, Enablers, Attract, Grow and Retain constitute the four input pillars of the GTCI model.

Figure 2: GTCI model 2013



Conceptual framework

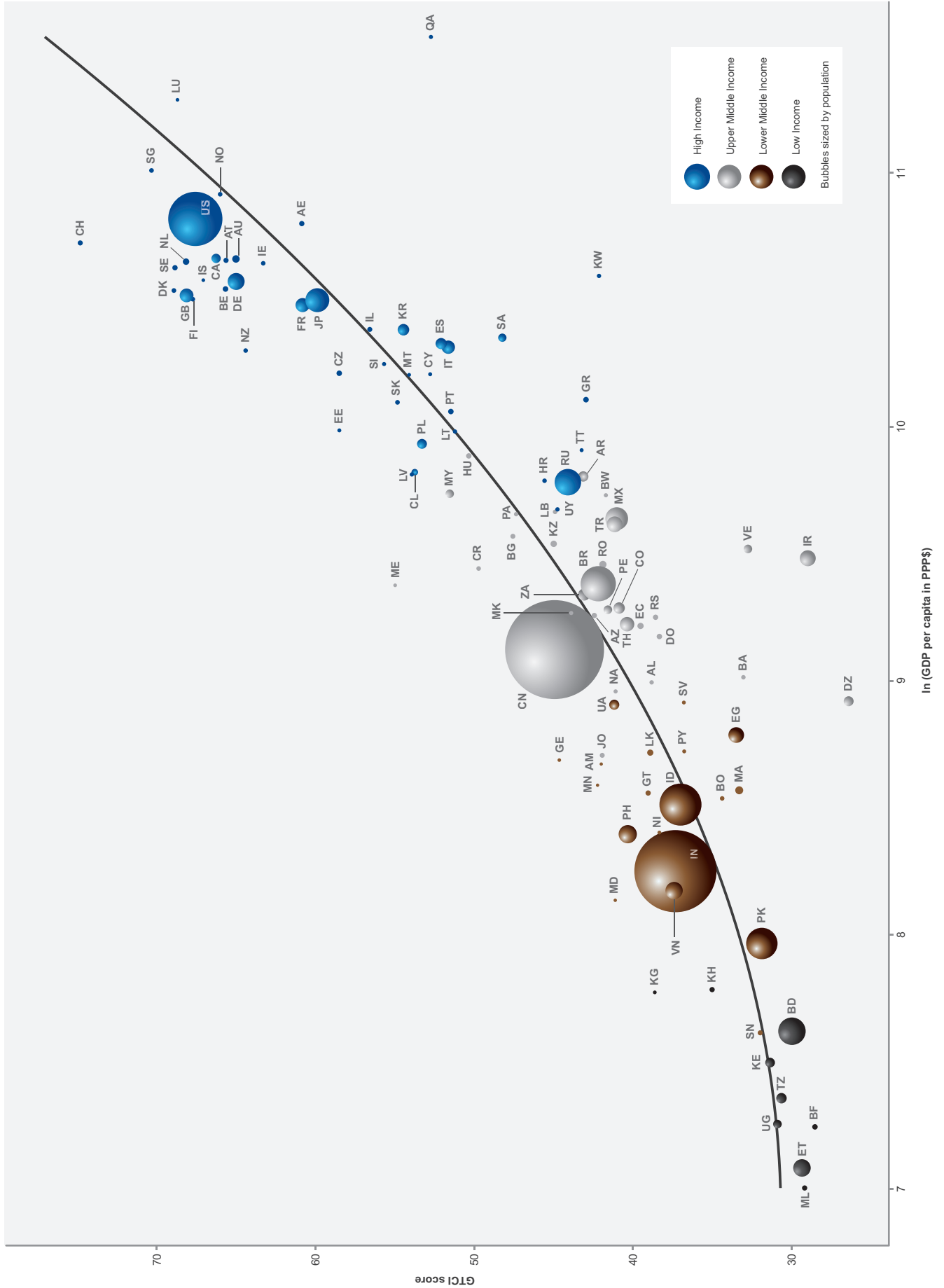
The GTCI attempts to offer an approach to talent competitiveness issues that is comprehensive, action-oriented, analytical and practical. As described earlier, the GTCI is a composite index, relying on a simple but robust input-output model composed of six pillars (four on the input side and two on the output side). It generates three main indices that are the most visible focus for analysis, namely:

1. **The talent competitiveness Input Sub-Index.**
Composed of four pillars, this index describes the policies, resources and efforts that a particular country can harness to foster its talent competitiveness. Enablers (Pillar 1) reflects the extent to which the political and economic environment creates a favourable climate for talent to develop and thrive. The other three pillars describe the three levers of talent competitiveness, focussing respectively on what countries are doing to Attract (Pillar 2), Grow (Pillar 3) and Retain (Pillar 4) talent. The Input Sub-Index is the direct arithmetic average of the scores registered on those four pillars.
2. **The talent competitiveness Output Sub-Index.**
This index aims to describe and measure the quality of talent in a country that results from the policies, resources and efforts measured in the Input Sub-Index. It is composed of two pillars, describing the current situation of a particular country in terms of LV skills (Pillar 5) and GK skills (Pillar 6).
3. **The Global Talent Competitiveness Index.** This is the overall index and is computed as the direct arithmetic average of the scores obtained on each of the six pillars described above.

The GTCI model relies on a total of 48 indicators, distributed across the pillars mentioned above and coming from various recognised international sources. Further details on the GTCI technical notes and the variables used are provided in the Appendices. The GTCI is an evolving model, which, in coming years will be refined further through academic debates as well as discussions with business and government leaders.

In its first year, the GTCI model covers 103 countries, representing 86.3% of the world's population and 96.7% of the world's GDP (in current US dollars).

Figure 3a: GTCI scores vs GDP per capita



Note: GDP per capita in PPP\$ is drawn from International Monetary Fund, World Economic Outlook and population data (represented by the bubbles) is from United Nations, World Population Prospects: The 2012 Revision; The trend line is a polynomial degree of two (R²=0.764).

Figure 3b. GTCI scores vs GDP per capita (ISO-2 Country Code)

CODE	COUNTRY	CODE	COUNTRY	CODE	COUNTRY
AE	United Arab Emirates	GB	United Kingdom	MY	Malaysia
AL	Albania	GE	Georgia	NA	Namibia
AM	Armenia	GR	Greece	NI	Nicaragua
AR	Argentina	GT	Guatemala	NL	Netherlands
AT	Austria	HR	Croatia	NO	Norway
AU	Australia	HU	Hungary	NZ	New Zealand
AZ	Azerbaijan	ID	Indonesia	PA	Panama
BA	Bosnia and Herzegovina	IE	Ireland	PE	Peru
BD	Bangladesh	IL	Israel	PH	Philippines
BE	Belgium	IN	India	PK	Pakistan
BF	Burkina Faso	IR	Iran, Islamic Rep.	PL	Poland
BG	Bulgaria	IS	Iceland	PT	Portugal
BO	Bolivia	IT	Italy	PY	Paraguay
BR	Brazil	JO	Jordan	QA	Qatar
BW	Botswana	JP	Japan	RO	Romania
CA	Canada	KE	Kenya	RS	Serbia
CH	Switzerland	KG	Kyrgyz Republic	RU	Russian Federation
CL	Chile	KH	Cambodia	SA	Saudi Arabia
CN	China	KR	Korea, Rep.	SE	Sweden
CO	Colombia	KW	Kuwait	SG	Singapore
CR	Costa Rica	KZ	Kazakhstan	SI	Slovenia
CY	Cyprus	LB	Lebanon	SK	Slovak Republic
CZ	Czech Republic	LK	Sri Lanka	SN	Senegal
DE	Germany	LT	Lithuania	SV	El Salvador
DK	Denmark	LU	Luxembourg	TH	Thailand
DO	Dominican Republic	LV	Latvia	TR	Turkey
DZ	Algeria	MA	Morocco	TT	Trinidad and Tobago
EC	Ecuador	MD	Moldova	TZ	Tanzania
EE	Estonia	ME	Montenegro	UA	Ukraine
EG	Egypt, Arab Rep.	MK	Macedonia, FYR	UG	Uganda
ES	Spain	ML	Mali	US	United States
ET	Ethiopia	MN	Mongolia	UY	Uruguay
FI	Finland	MT	Malta	VE	Venezuela, RB
FR	France	MX	Mexico	VN	Vietnam
				ZA	South Africa

GLOBAL TALENT COMPETITIVENESS INDEX 2013: MAIN FINDINGS

A high-level way of mapping individual countries in terms of talent competitiveness consists of comparing their GTCI scores to their GDP per capita. It is a simplified manner of acquiring a first assessment about the ways in which talent competitiveness relates to the overall level of economic development of a nation. As Figure 3a suggests, GTCI performance is indeed strongly correlated to income per capita.

This strong correlation, however, says little about the channels through which talent policies (and success in growing, attracting and retaining skills of different types) are determined by the various dimensions of economic development, social and economic policies, or other characteristics of a country, such as history, culture, size or geographical location. It says even less about the tools available to various countries to improve their talent situation and turn talents and skills into efficient sources of innovation and competitiveness.

To access this higher level of granularity in the analysis, it is necessary to observe, analyse and compare the scores of individual countries on each of the six pillars and each of the 48 variables of the GTCI model. Such an approach helps identify patterns, differences and similarities among countries, suggesting some possible principles with regard to talent competitiveness. This year's GTCI report points to six initial key messages.

Message 1: The global war for talent is on, and it is an uneven one

Unsurprisingly, the top of the GTCI list is heavily constituted of high-income countries. The first middle-income country (Montenegro) appears at rank 26, while the first low-income country (the Kyrgyz Republic) is ranked at 78 out of 103 countries. The middle-income economies clearly seem to face specific hurdles to grow, attract and retain the skills and talents that they need to grow, innovate and compete globally. This first message becomes even clearer when one starts differentiating among the kind of skills that countries need and compete for. Whereas mature economies face urgent needs to realign their human resources in order to develop innovative knowledge-based societies, a significant number of developing and emerging economies are still struggling with acquiring or generating the vocational skills required to build the basic infrastructure they lack, and to compete in more labour-intensive markets.²⁰ One urgent concern that is shared around the world, and in all income groups, is that of fighting massive youth unemployment.

Message 2: Fostering talent competitiveness is a complex task, especially in poorer countries

Talent flows and policies offer a contradictory picture of the world. It might be expected, for example, that a country that does well on the input side of talent competitiveness (for example, by having a strong education system and efficient policies to lure talent from abroad) would also show high scores on the output side – in other words, its ability to provide locally the LV and GK skills required to be a productive, innovative and competitive economy. This GTCI input/output correlation is stronger and significant for richer countries (high and upper-middle income). In other words, there is a threshold (somewhere in the vicinity of US\$4,000 per capita per annum) beyond which strategies aiming at growing, attracting and retaining talent do not translate automatically (or at least not quickly) into output results. For poorer economies, building talent competitiveness must be regarded as a medium- to long-term objective, for which low hanging fruit might be the exception rather than the rule. Policies should hence be targeted around the specific skills that the economy requires at a particular point in time, and that it has a good chance of finding locally. Building a “Grow” pillar around skills that are in high demand worldwide may not necessarily be a good choice if it is not accompanied by a similarly strong “Retain” pillar. Examples abound of countries that have developed high-quality education tracks, only to see their graduates flock to higher-paying shores.²¹

Message 3: Upcoming ‘talent champions’ are emerging

This first edition of the GTCI also shows that, in addition to the historical determination, a handful of dynamic economies at various levels of income are scoring high on the index. By and large, their performance is a direct result of the importance that their respective governments have granted to talent competitiveness, showing how different comparative advantages (and sometimes disadvantages) can be used to stimulate a country's ability to grow, attract and retain talent. Singapore (2nd in the world) is the perfect example in this case, but the experiences of other small economies such as Estonia (23rd), Montenegro (26th) and Malaysia (37th), show how middle-income countries are striving to mobilise the talent base that their specific economic and geographical situations require. Estonia and Montenegro need to carve out a competitive space amongst other larger European economies. Malaysia needs the skills and talents to move up the ladder of economic value, and to compete with Asian giants such as India and China.

Message 4: The global map of talent competitiveness bears the mark of history

Europe clearly dominates this year's GTCI rankings, with eight countries in the top ten, and 14 in the top 20.²² An examination of the scores registered by European countries shows that the Grow pillar (especially education) is a common success factor for those countries: there are eight European countries in the top ten of the Grow pillar and seven European countries in the top ten of the Formal Education sub-pillar. There is a longstanding tradition of basic education for all, as well as demanding standards in higher education (e.g., in the UK). In addition to European countries, one finds at the top of the rankings a significant number of traditional "immigration lands", i.e., typically large countries such as Australia (15th), Canada (11th), and even the United States (9th). Part of this situation can be explained by the ways in which former colonial empires were built, and then dismantled: the respective legacies left by those evolutions in terms of education, language and even administration have added another layer of history on the provision and distribution of skills worldwide.

Message 5: Global Knowledge Skills are critical and strategically important

In terms of GTCI pillars, the most striking international differences are found in the GK area. This is the pillar for which the distance between rich and poor countries is the largest. Such skills include most of the "e-leadership skills" mentioned in Chapter 4 of this report, for example, and many of the "soft skills" that managers, leaders and innovators need in the global knowledge economy. Their development (or acquisition) requires a highly developed ecosystem of universities, innovative institutions, and enablers that is generally not found in less advanced economies, and which is difficult to replicate rapidly. Such skills are critically important not just from the point of view of competitiveness and productivity, but even more so on the innovation front.²³

Yet, it remains that a large number of countries currently face an urgent need for the mid-level LV skills that will allow them to build infrastructure, develop basic services, and increase their productivity – and thereby their competitiveness. One of the challenges of the coming years will hence be to allow such countries to develop their LV pillar without allowing the GK gap to grow too much, avoiding the risk of another "divide".

Message 6: Expect more changes in the coming years

Contrary to what analysts used to believe, the world of skills and talents is changing very fast. On the push side, technology keeps affecting workers' mobility and ability to work remotely. On the pull side, migrations (see Chapter 3 of this report) and skills gaps (as described above) enhance the rationale for increased cross-border labour flows. A recent report by McKinsey's Global Institute underlined that the "automation of knowledge work" was probably the most under-reported (compared to its likely economic impact) of all "disruptive technological trends".²⁴ Keeping track of such changes, and factoring them into a credible quantification of talent competitiveness, will be one of the challenges that future editions of the GTCI will need to address: demand for new skills and talents is likely to continue to change much faster than our ability to provide them (through formal and continuous education), and probably to manage them. Greater awareness is hence becoming critically important for enterprises, governments and individuals to better synchronise the ways in which talents are grown. Curricula need to be modernised, education and training methods need to move closer to students' and workers' lifestyles and habits, and human resources need to be managed as a fluid and constantly changing pool of talents ("deployment" of talent may become an element of growing it, as in corporations such as IBM). Understanding what makes talents and skills move across borders will continue to be a significant source of competitive advantage.

Table 1: Global Talent Competitiveness Index rankings (continued)

Country	Score (0-100)	Overall Rank	Income Group	Income Group Rank	Regional Group	Regional Group Rank
Switzerland	74.83	1	HI	1	EUR	1
Singapore	70.34	2	HI	2	ESEAO	1
Denmark	68.93	3	HI	3	EUR	2
Sweden	68.86	4	HI	4	EUR	3
Luxembourg	68.70	5	HI	5	EUR	4
Netherlands	68.16	6	HI	6	EUR	5
United Kingdom	68.13	7	HI	7	EUR	6
Finland	67.73	8	HI	8	EUR	7
United States	67.58	9	HI	9	NAC	1
Iceland	67.07	10	HI	10	EUR	8
Canada	66.27	11	HI	11	NAC	2
Norway	66.01	12	HI	12	EUR	9
Belgium	65.67	13	HI	13	EUR	10
Austria	65.64	14	HI	14	EUR	11
Australia	65.01	15	HI	15	ESEAO	2
Germany	65.00	16	HI	16	EUR	12
New Zealand	64.40	17	HI	17	ESEAO	3
Ireland	63.30	18	HI	18	EUR	13
United Arab Emirates	60.87	19	HI	19	NAWA	1
France	60.82	20	HI	20	EUR	14
Japan	59.89	21	HI	21	ESEAO	4
Czech Republic	58.51	22	HI	22	EUR	15
Estonia	58.50	23	HI	23	EUR	16
Israel	56.58	24	HI	24	NAWA	2
Slovenia	55.68	25	HI	25	EUR	17
Montenegro	54.98	26	UM	1	EUR	18
Slovak Republic	54.84	27	HI	26	EUR	19
Korea, Rep.	54.46	28	HI	27	ESEAO	5
Malta	54.10	29	HI	28	EUR	20
Latvia	53.93	30	HI	29	EUR	21
Chile	53.75	31	HI	30	LCN	1
Poland	53.29	32	HI	31	EUR	22
Cyprus	52.78	33	HI	32	NAWA	3
Qatar	52.73	34	HI	33	NAWA	4
Spain	52.08	35	HI	34	EUR	23
Italy	51.64	36	HI	35	EUR	24
Malaysia	51.54	37	UM	2	ESEAO	6
Portugal	51.47	38	HI	36	EUR	25
Lithuania	51.21	39	HI	37	EUR	26
Hungary	50.34	40	UM	3	EUR	27
Costa Rica	49.72	41	UM	4	LCN	2
Saudi Arabia	48.23	42	HI	38	NAWA	5
Bulgaria	47.56	43	UM	5	EUR	28
Panama	47.36	44	UM	6	LCN	3
Croatia	45.57	45	HI	39	EUR	29
Kazakhstan	44.99	46	UM	7	CSA	1
China	44.94	47	UM	8	ESEAO	7
Lebanon	44.90	48	UM	9	NAWA	6
Uruguay	44.75	49	HI	40	LCN	4
Georgia	44.64	50	LM	1	NAWA	7
Russian Federation	44.10	51	HI	41	EUR	30
Macedonia, FYR	43.89	52	UM	10	EUR	31
Trinidad and Tobago	43.23	53	HI	42	LCN	5
Argentina	43.13	54	UM	11	LCN	6
South Africa	43.09	55	UM	12	SSF	1

Table 1: Global Talent Competitiveness Index rankings (continued)

Country	Score (0-100)	Overall Rank	Income Group	Income Group Rank	Regional Group	Regional Group Rank
Greece	42.95	55	HI	43	EUR	32
Azerbaijan	42.44	57	UM	13	NAWA	8
Mongolia	42.23	58	LM	3	ESEAO	8
Brazil	42.18	59	UM	14	LCN	7
Kuwait	42.14	60	HI	44	NAWA	9
Armenia	42.00	61	LM	3	NAWA	10
Jordan	41.93	62	UM	15	NAWA	11
Romania	41.89	63	UM	16	EUR	23
Botswana	41.70	64	UM	17	SSF	3
Peru	41.58	65	UM	18	LCN	8
Ukraine	41.18	66	LM	4	EUR	34
Turkey	41.18	67	UM	19	NAWA	12
Maldives	41.11	68	LM	5	EUR	35
Namibia	41.09	69	UM	20	SSF	3
Mexico	41.04	70	UM	21	LCN	9
Colombia	40.87	71	UM	22	LCN	10
Thailand	40.37	72	UM	23	ESEAO	9
Philippines	40.33	73	LM	6	ESEAO	10
Ecuador	39.93	74	UM	24	LCN	11
Guatemala	39.04	75	LM	7	LCN	12
Sri Lanka	38.91	76	LM	8	CSA	3
Albania	38.82	77	UM	25	EUR	36
Kyrgyz Republic	38.82	78	LI	1	CSA	3
Serbia	38.57	79	UM	26	EUR	37
Nicaragua	38.33	80	LM	9	LCN	13
Dominican Republic	38.33	81	UM	27	LCN	14
Vietnam	37.41	82	LM	10	ESEAO	11
India	37.32	83	LM	11	CSA	4
Indonesia	37.00	84	LM	12	ESEAO	12
El Salvador	36.79	85	LM	13	LCN	15
Paraguay	36.77	86	LM	14	LCN	16
Cambodia	35.01	87	LI	2	ESEAO	13
Bolivia	34.38	88	LM	15	LCN	17
Egypt, Arab Rep.	33.49	89	LM	16	NAWA	13
Morocco	33.30	90	LM	17	NAWA	14
Spain and Portugal	33.04	91	UM	28	EUR	38
Venezuela, RB	32.75	92	UM	29	LCN	18
Senegal	31.99	93	LM	18	SSF	4
Yemen	31.99	94	LM	19	CSA	5
Kenya	31.38	95	LI	3	SSF	5
Uganda	30.89	96	LI	4	SSF	6
Tanzania	30.84	97	LI	5	SSF	7
Bangladesh	29.88	98	LI	6	CSA	6
Ethiopia	29.35	99	LI	7	SSF	8
Mali	29.18	100	LI	8	SSF	9
Iran, Islamic Rep.	28.98	101	UM	30	CSA	7
Burkina Faso	28.93	102	LI	9	SSF	10
Algeria	28.40	103	UM	31	NAWA	15

Note: World Bank Income Group Classification (July 2013): HI = high-income; LM = lower-middle income; UM = upper-middle income; LI = low-income. Regional Group is based on United Nations Classification (11 February 2013): EUR = Europe; NAC = Northern America; LCN = Latin, Central America and the Caribbean; CSA = Central and Southern Asia; ESEAO = Eastern, South-Eastern Asia, and Oceania; NAWA = Northern Africa and Western Asia; SSF = Sub-Saharan Africa.

DISCUSSION OF GTCI RESULTS: COMPETING FOR TALENT, A GLOBAL GAME

The following analysis describes and assesses the salient features of the GTCI 2013 results. It does so for the top ten global leaders on the GTCI, and for the best performers within four income categories according to the World Bank classification: high-, upper-middle, lower-middle, and low-income countries.²⁵

The top 20 in GTCI 2013

This year, the GTCI rankings are heavily dominated by European countries. While Switzerland comes out as number one, the top ten include only two non-European countries, namely Singapore (2nd) and the United States (9th). The picture does not change much if we consider the top 20: only four additional non-European countries then come within range: Canada (11th), Australia (15th), New Zealand (17th) and the United Arab Emirates (19th).

Within Europe, it is mostly the northern part of the continent that appears as most “talent competitive”, including Denmark (3rd), Sweden (4th), Luxembourg (5th), the Netherlands (6th), the United Kingdom (7th), Finland (8th), Iceland (10th), Norway (12th) and Belgium (13th), followed by Austria (14th), Germany (16th), Ireland (18th) and France (20th).

It is also worth noting that, among the non-European leaders of the GTCI rankings, one can see mostly economies with a longstanding history of immigration (e.g., the US, Canada, Australia), and dynamic economies with clear strategies to attract external expertise and become “talent hubs” (Singapore, the United Arab Emirates).

The following paragraphs offer some insights into the building blocks for the performance of the top ten GTCI countries. Beyond some clear similarities (for example, all have devoted significant attention to education for a long time), a few differences emerge that can help other countries determine what their own “winning strategies” might be in the current global competition for talents.

Switzerland (1st) is clearly ahead of the pack. Its overall GTCI score results from high performance across virtually all variables of the model. Switzerland is also 1st on the Input Sub-Index, where its performance is evenly high, with the possible exception of the Attract pillar (18th). On the Output Sub-Index (where it also ranks 1st), Switzerland’s performance is particularly high on the variable of innovation output. It also ranks 1st on both the LV and GK pillars.

Singapore (2nd) ranks exceptionally high on Enablers (3rd). It features a high inflow of international students but does not score as high on the sub-pillars of Internal Openness (27th), Access to Growth Opportunities (30th), and Employable Skills (20th). While its Formal Education (8th) and Higher Level skills (2nd) are strong, Singapore’s Talent Impact (25th) could be strengthened by more emphasis on entrepreneurial activity (45th). Overall, Singapore’s position is driven by its strengths in both the Input (2nd) and Output (6th) sub-indices, especially on the GK side.

Four Nordic countries are found in the top ten of the GTCI this year, namely Denmark (3rd), Sweden (4th), Finland (8th) and Iceland (10th). **Denmark’s** Input performance (7th) is not as high as that of its neighbour Sweden (3rd), but it is compensated by remarkably high scores on variables such voicing concern to officials paired with high government effectiveness (both 2nd). Denmark also has higher FDI inflows performance (30th) and ease of doing business (4th). Finally, Denmark (the land of “flexicurity”) has more labour market flexibility (29th) and social protection (8th) than Sweden (52nd and 19th, respectively). **Sweden**, however, has a solid base to work from with similar scores in the Grow (5th), Attract (4th) and Retain (7th) pillars. Sweden’s Input Sub-Index score puts it in 3rd position. On the Output Sub-Index, Sweden is only in 9th position, in spite of an excellent performance on the innovation output variable (2nd behind Switzerland). **Finland** and **Iceland** are close to one another, but they show interesting differences in the ways in which their respective GTCI performances are built. Finland’s Input rank is 8th and its Output rank is 7th. Under Enablers, Finland ranks 1st in the world for Regulatory Landscape and 3rd in Market Landscape. It is in 4th position on the Grow pillar and in 5th position for the GK pillar, both reflecting the country’s longstanding priority to education: Finland enjoys high scores in Lifelong Learning (4th) and Access to Growth Opportunities (8th). However, the country does not score as high on the Sustainability (19th) and Business Landscape (30th) sub-pillars. Iceland scores well on Higher Skills and Competencies (1st), Internal Openness (2nd) and Lifestyle (6th), but is not as strong when it comes to Grow (20th). For the Attract pillar, Iceland (8th) is ahead of Finland (15th). In Retain it ranks 11th. On the output side, Iceland’s Output Sub-Index performance (4th) is higher than Finland’s (7th), and a key driver is Iceland’s exceptional performance in Higher Skills and Competencies (1st) compared to Finland (9th).

Luxembourg, the Netherlands and the United Kingdom, respectively in 5th, 6th and 7th places, also show how similar strong GTCI performances can be achieved through different paths. **Luxembourg’s** 5th place comes from a contrasted performance between Input (9th) and Output (2nd) sub-indices. Few other top talent performers display such a large difference between the two GTCI sub-indices, with the possible exception of the Netherlands and Belgium, as mentioned below. For a number of years, Luxembourg, one of the smallest countries in the world, has demonstrated a remarkable ability to attract capital and talent through high levels of Internal and External Openness (for which it ranks 2nd overall); it also ranks 1st in the world for the prevalence of foreign ownership. Possibly handicapped by its size, Luxembourg is not performing as well on the Grow (14th) or Retain (13th) pillars. On the Output Sub-Index, its performance is also less spectacular for the LV pillar (15th), but remains high for GK, for which it ranks 2nd amongst all 103 countries, just behind Switzerland. Much of this may reflect Luxembourg’s success in attracting financial companies, as well as private and public organisations focused on innovation.

The **Netherlands’** overall rank of 6th also results from a contrasted performance, in which the country’s Input performance (4th) is higher than its Output performance (10th). Compared to

other top ten countries, the Netherlands is not remarkable for its Regulatory Landscape (9th), Market Landscape (18th) or Business Landscape (17th). Its labour market flexibility is low (45th). However, these areas are largely compensated by a strong Attract pillar (6th), scoring high on Internal Openness (6th) that is also reflected in a high percentage of female parliamentarians (4th). Its performance is equally high on the Grow pillar (6th) and on the Retain pillar (5th). On the Output Sub-Index, the LV pillar is slightly stronger than GK (10th vs. 14th), though neither are in the topmost league.

The **UK** occupies 7th position overall and shows a rather balanced performance across Input (5th) and Output (8th). While talent growth is a valuable asset (2nd for the Grow pillar) for the country, the Enablers (10th), Attract (12th) and Retain (9th) pillars are not as strong than its overall rank. The UK's Output also shows lower ranks – 11th for LV and 12th for GK skills respectively. Noteworthy highlights of the UK's performance are the Business Landscape (5th), Lifelong Learning (3rd), and Access to Growth Opportunities (4th) sub-pillars, with a high degree of qualified labour inflow (4th), as well as its excellent quality of management schools (2nd) and universities (1st). Lowlights, on the other hand, are the UK's FDI inflows (58th), the pupil-teacher ratio (52nd), technical/vocational enrolment (52nd), and extent and effect of taxation (53rd). The UK's Internal Openness displays contrasting performances, with a high level of tolerance for minorities (5th) but a relative lack of tolerance to immigrants (20th). In the same sub-pillar, social mobility is relatively low (19th), as is the number of women in professionals and technical roles (57th).

The **United States** is obviously the largest of these top ten countries, and differences by state or region would surely show similarities to the differences within Europe. It occupies 9th position and is ranked 11th on the Input and 5th on the Output sub-indices. While the country's performance is not particularly remarkable on the Retain pillar (19th), it is a world leader in terms of the Grow pillar (3rd) and in a solid place with an Enablers' rank of 7th. In particular, the US scores relatively high in Formal Education (3rd), with high tertiary enrolment (2nd) and Access to Growth Opportunities (7th). This contrasts, however, with the country's low performance in pupil-teacher ratios (49th) and average scores in reading, math and science (22nd). Overall, the

US does not perform as highly as one could expect on Attraction (22nd) as its External Openness (24th) and Internal Openness (19th) do not stand out as compared to other countries. On the Output side, the US is among the world leaders for GK (7th) with relatively high legislators, senior official and managers (2nd). However, its high position in Higher Skills and Competencies (5th) is not accompanied by an equivalent Talent Impact (21st), leaving room for improvement to boost the respective variables in innovation (16th) and entrepreneurial activity (29th). Under the LV pillar (5th), the US' labour productivity is high (3rd), but youth employment highlights a serious concern (36th).

Growing, attracting and retaining talent: top GTCI performers by income group

Considering the strong correlation (highlighted above) between GTCI scores and GDP per capita, it is important to look at how individual countries perform vis-à-vis their respective income group.²⁶

A first cursory look at how major income groups perform vis-à-vis specific pillars of the GTCI (see Table 2 below) shows that, differences are more significant on the output side (especially for GK skills) than on the input side. This is clearly linked to the way in which such skills are generated (higher education) and used (in advanced production and sharing processes), which are typical of higher-income economies.

Table 2: Income group average scores

	Classification	GTGI	Enablers	Attract	Grow	Retain	Labour and Vocational	Global Knowledge
INCOME LEVELS	High income	58.40	66.97	59.46	60.42	63.62	50.69	49.25
	Upper middle income	41.91	47.01	49.84	45.43	45.22	36.28	27.67
	Lower middle income	37.79	40.92	48.85	40.81	41.14	32.87	22.17
	Low income	31.51	38.25	45.75	34.35	34.60	29.78	6.32

Note: Countries are classified according to the World Bank Income Group (July 2013).

When it comes to identifying the ways in which specific countries can improve their talent policies and get a better return on their talent investment, it becomes important to consider the

results obtained by other countries of a similar level of GDP per capita. Table 3 presents these results, listing the top performers of each major income group.

Table 3: Ten best performers by income group (rank)

GTCI	Enablers	Attract	Grow	Retain	Labour and Vocational	Global Knowledge
High income (44 countries)						
Switzerland (1)	Switzerland (1)	Belgium (1)	Switzerland (1)	Switzerland (1)	Switzerland (1)	Switzerland (1)
Singapore (2)	New Zealand (2)	Luxembourg (2)	United Kingdom (2)	Austria (2)	Austria (2)	Luxembourg (2)
Denmark (3)	Singapore (3)	Singapore (3)	United States (3)	United Arab Emirates (3)	Germany (3)	Iceland (3)
Sweden (4)	Denmark (4)	Sweden (4)	Finland (4)	Norway (4)	Qatar (4)	Denmark (4)
Luxembourg (5)	Sweden (5)	Denmark (5)	Sweden (5)	Netherlands (5)	United States (5)	Finland (5)
Netherlands (6)	Canada (6)	Netherlands (6)	Netherlands (6)	Germany (6)	Norway (6)	Singapore (6)
United Kingdom (7)	United States (7)	Canada (7)	Australia (7)	Sweden (7)	Singapore (7)	United States (7)
Finland (8)	Finland (8)	Iceland (8)	Belgium (8)	Estonia (8)	Denmark (9)	Israel (8)
United States (9)	Australia (9)	Ireland (10)	Germany (9)	United Kingdom (9)	Netherlands (10)	Estonia (9)
Iceland (10)	United Kingdom (10)	Norway (11)	Austria (10)	Singapore (10)	United Kingdom (11)	Sweden (10)
Upper middle income (31 countries)						
Montenegro (26)	Malaysia (23)	Costa Rica (16)	Malaysia (31)	Montenegro (32)	Montenegro (8)	Jordan (36)
Malaysia (37)	Hungary (31)	Panama (17)	Costa Rica (32)	Bulgaria (33)	Malaysia (26)	Colombia (37)
Hungary (40)	Botswana (32)	Montenegro (20)	Panama (39)	Hungary (40)	Kazakhstan (33)	Hungary (38)
Costa Rica (41)	Montenegro (33)	Namibia (28)	China (40)	Panama (42)	Hungary (34)	Lebanon (41)
Bulgaria (43)	South Africa (37)	Kazakhstan (29)	Argentina (41)	Costa Rica (43)	Botswana (40)	China (42)
Panama (44)	Bulgaria (42)	Argentina (30)	South Africa (42)	Kazakhstan (45)	Peru (45)	Bulgaria (43)
Kazakhstan (46)	Namibia (43)	South Africa (31)	Lebanon (44)	Macedonia, FYR (46)	China (46)	Turkey (46)
China (47)	Costa Rica (46)	Brazil (32)	Montenegro (45)	Malaysia (48)	Azerbaijan (47)	Serbia (47)
Lebanon (48)	Peru (51)	Peru (33)	Thailand (46)	Azerbaijan (50)	Lebanon (49)	South Africa (49)
Macedonia, FYR (52)	Jordan (52)	Botswana (34)	Hungary (48)	Lebanon (52)	Serbia (51)	Montenegro (52)
Lower middle income (19 countries)						
Georgia (50)	Georgia (40)	Nicaragua (9)	Guatemala (34)	Georgia (38)	Nicaragua (41)	Moldova (39)
Mongolia (58)	India (54)	Mongolia (27)	Philippines (55)	Egypt, Arab Rep. (47)	Mongolia (43)	Ukraine (50)
Armenia (61)	Armenia (56)	Georgia (41)	Indonesia (58)	Armenia (53)	Ukraine (50)	Philippines (58)
Ukraine (66)	Sri Lanka (61)	Senegal (45)	India (62)	Moldova (57)	Paraguay (52)	Georgia (61)
Moldova (68)	Mongolia (63)	Vietnam (48)	Mongolia (67)	Ukraine (58)	Vietnam (58)	Armenia (62)
Philippines (73)	Ukraine (74)	Sri Lanka (54)	Paraguay (70)	Sri Lanka (66)	El Salvador (60)	Pakistan (67)
Guatemala (75)	El Salvador (75)	Armenia (55)	Armenia (74)	Indonesia (70)	Guatemala (62)	Egypt, Arab Rep. (69)
Sri Lanka (76)	Moldova (76)	Paraguay (56)	Morocco (77)	Philippines (71)	Moldova (70)	Sri Lanka (71)
Nicaragua (80)	Philippines (79)	Philippines (59)	Georgia (81)	Mongolia (72)	Philippines (79)	El Salvador (73)
Vietnam (82)	Vietnam (82)	Morocco (69)	Senegal (83)	Guatemala (73)	Bolivia (81)	Paraguay (76)
Low income (9 countries)						
Kyrgyz Republic (78)	Kenya (73)	Kyrgyz Republic (35)	Uganda (78)	Cambodia (62)	Kyrgyz Republic (39)	Kyrgyz Republic (92)
Cambodia (87)	Cambodia (78)	Uganda (43)	Kenya (87)	Kyrgyz Republic (64)	Ethiopia (72)	Mali (94)
Kenya (95)	Kyrgyz Republic (81)	Tanzania (63)	Cambodia (92)	Ethiopia (82)	Cambodia (73)	Ethiopia (97)
Uganda (96)	Uganda (83)	Cambodia (71)	Tanzania (93)	Mali (87)	Kenya (74)	Bangladesh (98)
Tanzania (97)	Tanzania (86)	Mali (81)	Mali (97)	Bangladesh (92)	Bangladesh (86)	Uganda (99)
Bangladesh (98)	Burkina Faso (88)	Kenya (88)	Kyrgyz Republic (99)	Burkina Faso (94)	Tanzania (91)	Kenya (100)
Ethiopia (99)	Bangladesh (89)	Bangladesh (94)	Burkina Faso (100)	Tanzania (99)	Burkina Faso (98)	Burkina Faso (101)
Mali (100)	Ethiopia (98)	Burkina Faso (95)	Bangladesh (101)	Kenya (100)	Uganda (101)	Cambodia (102)
Burkina Faso (102)	Mali (100)	Ethiopia (98)	Ethiopia (103)	Uganda (103)	Mali (102)	Tanzania (103)

High-income group (44 countries)

Because this group finds itself largely at the top of the GTCI rankings, these countries have already been extensively discussed above. Switzerland is at the top of the list, being the only high-income country that scores very high on all pillars of the GTCI. Clearly, high-income countries generally have the capacity to generate a significant amount of skills and talents (as shown by the Grow pillar), and all of them score fairly high on the output pillars (LV and GK). Yet, some countries, such as Luxembourg (15th in LV and 2nd in GK), Iceland (12th in LV and 3rd in GK), and Finland (18th in LV and 5th in GK), display a relative trade-off pattern in the output pillars.

Upper-middle income group (31 countries)

The top ten countries among this upper-middle income group are Montenegro (26th), Malaysia (37th), Hungary (40th), Costa Rica (41st), Bulgaria (43rd), Panama (44th), Kazakhstan (46th), China (47th), Lebanon (48th) and Macedonia (52nd).

Montenegro's performance is uneven, in particular on the output side: the country's remarkable 8th position in the LV pillar differs markedly from its 52nd rank for the GK pillar. Such a high divergence underlines the fundamentally different nature of the two kinds of skills that a country requires to compete internationally: Montenegro has a relatively high proportion of adults with the latest education attainment at secondary level (5th) and technicians and associate professionals (21st). However, its marginal position for Higher Skills and Competencies (44th) and Talent Impact (55th) drives down its overall rank. This composition can be a reflection of its economic structure, which relies highly on the service sector (mainly tourism). The country makes the top 20 for the Attract pillar (20th), boosted by its high FDI inflows (6th) and favourable female professionals and technical workforce. On the other hand, Macedonia, which occupies 10th position within the upper-middle income group yet holds a much lower rank overall (52nd), has a rather balanced performance across the output pillars. Macedonia yields marginal position in both the LV (68th) and GK (59th) pillars.

Malaysia ranks 2nd, coming ahead of all other Eastern Asia, South-Eastern Asia and Oceania countries within this income group. It has a wide distribution of rankings across the six pillars, with Enablers (23rd) as the highest, followed by LV (26th), Grow (31st), Retain (48th), Attract (50th), and GK (56th). Malaysia's relative strengths are in its relationship of pay to productivity (2nd), extent of staff training (7th), venture capital availability (8th), extent and effect of taxation (10th), ease of doing business (11th), and state of cluster development (11th), but also labour market flexibility (14th), and qualified labour inflows (18th). Its position is weakened by its low score on tolerance to immigrants (101st) and a rather low performance in gender mobility, female professionals and technical workforce (72nd), as well as for female parliamentarians (84th).

Hungary, 3rd in this group, shows relative strengths in the Enablers (31st), LV (34th), and GK (38th) pillars. On the other hand, it ranks relatively lower in the Retain (40th), Grow (48th), and Attract (61st) pillars. Despite its commendable performance in female professionals and technical workforce, the other variables under the Attract pillar drive down its score, such as female parliamentarians (87th), social mobility (91st), and qualified labour inflow (93rd). A similar discrepancy is also observed in the Grow pillar, with relatively high Formal Education (43rd) and low Lifelong Learning (74th). The relatively low performance in the Attract pillar is also seen for Bulgaria (64th), Hungary's neighbour, which ranks 5th in this upper-middle income group. Nevertheless, Bulgaria's performance in the Grow pillar is much lower (61st) with similar pattern as Hungary, where Formal Education is relatively higher (50th) than Lifelong Learning (87th). Bulgaria's rank in the Retain pillar (33rd) is ahead of Hungary (40th), with variables such as property stolen (29th) and physicians density (15th) scoring higher than Hungary.

China ranks 8th among this upper-middle group, and 3rd among the Asian members of this income group, after Malaysia and Kazakhstan. It is relatively strong in the Grow (40th), GK (42nd) and LV (46th) pillars. A most remarkable fact is that China holds 1st in PISA's reading, math, and science scores, and 8th in QS university ranking. Nevertheless, China's Access to Growth Opportunities (70th) is much lower as compared to other sub-pillars within the Grow pillar, such as Formal Education (32nd) and Lifelong Learning (47th). It has relatively low voicing concern to officials (100th) and use of virtual social networks (87th).

Lower-middle income group (19 countries)

The top performers within the lower-middle income group are Georgia (50th), Mongolia (58th), Armenia (61st), Ukraine (66th), Moldova (68th), the Philippines (73rd), Guatemala (75th), Sri Lanka (76th), Nicaragua (80th) and Vietnam (82nd).

Compared to its peers within the income group, **Georgia** earns the top spot in the overall GTCI rankings; it also leads the group in the Enablers (40th) and Retain (38th) pillars. It has excellent scores in starting a foreign business (5th), ease of doing business (8th), and labour market flexibility (16th). Georgia also performs rather well in the Attract pillar (41st), with relatively high female professionals and technical workers and relatively high FDI inflows (16th) and tolerance to minorities (26th). The country's major weaknesses are in the Grow (81st) and LV (82nd) pillars, notably in quality for scientific research institutions (94th), technical/vocational enrolment (91st), state of cluster development (90th), quality of management schools (85th), and youth employment (83rd).

The runner-up in this group is **Mongolia**, which scores best in the Attract pillar (27th). This is mainly due to very high scores in FDI inflows and involvement of female professionals and technical workers (1st). The country's performance is homogeneous across the remaining input pillars: Enablers (63rd), Grow (67th) and Retain (72nd). Areas deserving attention include venture capital availability (103rd), quality of management schools (101st), female parliamentarians (98th), state of cluster development (92nd) and government effectiveness (90th).

Armenia (3rd in this group) and the Philippines (6th) show interesting differences, which are quite typical in this range of income. On one hand, Armenia's relative strengths are in the Retain (53rd), Attract (55th) and Enablers (56th) pillars.

On the other hand, the **Philippines** (which is the Asia-Pacific leader in this income group) is relatively strong in the Grow (55th) and GK (58th) pillars, holding higher rankings than Armenia (74th for Grow and 62nd for GK).

The Philippines has several sub-pillars scattered across different pillars ranked at 80th and below, such as Regulatory Landscape (83rd), Market Landscape (85th), Formal Education (96th), Labour Productivity (85th), and Talent Impact (80th). Meanwhile, Armenia's weaker points centred around Lifelong Learning (92nd) and Access to Growth Opportunities (86th) under the Grow pillar, and Employable Skills (92nd).

Low-income group (9 countries)

The low income group consists of nine countries. The countries in this group are ranked in the following sequence: the Kyrgyz Republic (78th), Cambodia (87th), Kenya (95th), Uganda (96th), Tanzania (97th), Bangladesh (98th), Ethiopia (99th), Mali (100th) and Burkina Faso (102nd).

The **Kyrgyz Republic's** 78th rank in the overall index is split into the 75th position on the input side and 78th position on the output side. Its score of 38.62 is above average in the low-income group (the average is 31.51). Its Attract pillar ranks the highest among all pillars on the input side. Within this pillar, it becomes clear that External Openness (30th) and, in particular, FDI inflows (7th) are strengths. This does not dovetail with the qualified labour inflow variable (100th) and prevalence of foreign ownership (94th). Regarding internal openness, the Kyrgyz Republic boasts female technicians and professionals, female parliamentarians (34th) and tolerance to minorities (44th) as strong points. The Kyrgyz Republic's other strength on the input side is its result in Retain (64th), where it ranks 2nd among low-income countries (after Cambodia). This score can be attributed to the sustainability factor of the pension system (50th) and the lifestyle factors of property stolen (44th) and safety at night (51st). The Enablers pillar ranks 3rd and the Grow pillar is in 6th position amongst all low-income countries. On the output side, the Kyrgyz Republic is consistently first in both the LV (39th) and GK (92nd) pillars amongst low-income countries. The LV pillar is marked by a good relationship of pay to productivity (14th), while the strong showing in GK is due to a highly educated workforce (46th). Overall, however, the country ranks low in terms of the Talent Impact sub-pillar (102nd).

Cambodia ranks 87th overall in the GTCI and 2nd amongst the low-income countries. Cambodia scores 35.01 and is therefore above the income group average of 31.51. Its rank consists of 77th on the Input and 98th on the Output sub-indices. Its strength is the Retain pillar, where it ranks 1st among low-income countries. In the Retain pillar, Cambodia has a moderate rank in environmental performance (53rd) and safety at night (41st). Its extent and effect of taxation is favourable (24th). Cambodia's talent pipeline does not reflect this, as it ranks 92nd in Grow. On the output side, Cambodia ranked 73rd in LV and 102nd in GK.

Kenya is in 3rd position among low-income countries and in 95th position in the GTCI. Amongst the low-income countries, Kenya's score of 31.36 is marginally below the income group average score of 31.51. Kenya's strength appears to be its Enablers and Grow strategies, where it ranks 1st and 2nd respectively among low-income countries. Within the Enablers pillar, Business Landscape is relatively high (28th), while the Regulatory (92nd) and Market Landscape (91st) ranks are low. Kenya's Grow pillar is boosted by its high rank in access to growth opportunities (51st) and lifelong learning (53rd). Kenya also appears to be above average in the LV pillar; within the low-income group, it ranks 4th. Kenya is the third-highest ranked country in the low-income group, yet the country requires significant development. It ranks 6th in the Attract pillar and 8th in the Retain pillar, while it comes in 6th GK out of nine low-income countries.

CONCLUSION

Faced with the complex array of challenges and opportunities mentioned in this chapter, public and private decision-makers need the following:

- Quantitative tools and indicators that can help them identify their best possible courses of action with regard to talent-related policies;
- Success stories they can adapt to their own situation; and
- Benchmarking instruments that will help them monitor their progress over time and compare their performance to that of their neighbours and other similar economies.

For all types of economies, the challenges of upgrading skills are both immense and urgent. They include both the global knowledge skills linked to leadership and innovation, and the labour and vocational skills required to build infrastructure, and provide housing, schooling and other critical foundations of a modern economy. This requires a fresh look at immigration, educational upgrading and reform, social mobility, apprenticeships and lifelong learning, as well as ensuring appropriate regulation and flexibility in labour markets. These are complex and interconnected domains, touching on the lives of everyone. The tragedy of youth unemployment cuts across the globe and is perhaps the single most important sign of the dimension and urgency of such issues.

In this moving and complex environment, it is becoming clear that progress on talent competitiveness will require concerted efforts from the relevant components of government, business and education. All over the world, success stories call attention to how this can be done. The GTCI attempts to offer a common quantitative basis for concerted action in the field of talent competitiveness. It aims to be a dashboard for evaluating progress, and a guide for stimulating efforts and imagination. In the future, it will be improved through further refinements of its analytical approach, inclusion of additional data, and constructive criticism from its users. It is hence only a first step in what promises to be an exciting journey. We hope that it will also be a useful and constructive one towards a world where talent is not only valued but also stimulated and shared.

Notes

- ¹ The contribution of Aung Myint Thein, a member of the GTCI team at INSEAD, is gratefully acknowledged for preparing the data and providing support for the analysis reported in this chapter.
- ² Eurostat (2013)
- ³ Based on “World Population Prospects: The 2012 Revision” (United Nations, 2012), due to this demographic dynamism, it is estimated that the population of Nigeria will be around 465 million by 2050.
- ⁴ World Bank (2013)
- ⁵ Eurostat (2013)
- ⁶ European Commission (2013)
- ⁷ OECD (2013a)
- ⁸ OECD Report (2013b)
- ⁹ Ramirez, F.O., X. Luo, E. Schofer, and J.W. Meyer (2006)
- ¹⁰ McKinsey (2012)
- ¹¹ Cappelli, P. (2008)
- ¹² For example, the Heidrick and Struggles Global Talent Index and, more recently, World Economic Forum’s The Human Capital Index.
- ¹³ See globalindices.insead.edu/gitr
- ¹⁴ See globalindices.insead.edu/gii
- ¹⁵ The Economist (2006)
- ¹⁶ A comprehensive 2007 handbook on Human Resource Management (Boxall, Purcell and Wright, 2007) reviewing academic research does not list “talent” in its index, let alone in the title of any of its articles.
- ¹⁷ Lepak and Snell (1999); Becker and Huselid (2006); Boudreau and Ramstad (2007); Evans, P., V. Pucik and I. Björkman (2011)
- ¹⁸ Becker, B.E., M.A. Huselid, and R.W. Beatty (2009)
- ¹⁹ Stahl, G., I. Björkman, E. Farndale, S. Morris, J. Pauwe and P. Stiles (2007)
- ²⁰ Analysis among various income groups (see later in this chapter) shows that, on the output side of the GTCI, middle-income countries score better on Labour and Vocational Skills (LV) than on Global Knowledge Skills (GK). It is also interesting to note that France and Germany have symmetrical positions on those two pillars: Germany scores high on LV, and France on GK. Switzerland, on the other hand, scores equally high on both pillars.
- ²¹ English-speaking Caribbean countries (such as Trinidad and Tobago) provide one relevant example. Their Ministers of Health are concerned about chronic staffing shortages in local health facilities. It was estimated that more than 1,800 nurses emigrated from those countries to Canada, the UK, and the US between 2002 and 2006 (The World Bank, 2009).
- ²² See detailed analysis below of the “top 10 and top 20” of GTCI 2013.
- ²³ The GTCI results are more tightly correlated to the Global Innovation Index (GII) than the Global Competitiveness Index (GCI) (the correlation with GII is 0.95 while the correlation with GCI is 0.89).
- ²⁴ McKinsey (2013)
- ²⁵ Countries are grouped according to the World Bank classification. Economies are divided according to 2011 gross national income (GNI) per capita, calculated using the World Bank Atlas method. The groups are: low-income (US\$1,025 or less); lower-middle income (US\$1,026 to US\$4,035); upper-middle income (US\$4,036 to US\$12,475); and high-income (US\$12,476 or more).
- ²⁶ The income groups used in this report follow the World Bank’s classification of July 2013. Countries are divided according to 2012 Gross National Income (GNI) per capita, calculated using the World Bank Atlas method. The groups are: low-income (US\$1,035 or less); lower-middle income (US\$1,036 to US\$4,085); upper-middle income (US\$4,086 to US\$12,615); and high-income (US\$12,616 or more).
- ²⁷ Michaels, E., H. Handfield-Jones, and B. Axelrod (2001)

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ANNEX 1: THE TOP 10 IN THE GTCI INPUT AND OUTPUT SUB-INDICES

The top performers on the GTCI Input Sub-Index

To a large extent, the GTCI Input Sub-Index can be considered as a summary of the amount of efforts and resources that individual countries are devoting to enhancing their respective local talent bases, as well as of the assets and obstacles that they are facing in this regard. Because the overall GTCI index is an average of four input pillar scores and two output pillar scores, one can naturally expect that it will be more strongly correlated to the Input Sub-Index than to the Output Sub-Index, and this is clearly the case. However, looking in greater detail at how countries fare on the input side of the GTCI model remains a worthy exercise, because it provides some valuable insights on what may constitute a successful talent competitiveness strategy.

The top ten of the GTCI Input Sub-Index is, as expected, quite reminiscent of the one found at the top of GTCI rankings.

For the GTCI Input Sub-Index, first spot and runner-up are held by Switzerland and Singapore, the same countries that lead the GTCI ranking. Subsequent members of the top ten are Sweden, the Netherlands, the United Kingdom, Belgium, Denmark, Finland, Luxembourg and Canada.

Belgium is an interesting case here: its rank on the Input Sub-Index (6th) is remarkably higher than its overall GTCI ranking (13th). This is due to noteworthy performance in the Attract pillar (1st) with strong External Openness (3rd) and high FDI inflow as a percentage of GDP (1st). Other strengths displayed by Belgium lie in the Grow pillar (8th), resulting from high rankings in Formal Education (5th) and Lifelong Learning (5th). Its performance is less remarkable in the Enablers pillar (16th), and in the Retain pillar (27th).

Canada and the United States are among the few non-European countries leading the Input Sub-Index (10th and 11th respectively). Canada is a world leader for two pillars, namely Enablers (6th) and Attract (7th). This is largely explained by its record in the Business Landscape sub-pillar (3rd), with a highly flexible labour market (4th) and high reliance on professional management (7th). Canada's position is also greatly enhanced by its excellent rank in tolerance to minorities (1st) and immigrants (2nd). It ranks highly at enhancing women's involvement in the professional and technical workforce. The quality of education is also an asset for Canada, as shown by the country's performance on QS university rankings (3rd), PISA's reading, math, and science scores (6th), and the quality of management schools (5th). Canada's relatively weaker spots are in the Grow (13th) and Retain (16th) pillars; the country ranks relatively low in voicing concern to officials (41st), and on lifestyle indicators such as property stolen (51st) and physician density (56th).

In addition to the top ten in the list of "GTCI output champions" (Switzerland, Luxembourg, Denmark, Iceland, the United States, Singapore, Finland, the United Kingdom, Sweden and

the Netherlands), other countries of the top 20 provide useful insights on how a strong performance is built on the Labour and Vocational (LV) and Global Knowledge (GK) pillars. They include Austria, Norway, Germany, Canada, France, Israel, Estonia, New Zealand, Australia and the Czech Republic. In this second list, the examples of Austria and Estonia are both complementary and significantly distinct from one another.

Austria's overall GTCI rank (14th) comes from a homogeneous performance across both sub-indices: 14th on the Input Sub-Index and 11th on the Output Sub-Index. Austria is relatively strong on the Grow (10th) and Retain (2nd) pillars, while being somewhat less impressive on the Enablers (18th) and Attract (23rd) pillars. The country's high input performance can be attributed to factors such as Formal Education (2nd), supported by high technical and vocational enrolment (4th). Despite a relatively modest QS ranking (25th), the country has a high international student inflow (7th). Beyond formal education, its Access to Growth Opportunities sub-pillar is overall on par (10th), while Lifelong Learning (22nd) could be improved. Austria's retention indicators show high performance on the Lifestyle sub-pillar (1st). Its lower position on the Attract pillar (23rd) is attributed to its weaker rank on FDI inflows (40th), prevalence of foreign ownership (35th), and tolerance towards minorities (38th) and immigrants (37th).

Estonia (23rd overall in GTCI rankings) has an input rank of 23rd and an output rank of 17th. The country's performance is not particularly high on the Attract (52nd) or Grow (35th) pillars, or even on Enablers (25th). Estonia's performance could probably be even higher if some obstacles could be diminished or mitigated, including the country's relative lack of External Openness (65th) and Internal Openness (47th). Estonia ranks low for FDI inflows (83rd), qualified labour inflows (59th), and exhibiting low tolerance towards immigrants (91st) and minorities (81st). Estonia, nevertheless, presents high levels of female professionals and technical workers and respectable levels of social mobility (21st). Reading, math and science scores are high (11th) and its pupil-teacher ratio is among the best (12th). In spite of less than impressive Enablers performances (for example, it ranks only 46th for the Business Landscape sub-pillar) Estonia has proved to be a leader in the Retain pillar (8th). Estonia's output, however, is marked by a significantly lower rank in the Labour and Vocational (24th) pillar than its Global Knowledge (9th), perhaps reflecting its commitments to innovation, the IT sector and e-government. Its youth employment is rather low (64th). Nevertheless, the country has relatively high tertiary-educated workforce (6th). This translates into a significant impact on the country's ability to innovate (8th).

Table 1: GTCI Input Sub-Index rankings

Country	Input (0-100)	Input Rank	Enablers (0-100)	Enablers Rank	Attract (0-100)	Attract Rank	Grow (0-100)	Grow Rank	Retain (0-100)	Retain Rank
Switzerland	77.75	1	84.29	1	65.57	18	77.81	1	83.32	1
Singapore	74.80	2	82.47	3	79.53	3	68.45	11	68.77	10
Sweden	74.04	3	80.85	5	73.46	4	71.93	5	69.91	7
Netherlands	73.08	4	76.97	13	71.12	6	71.53	6	72.69	5
United Kingdom	72.54	5	79.39	10	68.57	12	73.17	2	69.04	9
Belgium	72.51	6	74.53	16	81.79	1	70.93	8	62.77	27
Denmark	72.14	7	81.97	4	72.16	5	68.05	12	66.40	17
Finland	71.95	8	79.79	8	67.64	15	72.03	4	68.36	12
Luxembourg	71.50	9	70.08	21	81.55	2	66.57	14	67.79	13
Canada	71.23	10	80.77	6	71.06	7	66.65	13	66.43	16
United States	70.59	11	80.63	7	64.13	22	72.27	3	65.31	19
Norway	70.58	12	71.54	19	69.85	11	66.49	15	74.45	4
Australia	70.56	13	79.43	9	68.27	14	71.22	7	63.30	26
Austria	69.93	14	72.00	18	62.49	23	70.30	10	74.92	2
Iceland	69.73	15	77.39	12	70.45	8	62.59	20	68.50	11
New Zealand	69.47	16	84.04	2	68.28	13	64.97	17	60.58	35
Germany	69.13	17	70.23	20	65.35	19	70.45	9	70.50	6
Ireland	68.73	18	73.92	17	70.07	10	63.28	18	67.66	14
United Arab Emirates	67.01	19	76.04	14	56.35	37	60.85	23	74.79	3
Japan	63.42	20	79.14	11	46.82	76	61.96	22	65.76	18
France	63.11	21	65.46	24	56.73	36	65.25	16	65.01	20
Czech Republic	61.06	22	67.04	22	53.34	47	57.40	29	66.44	15
Estonia	60.05	23	65.09	25	51.63	52	53.80	35	69.69	8
Portugal	59.20	24	55.46	41	60.23	26	58.53	27	62.57	29
Montenegro	58.86	25	58.92	33	64.66	20	50.31	45	61.57	32
Costa Rica	58.57	26	54.60	46	67.34	16	56.10	32	56.26	43
Spain	58.29	27	54.98	45	60.49	25	58.54	26	59.18	37
Slovak Republic	58.14	28	64.95	26	53.15	49	50.47	43	63.99	22
Slovenia	57.98	29	57.93	36	51.69	51	58.41	28	63.89	23
Cyprus	57.68	30	58.78	35	51.47	53	59.77	25	60.71	34
Chile	57.54	31	57.40	39	64.51	21	57.14	30	51.13	56
Korea, Rep.	57.42	32	62.51	28	48.71	66	60.04	24	58.40	41
Malaysia	57.11	33	66.02	23	52.13	50	56.48	31	53.79	48
Latvia	57.07	34	57.42	38	54.34	42	52.37	38	64.13	21
Israel	56.96	35	58.90	34	55.16	39	62.09	21	51.68	55
Poland	56.24	36	62.77	27	50.31	57	48.11	52	63.76	24
Malta	55.65	37	62.06	30	55.01	40	52.82	36	52.70	51
Lithuania	55.48	38	62.21	29	48.59	67	49.47	47	61.66	31
Panama	55.13	39	45.43	67	66.45	17	52.31	39	56.32	42
Qatar	54.52	40	74.79	15	40.97	93	62.74	19	39.56	77
Italy	54.43	41	52.93	49	46.14	79	55.95	33	62.72	28
Uruguay	54.42	42	52.81	50	61.48	24	48.18	51	55.23	44
Hungary	54.27	43	59.41	31	50.08	61	49.09	48	58.50	40
Saudi Arabia	53.57	44	55.10	44	47.98	72	52.50	37	58.69	39
Bulgaria	52.58	45	55.42	42	49.05	64	44.38	61	61.46	33
Georgia	52.45	46	55.84	40	54.44	41	40.41	81	59.12	38
Croatia	51.90	47	53.76	47	46.52	77	47.23	54	60.07	36
Kazakhstan	50.98	48	49.84	57	59.93	29	40.32	82	53.85	45
Trinidad and Tobago	50.21	49	53.01	48	55.40	38	44.05	65	48.37	60
Macedonia, FYR	50.19	50	52.16	53	50.10	60	44.66	60	53.84	46
Argentina	49.57	51	43.96	71	58.83	30	50.95	41	44.54	67
Brazil	49.24	52	45.15	69	58.33	32	48.30	50	45.17	65
Armenia	48.80	53	50.52	56	50.78	55	41.50	74	52.37	53

Table 1: GTCI Input Sub-Index rankings (continued)

Country	Input (0-100)	Input Rank	Enablers (0-100)	Enablers Rank	Attract (0-100)	Attract Rank	Grow (0-100)	Grow Rank	Retain (0-100)	Retain Rank
Kuwait	48.62	54	49.91	58	41.55	90	41.77	72	81.66	30
Oman	48.19	55	43.84	72	41.40	92	44.11	63	83.40	30
South Africa	48.08	56	57.86	37	58.73	31	50.64	42	34.77	121
Lebanon	48.02	57	40.71	84	48.55	68	50.41	44	62.36	62
Oman	48.01	58	47.76	69	48.81	65	51.30	40	44.16	68
Azerbaijan	47.93	59	48.53	66	48.78	62	43.30	69	53.12	50
Mongolia	47.74	60	49.76	63	60.21	27	40.62	87	41.47	72
Botswana	47.30	61	59.11	32	56.99	34	41.89	73	31.52	96
Namibia	48.81	52	50.21	43	60.18	28	40.24	71	29.63	97
Russian Federation	49.78	53	42.61	77	44.82	82	46.13	57	53.46	49
Jordan	48.50	54	52.39	52	41.62	89	43.47	66	48.91	56
Thailand	48.49	55	45.58	64	48.19	79	50.68	46	44.12	69
Romania	48.43	56	52.09	50	41.81	91	44.69	64	48.07	61
Albania	48.28	57	48.02	62	48.80	60	41.58	75	51.63	54
Peru	45.93	68	52.46	51	57.10	33	41.45	75	32.70	95
Mexico	45.62	69	48.32	60	50.24	38	47.31	53	36.62	83
Philippines	45.41	70	42.32	79	50.33	39	46.73	55	43.37	71
Sri Lanka	45.21	71	46.08	61	51.15	54	39.01	85	44.58	66
Guatemala	44.85	72	37.44	91	47.29	74	54.64	34	40.62	73
Nicaragua	44.85	73	38.37	87	79.27	9	33.10	98	37.65	84
Turkey	44.38	74	45.56	65	41.96	87	43.76	60	46.25	63
Kyrgyz Republic	44.14	75	41.15	81	56.81	35	32.66	99	45.75	64
India	44.08	76	52.10	54	44.38	84	44.27	62	35.45	89
Cambodia	43.75	77	42.54	78	48.11	71	36.30	93	48.00	62
Ecuador	43.63	78	32.17	97	53.60	44	48.54	40	40.32	75
Indonesia	43.63	79	37.14	93	48.40	70	45.60	58	43.26	70
Moldova	43.47	80	43.03	76	43.79	85	38.31	90	48.75	57
Dominican Republic	43.46	81	42.23	80	53.25	46	40.73	79	37.53	86
Ukraine	43.34	82	43.04	74	43.00	86	38.60	95	48.67	58
Colombia	43.32	83	45.28	68	47.00	75	46.26	56	54.74	31
Vietnam	42.49	84	40.84	82	53.21	48	36.77	91	39.13	80
Morocco	41.21	85	37.59	95	48.49	69	41.33	77	37.45	88
El Salvador	40.20	86	43.04	75	44.87	83	39.06	94	33.88	93
Paraguay	39.99	87	36.52	96	50.59	50	42.35	70	36.47	88
Bosnia and Herzegovina	39.87	88	36.74	95	35.46	99	45.01	59	39.23	79
Serbia	39.27	89	44.70	70	33.89	100	38.32	96	40.16	78
Uganda	38.89	90	40.79	83	53.91	43	41.29	78	19.18	123
Bolivia	38.66	91	33.44	94	47.42	73	39.60	96	34.78	90
Tanzania	38.25	92	39.00	86	49.11	63	36.15	93	28.26	99
Kenya	37.66	93	43.63	73	41.85	88	38.89	92	26.27	100
Egypt, Arab Rep.	37.57	94	34.01	93	28.53	103	35.64	94	53.81	47
Senegal	37.31	95	33.38	95	53.37	45	40.18	83	23.30	102
Mali	36.38	96	29.34	100	48.00	61	33.72	97	37.44	87
Venezuela, RB	36.22	97	25.40	102	38.29	97	40.56	80	40.58	74
Bangladesh	35.77	98	37.65	89	40.80	84	30.24	101	34.30	92
Burkina Faso	35.60	99	37.93	88	29.87	98	31.17	100	33.40	94
Pakistan	34.42	100	32.97	98	39.76	96	35.45	95	29.47	98
Ethiopia	33.87	101	31.48	99	36.92	98	29.45	103	30.63	95
Iran, Islamic Rep.	33.42	102	37.74	101	32.52	101	34.40	98	39.04	81
Algeria	29.65	103	22.48	103	26.90	102	30.22	102	30.34	79

Table 2: GTCI Output Sub-Index rankings

Country	Output (0-100)	Output Rank	LV (0-100)	LV Rank	GK (0-100)	GK Rank
Switzerland	68.98	1	69.56	1	68.40	1
Luxembourg	63.10	2	58.30	15	67.91	2
Denmark	62.49	3	60.69	9	64.30	4
Iceland	61.76	4	59.01	12	64.50	3
United States	61.56	5	62.54	5	60.57	7
Singapore	61.41	6	61.74	7	61.07	6
Finland	59.30	7	57.39	18	61.20	5
United Kingdom	59.30	8	59.83	11	58.76	12
Sweden	58.50	9	57.35	19	59.64	10
Netherlands	58.32	10	60.17	10	56.48	14
Austria	57.06	11	65.39	2	48.73	26
Norway	56.86	12	61.76	6	51.97	21
Germany	56.74	13	64.46	3	49.02	25
Canada	56.35	14	58.02	16	54.67	17
France	56.22	15	56.12	20	56.33	16
Israel	55.83	16	51.26	23	60.39	8
Estonia	55.40	17	50.96	24	59.83	9
New Zealand	54.27	18	49.54	28	59.01	11
Australia	53.93	19	57.91	17	49.96	23
Czech Republic	53.41	20	58.79	13	48.03	28
Japan	52.82	21	52.10	22	53.53	19
Ireland	52.42	22	48.38	29	56.46	15
Belgium	52.01	23	49.94	25	54.08	18
Slovenia	51.08	24	49.68	27	52.48	20
Malta	51.01	25	44.66	35	57.36	13
Qatar	49.15	26	63.62	4	34.68	48
United Arab Emirates	48.58	27	52.87	21	44.30	31
Korea, Rep.	48.55	28	46.89	31	50.20	22
Slovak Republic	48.23	29	58.36	14	38.10	40
Latvia	47.66	30	46.76	32	48.57	27
Poland	47.41	31	47.52	30	47.29	30
Montenegro	47.22	32	61.28	8	33.17	52
Chile	46.15	33	43.14	38	49.17	24
Italy	46.05	34	44.39	36	47.70	29
Cyprus	42.96	35	43.88	37	42.04	34
Lithuania	42.67	36	41.41	42	43.94	32
Hungary	42.49	37	45.11	34	39.88	38
Malaysia	40.42	38	49.82	26	31.01	56
Spain	39.64	39	35.97	65	43.30	33
China	38.80	40	40.38	46	37.22	42
Russian Federation	38.74	41	41.05	44	36.44	45
Lebanon	38.68	42	39.81	49	37.55	41
Saudi Arabia	37.55	43	38.51	55	36.60	44
Bulgaria	37.53	44	37.86	57	37.21	43
Serbia	37.18	45	39.15	51	35.22	47
Ukraine	36.86	46	39.71	50	34.01	50
Moldova	36.41	47	33.47	70	39.34	39
Portugal	36.02	48	30.79	83	41.26	35
Colombia	35.96	49	31.77	76	40.14	37
Turkey	34.72	50	33.72	69	35.72	46
South Africa	33.12	51	31.75	77	34.50	49
Kazakhstan	33.01	52	45.34	33	20.68	80

Table 2: GTCI Output Sub-Index rankings (continued)

Country	Output (0-100)	Output Rank	LV (0-100)	LV Rank	OR (0-100)	OR Rank
Croatia	32.91	53	35.98	54	29.84	57
Peru	32.88	54	40.88	48	25.18	88
Romania	32.82	55	34.00	67	31.05	54
Jordan	32.81	56	34.81	100	41.01	36
Qatar	32.49	57	31.27	80	33.72	51
Costa Rica	32.02	58	38.89	53	25.16	89
Mexico	31.88	59	36.19	63	27.54	60
Panama	31.82	60	37.94	56	25.88	83
Azerbaijan	31.45	61	40.11	47	32.78	75
Ecuador	31.30	62	31.38	79	31.02	55
Macedonia, FYR	31.28	63	34.15	68	28.42	59
Mongolia	31.21	64	41.21	43	31.21	78
Botswana	30.61	65	42.89	40	18.13	87
Paraguay	30.34	66	28.11	82	21.98	76
Argentina	30.25	67	36.09	67	23.83	72
Philippines	30.18	68	31.32	78	29.01	58
El Salvador	29.94	69	37.06	60	22.87	73
Morocco	29.65	70	27.38	92	31.91	53
Timor-Leste	29.28	71	28.95	48	18.00	85
Kuwait	29.17	72	35.48	60	22.86	74
Georgia	29.01	73	30.88	62	27.22	61
Armenia	28.90	74	29.03	67	27.19	62
Ireland	28.12	75	30.84	64	25.81	64
Dominican Republic	28.08	76	31.79	75	24.37	68
Brazil	28.05	77	27.15	94	18.97	82
Fiji	27.58	78	43.09	39	12.07	92
Guatemala	27.43	79	30.40	63	18.45	86
Vietnam	27.24	80	27.49	90	16.99	89
Pakistan	26.79	81	28.49	90	28.09	67
Sri Lanka	26.31	82	28.79	88	23.85	71
Venezuela, RB	25.82	83	32.85	71	18.79	84
Bolivia	25.81	84	30.83	61	20.69	79
Uruguay	25.42	85	28.90	93	23.93	70
Egypt, Arab Rep.	25.32	86	26.48	95	24.17	69
Nicaragua	25.31	87	42.14	41	8.48	96
Albania	23.95	88	38.72	54	9.18	93
India	23.80	89	26.28	96	21.23	77
Indonesia	23.75	90	28.08	89	18.94	83
Senegal	21.21	91	30.21	85	12.42	91
Ethiopia	20.31	92	32.89	72	9.02	97
Iran, Islamic Rep.	20.10	93	26.81	94	13.98	90
Algeria	19.91	94	20.53	100	19.20	81
Bosnia and Herzegovina	19.37	95	24.09	99	14.05	89
Kenya	18.75	96	32.12	74	5.38	100
Bangladesh	18.38	97	28.84	86	8.84	98
Cambodia	17.53	98	32.28	73	2.80	102
Morocco	17.48	99	28.24	97	8.81	95
Tanzania	15.41	100	28.17	91	2.85	103
Uganda	15.20	101	24.43	101	8.18	99
Mali	14.79	102	30.75	100	8.82	94
Burkina Faso	14.39	103	24.75	98	4.03	101

ANNEX 2: A REGIONAL VIEW OF THE GTCI

Not all regions show the same degree of income disparity among their member countries. Sub-Saharan Africa, for example, is quite homogeneous (hosting many of the poorest countries on the world) while others (such as Eastern Asia, South-Eastern Asia and Oceania) harbour both high-income countries such as Singapore and low-income ones such as Cambodia. It is hence more perilous to identify “geographical” messages from GTCI data than it is for income groups.

Table 3 below brings together information on key GTCI elements (pillars) for both income groups and regional groups.

Northern America (2 countries)

Northern America has already been covered in the top ten of the GTCI and in the section on the Input Sub-Index. It is made up of Canada and the United States of America.

Europe (38 countries)

This regional group consists of Switzerland (1st), Denmark (3rd), Sweden (4th), Luxembourg (5th), the Netherlands (6th), the United Kingdom (7th), Finland (8th), Iceland (10th), Norway (12th), Belgium (13th), Austria (14th), Germany (16th), Ireland (18th), France (20th), the Czech Republic (22nd), Estonia (23rd), Slovenia (25th), Montenegro (26th), the Slovak Republic (27th), Malta (29th), Latvia (30th), Poland (32nd), Spain (35th), Italy (36th), Portugal (38th), Lithuania (39th), Hungary (40th), Bulgaria (43rd), Croatia (45th), the Russian Federation (51st), Macedonia, FYR (52nd), Greece (56th), Romania (63rd), Ukraine (66th), Moldova (68th), Albania (77th), Serbia (79th), and Bosnia Herzegovina (91st). Thus this group is very diverse in occupying ranks from 1st to 91st positions, pointing to some of the challenges that the European community and region faces.

Many of these countries have already been discussed in the section on the top ten of the GTCI. Of these countries, Germany and France stand out and are often compared as the leading economies of the European Union. **Germany** occupies 16th in the GTCI, 17th on the GTCI Input Sub-Index and 13th on the GTCI Output Sub-Index. In the pillar ranks, Germany’s highlights are its renowned vocational skills (Labour and Vocational, or LV, is 3rd), and its performance in the Retain (6th) and Grow (9th) pillars. In LV skills, Germany shows a high rank in Employable Skills (3rd), notably technicians and associate professionals (2nd). In Retain, the country is high-ranking on Lifestyle (7th). Under Grow, the country is high-ranking in Formal Education (6th) and Access to Growth Opportunities (5th). In the other three pillars, Germany’s ranks hover between 19th and 25th: the Attract pillar ranks 19th, the Enablers pillar ranks 20th and the Global Knowledge (GK) pillar ranks 25th. The moderate rank on Attract reflects reasonable Internal Openness (9th) but low External Openness (43rd) ranks. Among the Enablers, the Regulatory Landscape ranks 15th, the Market Landscape ranks 9th, and the Business Landscape ranks 50th; the latter being perhaps concomitant with the External Openness of the country. Finally, in the GK pillar, Talent Impact is divided into a high position in innovation output (7th) and a low position in terms of entrepreneurial activity (59th).

France ranks lower than Germany at 20th overall, with an input rank of 21st and output rank of 15th. Its pillar ranks are between 16th and 36th. The GK and Grow pillars rank highest at 16th each. Within the Grow pillar, France ranks moderately in Formal Education (15th), Access to Growth Opportunities (18th) and Lifelong Learning (19th). In the GK pillar, the talent impact is notable (6th), with a high rank for entrepreneurial activity (6th) and lower rank for innovation output (25th). But its higher-level skills and competencies (22nd) do not measure up to the same degree, ranking 19th for researchers, 25th for professionals, 27th for legislators, senior officials and managers, and 29th

Table 3: Regional group average scores

	Classification	GTCI	Enablers	Attract	Grow	Retain	Labour and Vocational	Global Knowledge
REGIONS	Northern America	66.92	80.70	67.60	69.46	65.87	60.28	57.62
	Europe	55.21	62.00	56.63	56.26	62.13	48.28	45.98
	Eastern, South-Eastern Asia, and Oceania	49.46	58.12	55.31	53.35	51.78	43.07	35.11
	Northern Africa and Western Asia	44.24	50.52	45.48	47.34	52.63	37.18	32.29
	Latin, Central America, and the Caribbean	41.31	43.28	55.12	46.08	42.49	36.17	24.69
	Central and Southern Asia	35.81	41.08	46.49	36.66	40.36	32.64	17.64
	Sub-Saharan Africa	33.78	42.84	49.53	38.46	29.15	29.51	13.20

Note: Countries are classified according to United Nations Regional Classifications (11 February 2013).

for tertiary-educated workforce. Following this are the LV and Retain pillars, which each rank 20th. The LV pillar shows a moderate Employable Skills rank (15th) and labour productivity (22nd). Within the Employable Skills, youth employment is ranked low (67th), while technicians and associate professionals rank high (3rd), and the secondary-educated workforce is moderate (28th). Labour Productivity reflects a high ranking on labour productivity per employee (11th) but a poorer connection between pay and productivity (55th). On the lower end are the Enablers, occupying 24th position, with the Attract pillar taking 36th. In the Enablers, the Business Landscape ranks 52nd, with the Regulatory Landscape is 25th and the Market Landscape ranks 22nd. Under Attract, External Openness ranks lower (46th) than Internal Openness (31st).

Eastern and South-Eastern Asia and Oceania (13 countries)

Singapore marks an excellent performance in the region, with its government's explicit focus on building talent competitiveness. After Singapore, two Oceania countries, Australia (15th) and New Zealand (17th), follow. Japan (21st) and Korea (28th) are the bottom two from the high-income group. As mentioned earlier, Malaysia (37th) leads the upper-middle income group and is followed by China (47th). Meanwhile, Indonesia (84th) and Cambodia (87th) lag behind.

Australia and **New Zealand** are equally strong on Attract, respectively at 14th and 13th places. Australia ranks 10th in Internal Openness and 21st in External Openness while the distribution is more skewed in the case of New Zealand with exceptionally high Internal Openness (4th) and relatively low External Openness (38th). Both are among the top ten in Enablers with New Zealand in 2nd and Australia in 9th position. Australia is in 7th position in Grow, with particular strengths in Formal Education (1st). Here New Zealand lags behind (17th), though it gains strength from Lifelong Learning (14th). Their performance in the Output Sub-Index is also similar despite playing on different strengths: Australia does well in LV skills (17th) while New Zealand's strength lies in GK (11th).

There is a relatively similar distribution in the performance of **Japan** and **Korea** across six pillars, except for Enablers and Retain. Japan occupies a higher position in Enablers (11th) and Retain (18th) than Korea (28th and 41st, respectively). They have relatively strong performance in Grow, where Korea leads in Formal Education (17th) and Japan takes the higher spot in Lifelong Learning (26th) and Access to Growth Opportunities (21st). Regarding the output composition, Japan has a rather balanced distribution of LV and GK skills (22nd and 19th, respectively) while Korea performs slightly lower in LV (31st) than its GK (22nd). In order to further enhance talent competitiveness, both have to address areas of concerns in the Attract pillar. They rank low both in External Openness (Japan, 73rd and Korea, 61st) and Internal Openness (Japan, 67th and Korea, 73rd), coming across as closed talent economies.

Northern Africa and Western Asia (15 countries)

The regional group of Northern Africa and Western Asia spans countries on the cusp of Europe such as Turkey, countries along the Persian Gulf and the Red, Caspian, Black and Mediterranean seas such as Kuwait, the United Arab Emirates (UAE), Egypt, Georgia, Lebanon, Israel, Morocco, Algeria and Cyprus, and the landlocked smaller economy of Armenia.

The GTCI includes 15 countries within this group. The top ten are the UAE, Israel, Cyprus, Qatar, Saudi Arabia, Lebanon, Georgia, Azerbaijan, Kuwait and Armenia. The other five are Jordan, Turkey, the Arab Republic of Egypt, Morocco and Algeria.

Leading the group is **the UAE** with a rank of 19th overall, 19th in the Input Sub-Index and 27th in the Output Sub-Index. Within the Input Sub-Index, the UAE ranks very highly in Retain (3rd), supported by a high rank in terms of the Sustainability sub-pillar. Regarding the Lifestyle sub-pillar, the UAE ranks high for safety at night (2nd) and a lack of stolen property (10th). Enablers are also reasonably high (14th) based on high ranks in Business Landscape (9th) and Market Landscape (12th) with a lower score in Regulatory Landscape (27th). In terms of its Business Landscape, the UAE's labour market flexibility is particularly high (3rd). Within Market Landscape, the availability of venture capital ranks highly (6th). The Grow pillar ranks lower at 23rd and the Attract pillar is even lower at 37th. The output side is marked by average LV skills (21st) with the highlight being strong labour productivity (10th). As the UAE's economy remains oil-based, building the Grow pillar will be critical for the economy's future.

The second rank in this group is held by Israel, which has been discussed above in the Top 10 countries in the GTCI Output Sub-Index. **Cyprus** ranks 3rd in this regional group, 33rd in the GTCI, 30th in the Input Sub-Index and 35th in the Output Sub-Index. These rankings are reflected in similar scores on the Input Sub-Index, where the Grow pillar is the strongest (25th) while the Retain and Enablers pillars rank 34th and 35th respectively. The Attract pillar is lower at 53rd. The Grow pillar benefits from a high rank in Formal Education (14th), while Lifelong Learning (38th) and Access to Growth Opportunities (35th) lag somewhat behind. The Enablers pillar draws on a solid rank in the Regulatory Landscape (22nd) and Market Landscape (34th), while the Business Landscape trails behind (76th). Under the Output Sub-Index, the results show moderate levels of LV (37th) and GK (34th) skill. Under the LV pillar, three variables rank between 31st and 37th. Technicians and associate professionals are ranked 31st, labour productivity per employee 32nd, and secondary-educated workforce 37th, while youth employment (71st) and relationship of pay to productivity (61st) are particularly low.

Latin, Central America, and the Caribbean (18 countries)

Among the high-income countries within this regional group, Chile takes the lead (31st), followed by Uruguay (49th) and Trinidad and Tobago (53rd). However, the latter two countries are ranked below Costa Rica (41st) and Panama (44th) from the upper-middle income group. Subsequently, Argentina (54th), Brazil (59th), Peru (65th), Mexico (70th), and Colombia (71st) follow. Four countries are part of the low-income group whose rankings are very close to one another: El Salvador (85th), Paraguay (86th), Bolivia (88th), and Venezuela (92nd).

Chile stands out in this regional group, ranking highly in Attract (21st) and GK (24th). It performs remarkably well in External Openness (5th) and places all of its variables within the top 15; for instance, FDI inflows (11th), qualified labour inflow (13th), and prevalence of foreign ownership (12th). Chile also scores the highest in new product entrepreneurial activity (1st) that contributes to its high position in the Talent Impact sub-pillar (2nd). Chile's low performance in Retain (56th), particularly in the Lifestyle sub-pillar (78th), drives down its rank. Chile ranks 82nd in safety at night, 73rd in physicians density, 65th in property stolen, and 52nd in environmental performance.

The close tie between **Costa Rica** and **Panama** in GTCI score is also reflected at the pillar level. They compete head-to-head in Attract (Costa Rica, 16th and Panama, 17th), Grow (Costa Rica, 32nd and Panama, 39th), Retain (Costa Rica, 43rd and Panama, 42nd), Labour and Vocational (Costa Rica, 53rd and Panama, 56th), and Global Knowledge (Costa Rica, 65th and Panama, 63rd). The divergence in scores prevails only in Enablers where Costa Rica (46th) is well ahead of Panama (67th). Costa Rica ranks much higher in political stability (32nd), reliance on professional management (35th), government effectiveness (47th), labour market flexibility (49th), and R&D expenditure (51st) than Panama, which ranks 59th, 86th, 54th, 80th, and 76th respectively.

Brazil, ranking 59th in the GTCI, ranks 7th within this group and is placed right after Argentina. The country has varied distribution across six pillars, with Attract (32nd) as its best-performing pillar. This Attract score is the highest among the BRIC countries. As an emerging country, Brazil receives a constant stream of FDI inflow (48th) and qualified labour inflow (22nd). It has excellent internal openness (29th) as tolerance to minorities (16th) and immigrants (21st) is at the upper level. However, its Enablers (69th) come in behind China (59th) and India (54th) and its Global Knowledge (82nd) leaves Brazil almost in the bottom 20. The Talent Impact sub-pillar (88th) drags down its rank as Brazil is at the lower end of new product entrepreneurial activity.

Central and Southern Asia (7 countries)

This regional group has seven countries in the GTCI. This, however, presents a large human capital pool of 1.69 billion people, with India leading with the largest population of 1.24 billion. In the overall ranking, Kazakhstan heads up this regional group. The other countries in the group are Sri Lanka (ranked 46th), Kyrgyz Republic (78th), India (83rd), Pakistan (94th), Bangladesh (98th) and the Islamic Republic of Iran (101st).

Kazakhstan's leading position amongst the regional group is supported by its input rank of 48th and output rank of 52nd. Kazakhstan is particularly strong on the Attract (29th) pillar and in the LV skills (33rd). Digging deeper into Attract, it appears that the External Openness rank (33rd) and the Internal Openness rank (28th) are supporting this. Kazakhstan ranks high for female professionals and technicians, and moderately in its tolerance to minorities (19th) and immigrants (25th). In External Openness, FDI inflows rank high (12th), while the remaining elements rank lower: qualified labour inflow occupies 55th place and prevalence of foreign ownership 75th. Kazakhstan's other pillars are not as strong: Retain (45th), Enablers (57th), GK skills (80th) and Grow (82nd). In the Grow pillar, Formal Education ranks low (64th), Lifelong Learning even lower (70th) and Access to Growth Opportunities is very low (92nd). The Grow pillar reveals the lack of a solid foundation and might be an urgent area to address.

Ranking second in Central and Southern Asia, **Sri Lanka** comes in 76th overall, 71st on the Input Sub-Index and 82nd on the Output Sub-Index. Sri Lanka's input side reveals high ranks in Attract (54th), with External Openness at 68th and Internal Openness at 51st. In terms of External Openness, there are relative high ranks on inflow of qualified labour (38th) and foreign ownership (36th), but with an otherwise low FDI inflow (95th). On Internal Openness there is more tolerance to minorities (26th) than to immigrants (57th). The Retain pillar ranks 66th and is constituted by Sustainability (74th) and Lifestyle (57th). Under Lifestyle, Sri Lanka has a rank of 22nd for safety at night and 50th for environmental performance. Its Sustainability sub-pillar performance benefits from a more favourable ranking on the extent and effect of taxation (31st) but suffers from its pension system rank (67th). For the Output Sub-Index, Sri Lanka's LV pillar (88th) is influenced by the relationship of pay to productivity (32nd), while the GK skills (71st) benefit from the higher skills and competencies sub-pillar (59th), where the legislators, senior officials and managers rank 16th and the tertiary workforce ranks 58th.

Although the **Kyrgyz Republic** is in 3rd place in this regional group, it also ranks 1st in the low-income countries and has been described in that section. **India** is in 4th place and of particular importance as one of the BRIC economies and as the most populous country on earth with its 1.24 billion people. While ranking 4th among its regional peers, India ranks 83rd in the GTCI index overall, 76th in the Input Sub-Index and 89th in the Output Sub-Index. On the input side, the highest-ranking pillars are the Enablers (54th) and Grow (62nd). Noteworthy in the Enablers rank

is that India's Regulatory Landscape ranks 68th and its Market Landscape ranks 75th, while its Business Landscape ranks 18th because of high labour market flexibility and reliance on professional management. With the Grow pillar, India ranks high for Lifelong Learning (32nd) and Growth Opportunities (42nd) but low for Formal Education (93rd). Lowlights of India's performance are the Attract (84th) and Retain (89th) pillars. The Attract pillar reveals moderate external Openness (54th), with qualified labour inflow being high (24th), while FDI inflow (74th) and foreign ownership (59th) are weaker. But Internal Openness is much lower (93rd), with particularly low ranks for gender equality (90th) and tolerance to immigrants (92nd) as well as moderate ranks for social mobility (35th) and tolerance to minorities. The Retain pillar is constituted by a sustainability rank of 90th and a lifestyle rank of 82nd. On the output side, India's rank has a reasonable LV rank (33rd), although employable skills are very low at a rank of 99th. Labour productivity is also low at 77th. GK skills rank lower at 77th – innovation (39th) is stronger than entrepreneurship (70th). These ranks are consistent with prevailing insights on the drivers of India's uneven growth story. While India could address these issues from its strong business landscape, its low Grow pillar skills may hold it back and the regulatory landscape may continue to pose a hurdle.

Sub-Saharan Africa (10 countries)

Among the regional groups, Sub-Saharan Africa holds the bottom rank for the overall GTCI, and for the Retain, LV and GK pillars, as shown in Table 3. South Africa leads the pack, almost entering the top half of the GTCI (55th). The next countries are Botswana (64th) and Namibia (69th). Senegal (93rd) follows as the only country from the lower-middle income group. The remaining countries – Kenya (95th), Uganda (96th), Tanzania (97th), Ethiopia (99th), Mali (100th), and Burkina Faso (102nd) – are part of the low-income group and situated at the bottom of the ranking.

The top three countries in this Sub-Saharan Africa group share the same traits in terms of their performance in the GTCI pillars, with an extremely low rank in the Retain pillar, **South Africa** (101st), **Botswana** (96th), and **Namibia** (97th). Despite a slight variation on Sustainability (91st, 76th and 93rd, respectively), their rankings in the Lifestyle sub-pillar are close to one another (102nd, 101st, 98th). The indicators of major bottlenecks in their efforts to retain talent are property stolen (98th, 100th, 88th) and safety at night (97th, 101st, 99th) where they are in the bottom ten. The highlights lie in the three countries' performance in Enablers and talent Attraction. While they rank similarly on the Enablers pillar (37th, 32nd, 43rd), there are differences in the sub-pillars: Botswana leads in the Regulatory Landscape (33rd, ahead of South Africa's 41st and Namibia's 48th) and Business Landscape (21st, ahead of Namibia's 27th and South Africa's 35th), while South Africa leads in the Market Landscape (40th, ahead of Botswana's 65th and Namibia's 66th). In the Attract pillar, Namibia leads marginally (28th, ahead of South Africa's 31st and Botswana's 34th). The rankings suggest different relative strengths: while Namibia's position benefits from its positive rank in External Openness (22nd), South Africa's strength is its

Internal Openness (24th), and Botswana's rank benefits from strong External Openness (34th) and Internal Openness (35th). Other differences can be spotted in South Africa's significantly higher scores in Grow (42nd), while Botswana exhibits more solid LV skills (40th), though lower performance in GK (87th).

ANNEX 3: A CLOSER LOOK AT THE GTCI PILLARS

Enablers

Recognising that governments, business and markets all have key roles to play in the design and implementation of a talent competitiveness strategy, this pillar lists variables pertaining to the importance of these three enabling landscapes.

Under *Regulatory Landscape*, the GTCI has the components government efficiency and FDI climate. Government efficiency has been seen as constituting government effectiveness and stability. The *Market Landscape* sub-pillar contains concepts such as competition climate, innovation climate, connectivity and ease of doing business. Further, innovation climate consists of three variables. Firstly, ideas have to be researched and created, then they need to be taken to industry, and finally they need to be financed. These three parts of the innovation climate are measured by three variables, namely venture capital availability, firm-level technology absorption, and expenditure on R&D as a percentage of GDP. At the basic level, infrastructure in providing ICT access is fundamental. Ease of doing business is also important to provide a conducive environment for business operation. *Business Landscape* lists labour market flexibility and ownership as components.

Attract

This pillar has the two sub-pillars: *External Openness and Internal Openness*.

Under *External Openness*, the index lists variables about the inflow of FDI, people (brain gain) and companies into a country. Together these cover new financial, demographic and organisational forms. *Internal Openness* refers to the ability of citizens to move within a country. It aims to measure diversity, social and gender mobility. Of these three concepts, diversity and gender mobility consist of two variables each. Diversity consists of tolerance to immigrants and tolerance to minorities, while gender mobility consists of female professionals and technicians as well as female parliamentarians. The rationale for including these two parameters under diversity is that while minorities need to be accepted, newcomers from outside a country's borders also need to be tolerated to fulfil the concept of diversity. The gender mobility concept captures the understanding that gender diversity is achieved if women participate in political and business leadership. This is being captured by the variables under these concepts.

Grow

The Grow pillar consists of three sub-pillars, namely *Formal Education, Lifelong Learning and Growth Opportunities*. Based on the understanding that growth is constituted through classroom education and more importantly through lifelong learning and real-life challenges and opportunities, this pillar aims to capture variables in three areas: formal education, lifelong learning and access to growth opportunities.

Formal education measures concepts such as education climate, performance of the education system, top universities, and

international students. Within these, the education climate concept consists of three variables summing up aspects of a conducive climate: pupil-teacher ratio, technical/vocational enrolment and tertiary enrolment. Together these three provide a foundation of indicators listed under the output variables and allow analysts to countercheck aspects of the entire supply chain of talent – both of Labour and Vocational (LV) and Global Knowledge (GK) skills.

Lifelong Learning relies on the concept of further education and training, which consists of the variables for quality of management schools and extent of staff training. Together these variables capture again aspects of further learning for both LV and GK skills.

Concomitant to *Formal Education* and *Lifelong Learning*, budding talent requires *Access to Growth Opportunities*. These are provided by networks, research quality and voice. The networks concept is captured through the use of virtual networks and the state of cluster development. In that sense, the concept captures both the virtual and physical aspect of networking. Research quality is an important parameter to measure the rigour and thought processes of a country and is testimony to a country's intellectual capital. Further, to have a voice and use it regularly captures a country's ability to think and for leaders to listen to their populace, too.

Retain

This pillar contains two sub-pillars measuring concepts required to retain local and foreign human capital. Under *Sustainability*, the pension system and taxation concepts capture the extent to which a country manages its taxation scheme while also providing a pension system to its residents/citizens. *Lifestyle* measures quality of life and also services. For quality of life, the concept consists of the environmental performance, property stolen, and safety at night variables.

Labour and Vocational

Within this pillar, the *Employable Skills* and *Labour Productivity* sub-pillars capture the extent of labour and vocational talent. *Employable Skills* contains concepts such as the vocationally trained workforce, technical professions and youth employment. Meanwhile, *Labour Productivity* shares insight regarding the output of total labour input and the extent to which pay is related to productivity.

Global Knowledge

Mirroring the LV pillar, the GK pillar contains two sub-pillars: *Higher Skills and Competencies*, which measures the concepts of an educated workforce and knowledge workers, and *Talent Impact*, which measures innovation and entrepreneurship. The knowledge workers concept consists of the variables legislators, senior officials and managers, professionals, and researchers, as these four populations of an educated workforce capture all aspects of knowledge workers and are at the heart of this pillar. Similar to *Labour Productivity*, *Talent Impact* captures the extent to which this talent converts its competencies into tangible results in innovation and entrepreneurship.

Notes

- ¹ Regional groups have been based on the United Nations Classification: EUR = Europe; NAC = Northern America; LCN = Latin America and the Caribbean; CSA = Central and Southern Asia; SEAO = South East Asia and Oceania; NAWA = Northern Africa and Western Asia; and SSA = Sub-Saharan Africa
- ² Acemoglu and Robinson (2013)

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CHAPTER 2

BUSINESS ECOSYSTEMS: DEVELOPING EMPLOYABLE TALENT TO MEET ASIA'S NEEDS

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HCLI

ASIA'S EMPLOYABILITY CHALLENGE

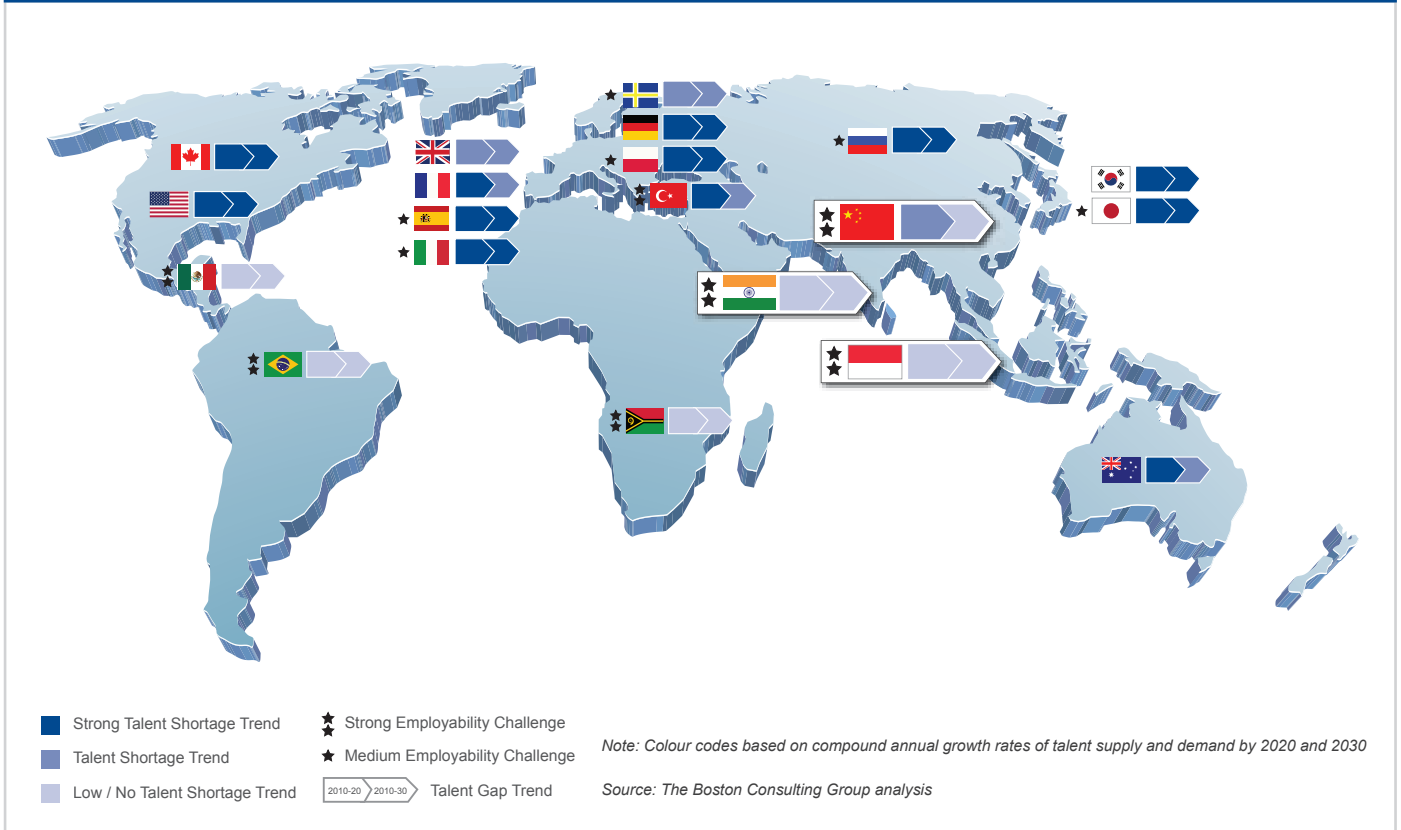
The World Economic Forum emphasised the world's talent risks in a 2011 study with The Boston Consulting Group. The study highlighted that – given relatively favourable birth rates and population sizes – *employee shortage* would be a smaller problem in Asian countries such as China, India, and Indonesia vis-à-vis the developed markets of the United States and Europe. However, Asia's rising economic powers would face a severe *employability* challenge due to the lower skill levels of their people (see Figure 1).

In a 2012 McKinsey survey, for instance, large employers in India stated that they currently had, on average, 36 vacant full-time entry-level jobs. This was more than the other eight countries surveyed across Europe, the Americas and Middle East. In the same survey, 53% of Indian employers said that the vacancies were due to a lack of skills.

What skills might employees in Asia lack? Manpower Group's 2012 Talent Shortage Survey, which involved close to 9,000 employers across the Asia Pacific, suggested that employers in this region had greater difficulties filling jobs (45% compared to the global average of 34%) due to a deficiency of both technical and soft skills. The former could comprise industry-specific qualifications or certifications, skilled trade qualifications, and speaking/verbal skills, and the latter interpersonal skills.

Employers are well aware that solutions are needed. In fact, many have taken it upon themselves to develop their employees. In the Economist Intelligence Unit's 2011 survey of over 400 senior executives on their talent outlook through to 2015, 60% of the respondents in Asia Pacific stated that, compared to two years ago, their companies were putting in more time and/or investment to bring new management talent, and/or specialised talent up to speed. This was a marked variance from the global average of 49%.

Figure 1: Significant talent gaps expected by 2020 and beyond
 In countries with no talent shortage trend, employability is the challenge



Source: World Economic Forum - BCG 2011

Talent solutions – new models needed

Yet, it is not merely sufficient to develop talent. The trick is to do so with speed and scale – and in a cost-effective manner. Consider PwC’s survey finding from 440 CEOs in Asia Pacific: talent constraints have prevented half the respondent companies in China from innovating effectively and 45% from pursuing market opportunities; in India, 41% had to cancel or delay a key strategic initiative. Thus, concerning talent development in Asia Pacific, there needs to be speed before more business opportunities are lost. Considering the difficulty that employers in Asia Pacific have in filling roles with the right quality of talent, any solution should also be scalable to produce huge numbers of business-ready employees. Finally, factoring in rising cost pressures across the region (including escalating manpower costs), talent development initiatives must be financially sustainable.

The Human Capital Leadership Institute (HCLI) proposes that the answer to the above lies in the “business ecosystem”. The rest of this chapter goes on to:

1. Explain the concept of the business ecosystem from scholarly literature;
2. Suggest the transferability to the talent development domain; and
3. Elaborate on the keys to successful ecosystem partnerships through two case examples.

THE “BUSINESS ECOSYSTEM” CONCEPT

The concept of the business ecosystem was first raised by Moore (1993), and can be broadly defined as an interdependent economic community including cross-industrial players, governments, and universities that co-evolve with one other to create and deliver value.¹

Traditionally, this creation and delivery of value has revolved around an innovation or new product. The structure of a typical business ecosystem involves a “keystone player” setting up an innovation platform, while other “niche players” with specialised capabilities then base their business activities around and operate on top of this platform by providing complementary offerings. Oft-cited examples include Microsoft’s Windows Operating System and third-party software programmes, and Apple’s iPhone and third-party mobile app developers.²

While the business ecosystem concept to date has been largely explored and studied in the innovation domain, HCLI suggests that the concept can likewise be instructive for companies as they design and implement speedy, scalable – and cost-effective – talent initiatives.

TRANSFERABILITY TO TALENT DEVELOPMENT

First and foremost, the key principle underlying the business ecosystem concept is that businesses should “look out”. This means not just focusing on internal capabilities, but leveraging external partners to confront and co-solve challenges and seize opportunities.

As suggested by Iansiti and Levien (2004), organisations should determine the dependencies most critical to their business, and systemically identify the external organisations with which their future is most closely intertwined. For instance, Microsoft would qualify that its success depends on the health of thousands of other organisations in other domains, such as systems integrators, independent software vendors, internet service providers and consumer electronics companies.

Partners in the above-mentioned domains are certainly critical to delivery. However, has due consideration been similarly given to potential partners in the talent domain? Ultimately, talent is a critical dependency to business, and can undermine the future of business just as broken supply chain links could. As highlighted by the PwC survey mentioned earlier, talent constraints can limit innovation and the pursuit of market opportunities, and delay or cancel strategic initiatives.

Aside from supporting business delivery, ecosystem partnerships on the talent front can better diagnose the nature or magnitude of the talent challenge at hand, and then align different parties to deal with it. Sometimes, each party may hold differing perceptions of the problem due to lack of information, exposure or biases. For instance, in the same McKinsey survey mentioned earlier, fewer than half of youth and employers believe that new graduates are adequately prepared for entry-level positions. This differs widely from the 72% of education providers who believe new graduates are business-ready. McKinsey’s survey findings go on to suggest that *only one kind* of employer will be successful in getting the talent it requires, and the distinguishing factor is that these employers reach out regularly to education providers and youth. All parties “actively step into one another’s worlds” – early and intensely – instead of staying in their silos. For instance, employers would help to design the curriculum, while education providers would have their students go through hands-on training on job sites.

In some sense, the positive outcome achieved through such ecosystem interactions is not surprising. A lot of knowledge about work is tacit, not easily codified and widely dispersed. By intentionally seeking out partners, this forces together knowledge and resource combinations that would otherwise not form naturally,³ and allow the seeking partners to reap above-average returns.

Thus, a forward-thinking company would leverage external partners in its business ecosystem to innovate on talent development solutions. And this is precisely what two companies – Infosys and Rolls-Royce – have done in Asia.

Two case examples

Let us first understand the context of Infosys. In the early 2000s, India’s IT industry was growing exponentially and by the mid-2000s, it was quite normal for major industry players such as Infosys to have to recruit over 10,000 entry-level engineers every year. However, the industry faced a significant employability challenge: there were simply not enough engineering graduates who were business-ready and could apply theory to practical problem solving, among other competency gaps. In 2004, Infosys launched its Campus Connect programme with 70 colleges to enhance the quality of IT education in India, thus meeting the employability challenge head-on. In subsequent years, the company collaborated with other organisations such as the All India Council for Technical Education that promoted and regulated engineering education in the country, and the National Association of Software and Services Companies to push out policy-level changes into the higher education system. Eight years after its first rollout, Campus Connect has been scaled up to 400 colleges, touching more than 180,000 students and 8,300 faculty members across India. For Infosys, it was also able to multiply its recruitment from about 8,000 in 2006 to over 20,000 employable recruits in 2012.

Rolls-Royce’s journey of talent development via the business ecosystem began with its announcement in 2007 that it would build an advanced manufacturing, training and research facility in Singapore. At full capacity, the facility would produce about 250 aero engines and over 6,000 fan blades a year. Such high-value manufacturing techniques required complex technology to be introduced for the first time into Asia. Unfortunately, the local labour market in Singapore lacked experienced aerospace technicians. Contrast this with Rolls-Royce’s employment experience in the UK, where technicians on the shop floor can have 30 years of experience building engines. To overcome the employability challenge, Rolls-Royce collaborated with the Singapore Workforce Development Agency, National Trades Union Congress’s Employment and Employability Institute, Singapore Airlines Engineering Company, Institute of Technical Education, and various polytechnics to develop training and qualifications programmes. This provided a steady stream of new recruits with the necessary skills for aerospace manufacturing. By its first year of operations in 2012, the new facility had filled over 500 new jobs.

But... just how different is a “business ecosystem” from other forms of external partnerships?

That a company should co-opt the complementary capabilities, resources and knowledge of other organisations in its network is not novel thinking.⁴ In fact, it can be argued that the vertically integrated organisation came into being as business leaders recognised this merit. However, a business ecosystem model has advantages over permanent, integrated organisational structures as it can enable activities, assets and capabilities to be flexibly and constantly reconfigured. This flexibility aligns with the volatile, uncertain and fast-moving pace of Asia. Moreover, the ecosystem model can work for companies of different resource capacities. For instance, it does not require a company to build out its own corporate university, and in so doing, preclude those with little capital to invest.

Secondly, in a true ecosystem, the partnership is not one between a principal and subcontractors. It is not about a client company sourcing for an educational institute or even a consulting firm to run training or leadership development courses. Instead, there is no strict separation between conception and execution that disfavors collective innovation.⁵ In fact, it is the potential for innovation, set against the contextual need for talent solutions of speed, scale and value, that lends further weight to the ecosystem argument.

Finally, an ecosystem model does not just comprise a single alliance, but a host of relationships among multiple players. Hence, the multiplier effect of complementary capabilities, resources and knowledge in creating the new talent development solution is many times more than a single industry-academic partnership. Rolls-Royce, for instance, did not just work with the education institutes to design curricula. As elaborated in the next section, it also worked with other parties such as the government and industry partners to amplify the impact.

KEYS TO DRIVING A SUCCESSFUL ECOSYSTEM

Ultimately, a business ecosystem is an extended organisational design that will only hold together when partners are in agreement about the development of a common project – in this case, talent development solutions of speed, scale and value. As pointed out by Koenig (2012), the critical question to ask is: how can partners come to an agreement with only their potential to influence to fall back on – in the absence of direct command and control relationships? Moreover, how can businesses avoid the risks of one party gaining at the expense of others, confusion during the collaboration process, and financially unsustainable arrangements to ultimately create truly innovative talent solutions?

The rest of this section adapts some of the principles proposed by Williamson and De Meyer (2012), illustrated through the case examples of Infosys and Rolls-Royce which were co-developed between them and the HCLI.

i) To avoid one-sided gains and promote agreement, create added value for all

For both Infosys and Rolls-Royce, it was clear that through their ecosystems, they would end up with a pool of business-ready graduates, and because of existing industry-academia relationships, a significant mindshare with these graduates who would be more prone to apply for jobs with them. Rolls-Royce, for instance, influenced 70% of the modules and curriculum at Singapore’s Institute of Technical Education, facilitating new recruits to have in advance the knowledge for working at its new facility in Singapore. However, what were the benefits to its partners?

From the perspective of their academic and education partners, they benefited by producing more employable graduates

and gaining an enhanced reputation in this respect. Moreover, the educational institutes partnering with Rolls-Royce benefited by receiving privileged industry-specific education material from an industry leader and training opportunities for their students; the faculty of colleges partnering Infosys received industry support on the research papers they were working on.

Uniquely in Rolls-Royce’s case, the Singapore government achieved a milestone in establishing the country as an aerospace hub in Asia through leveraging the Rolls-Royce brand and the fact that its most advanced aero engines would be manufactured in Singapore. In more quantitative terms, Rolls-Royce together with its joint venture partners accounted for over 15% of Singapore’s aerospace output and employed more than 2,200 people, of whom 85% were local.

ii) To untangle confusion in collaboration, structure differentiated partner roles and rewards

Having to work with multiple partners in the ecosystem can more often lead to confusion rather than clarity. It is thus important that each partner has clearly defined and differentiated roles.

Infosys made the concerted effort to structure this right from the start, both internally within its organisation and externally with its partners. Firstly, it set aside a core team of dedicated staff who managed the actual operations of the Campus Connect programme. This involved developing and managing the relationships with different ecosystem partners, and reviewing the programmes and performance of partners. Infosys expected each of its external college partners to form a core group comprising programme directors and faculty to work with the Infosys team to realise an implementation plan, underpinned by a Memorandum of Understanding.

Furthermore, Infosys created a system that differentiated its college partners. This was essential in managing an ecosystem of partnerships, compared to a one-to-one alliance. Each college partner would be categorised as “member” or “advanced”. Member colleges were recent entrants to the ecosystem that had commenced joint programmes, while advanced colleges were those that had significantly integrated the Campus Connect programme into their curriculum and/or co-created effective industry electives. For the latter group, they were further rewarded by Infosys sponsoring sabbaticals for their faculty, and financial support on joint prototype development of new innovations and research. On the other hand, there are also “punishments” along with rewards: in the event of failed objectives per the Memorandum of Understanding or implementation plan, a college partner may be dropped from the ecosystem.

iii) To ensure long-term financial sustainability, reduce cost and seek partner investment

To be viable in the long term, the ecosystem model should not lead to skyrocketing maintenance costs. Particularly in the context of rising cost pressures in Asia, the ecosystem should not only create added value for all parties, but reduce direct and indirect costs.

For Rolls-Royce, having the new facility in Singapore was a decision of business sense: due to Singapore’s geographic proximity to its fast-growing markets in Asia, there would be reduced customer transaction costs for providing services and transporting manufactured products to these markets. It was thus an extra sweetener that costs were further defrayed through tax incentives and training grants supported by the Singapore government.

Regarding the direct cost implications of Infosys’ Campus Connect programme, it was estimated that it had reduced costs by 40% in the last few years. This was achieved through leveraging innovation, such as webinar technology. Infosys has also gotten its college partners to become more invested, such that about half of its current programmes are now implemented in the colleges (and not on Infosys premises). These partners have also taken the lead in organising their own faculty-developed programmes, instead of relying on Infosys to initiate and direct, as was the case when Campus Connect was first launched.

iv) To create truly innovative solutions for a volatile and complex world, emphasise flexible structures and co-learning

The above keys to success are important but, as mentioned earlier, it is the potential for truly innovative solutions that differentiates the business ecosystem model from other forms of alliances – in this case, to develop talent with speed and scale. In Asia, speed is necessary to keep pace with rapid development and demand, while scale is required to create a magnified impact. To achieve this, the final key to success is that the structure put in place be flexible and facilitate co-learning.

The structure of Infosys’ Campus Connect programme, for instance, is not centralised, which would have hampered speed and scale considering the different regions in India, their education specifications, and the hundreds of partner colleges involved that would each require a certain degree of customisation. Rather, Campus Connect is built on a distributed model of ten development centres across India. Each college partner is attached to the nearest centre whose responsibility it is to ensure uniformity of the “Infosys experience”.

For Rolls-Royce, it partnered with Singapore’s Institute of Technical Education to design local modules and a curriculum to produce entry-level technicians. However, it magnified the impact by working with the Singapore Workforce Development Agency to develop Precision Engineering Workforce Skills Qualifications that were internationally recognised. Furthermore, to enable the ecosystem to co-learn and co-evolve, Rolls-Royce sought representation on several bodies that gathered industry intelligence and influenced policymaking, such as the Association of Aerospace Industries in Singapore and the Singapore Economic Development Board.

CONCLUSION

This chapter has shown that talent innovations for Asia are possible. The business ecosystem is an answer to developing talent quickly, with magnified impact and in a cost-effective manner. Businesses should thoroughly give it due consideration as they confront talent challenges and the war for talent. After all, as forewarned by Moore (1993), competition will no longer be between individual companies, but between the ecosystems that the companies spearhead or find themselves in.

Notes

- ¹ Rong, K., Y. Shi, and J. Yu (2013)
- ² Moore, J.F. (1993); Rong, K., Y. Shi, and J. Yu (2013); Zahra, S.A. and S. Nambisan (2012)
- ³ Galunic, D.C. and S. Rodan (1998)
- ⁴ Williamson, P.J. and A. De Meyer (2012)
- ⁵ Koenig, G. (2012)

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CHAPTER 3

LIBERALISING THE GLOBAL MARKET FOR LABOUR: FROM PARALYSIS TO POLICY INNOVATION

Manjula Luthria and Pamela Dale

The World Bank

Policymakers around the globe have resisted taking on the issue of international labour mobility. Despite the plethora of migration-related and development-focused fora, the international community has not been able to come together to get consensus on actually liberalising international labour markets. But this may be about to change. Three reasons are likely to force us to grapple with this issue seriously: ageing populations which are creating demand for labour-intensive services; social security systems which need young labour to pay in to them; and the shift away from manufacturing in many rich countries, which has elevated the importance of innovation and created a global race for talent. These three factors mean that international labour mobility at all skill levels is likely to increase in the near future.

After having resisted such movements for so long, the international community at large will need to rush to create the policy and institutional foundations for such movements to be facilitated and coordinated so they are safe for the people who

move and beneficial for the places they move to and from. This will mean making up for lost time. This chapter will provide a roadmap for doing so, looking first at the economic arguments for increased labour mobility, and then addressing the obstacles and opportunities for high-, mid-, and low-skill migration.

SETTING THE STAGE – WHY IS INTERNATIONAL LABOUR MOBILITY IMPORTANT?

Three key numbers

Three figures tell us why a rethink of international labour mobility is needed, and why it is needed now. They are: 232 million people, 39 trillion dollars, and 10 to 15 years.

Let's start with the 232 million people. That number, equivalent to 3.2% of the world's population, represents the number of migrants today.¹ They emigrate from countries across the income spectrum, with Mexico leading the way,

followed closely by India, the Russian Federation, and China.² Overwhelmingly, they migrate to the US, though proportional to their population, the Gulf Cooperation Council (GCC) countries of Qatar, the UAE and Kuwait host staggeringly large immigrant populations. Though migration occurs for a variety of reasons, the search for better economic opportunities is a key driver.

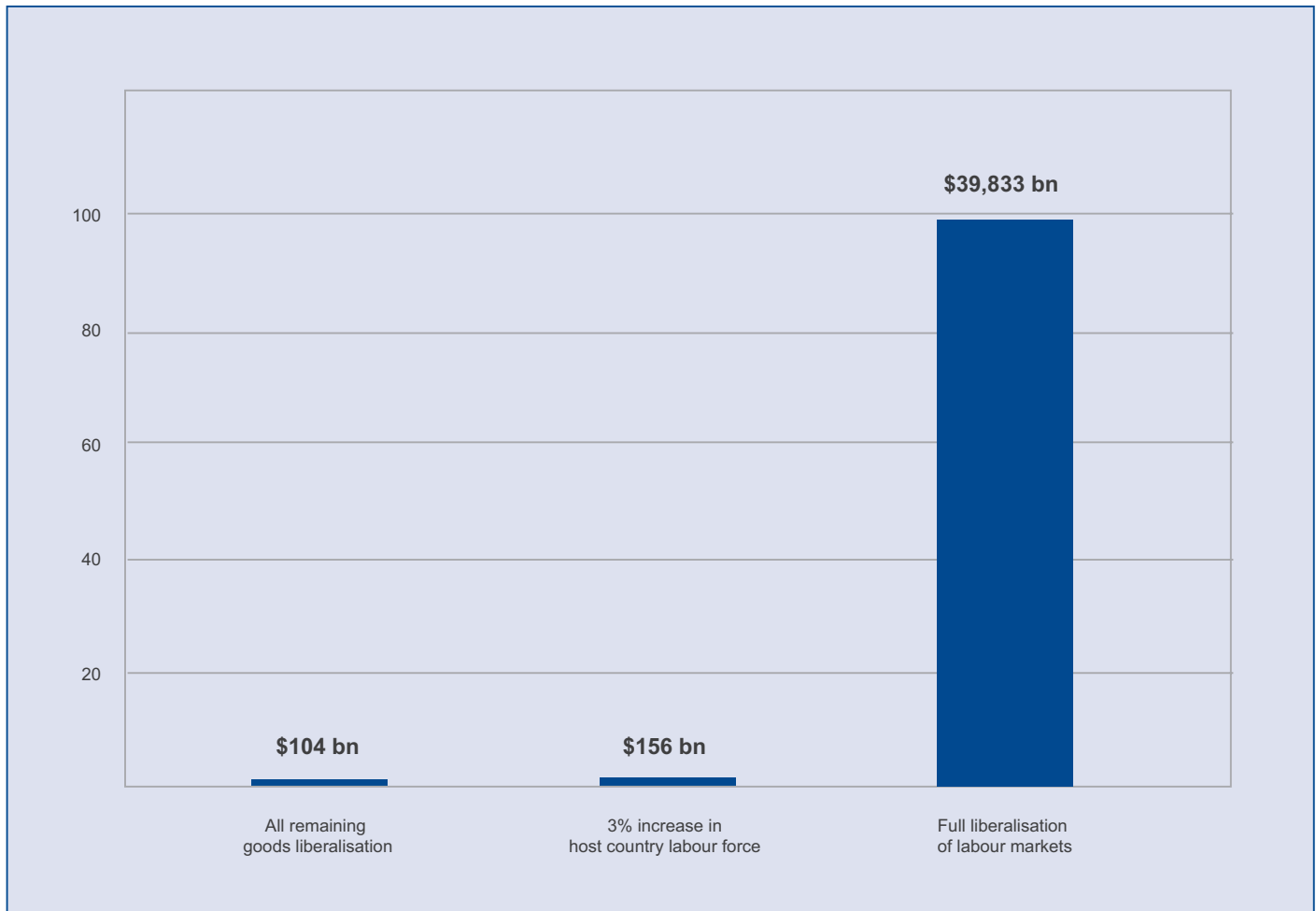
The potential economic impact of expanded income-earning opportunities for workers in low-wage countries is huge. In recent decades, the income gap across countries has largely risen,³ contributing to substantial earnings gaps between people in low- and high-wage countries. Nearly all of the existing earnings gap between workers in poor and rich locations stems from spatial differences, not personal characteristics. Therefore, enabling those workers trapped in low-wage environments to move to areas where their work is more highly valued opens up huge potential for improvements in individual economic well-being and global economic growth.

How huge? Potentially as much as US\$39 trillion. This number, higher than 2006 world GDP, reflects the potential gains

from full liberalisation of international labour markets.⁴ Though full liberalisation is highly infeasible, this figure dramatically illustrates the magnitude of the distortion between high- and low-wage countries. More practically, migration on a much smaller scale – an additional 16 million or so workers per year, or approximately a 3% increase in the combined host country labour force – surpasses the gains from eliminating all remaining barriers to trade and capital flows (see Figure 1). Yet, compared to the international machinery dedicated to liberalising trade and capital, our efforts towards liberalising labour have been scant – a point to which we return later.

These numbers show the incredible potential of more efficient, open international labour markets. But policymakers have been slow to recognise the potential of migration in aligning the interests of countries with growing, largely low-income, populations and the ageing middle- and upper-income countries that are in need of additional workers. The supply of skilled workers is inelastic in the short-run, and demographic change means the opportunity for labour market arbitrage is rapidly closing – there may be just 10 to 15 years left where the supply

Figure 1: Estimated gains from the liberalisation of labour mobility relative to trade



Source: Lant Pritchett, Let Their People Come: Breaking the Gridlock on Global Labour Mobility. Center for Global Development, 2006.

and demand for labour are so well-aligned. To capitalise on this opportunity, it is essential that sending and receiving countries, the private sector, and other stakeholders work together to open up new opportunities in international labour mobility.

Why we should expect to see more mobility

i) Labour market and fiscal impacts of ageing populations and shrinking workforces

In much of the developed world, years of declining fertility, coupled with advances in health and life expectancy, have led to ageing populations and concomitant declines in the workforce. The impact will be felt most acutely in the European Union, which will lose 66 million workers between 2005 and 2050.⁵ Likewise, parts of Eastern Europe and the Commonwealth of Independent States will see populations decline by as much as 25% in the first quarter of the century, and if Turkey (with its growing working-age population) is excluded, the region as a whole will lose over 23 million people during this same period.⁶ Japan's rate of population ageing is well-known; less known is that many other countries in the region face similar trends. The powerhouses of East Asian growth – such as China, the Republic of Korea and Singapore – and emerging economies such as Vietnam and Thailand will also see substantial ageing and declines in working-age population by 2020.⁷

In OECD countries in particular, ageing has the potential to shrink GDP growth rates and increase liabilities for spending on health care, social security and other entitlement programmes, at a time when the tax base is potentially shrinking.⁸ The pay-as-you-go pension systems common to most industrialised countries rely on a large working population, whose tax contributions fund the pensions.⁹ While many countries have anticipated and attempted to address the potential fiscal impact of pension liabilities for an ageing population through incentives for delayed retirement, higher contributions, or changes to pension benefit levels, these responses on their own have not been sufficient to fully mitigate the impact of a shrinking labour force.¹⁰ In addition to pension outlays, governments can expect increased expenditures on healthcare, even though today's elderly population tends to be healthy longer. Across the OECD, some estimates put the potential increase of age-related spending as a whole as high as 6 to 7 percentage points of GDP by 2050.¹¹ The full impacts of ageing will be complex and idiosyncratic, influenced by each country's economic structure, worker productivity, labour force participation rates, and related factors. But in all countries facing ageing and declining workforces, there is a pressing need for policy options to maintain growth and competitiveness.

Some of the impacts of ageing can be mitigated by policies to increase labour force participation rates, especially for women and youth. Active labour market programmes geared towards the young unemployed can improve employment outcomes, if they are appropriately designed and funded.¹² Though women's labour force participation rates have risen in most industrialised countries in recent decades, ageing countries in lower-income Europe and East Asia in particular have substantial room for

growth.¹³ Policies to reform pension systems or encourage delays in retirement – or at a minimum, counteract the decline in retirement age that has taken place in much of the OECD – are also necessary.¹⁴ However, changes in retirement age and labour force participation rates will be insufficient on their own to mitigate the impacts of ageing on labour force decline. Together with these policies, ageing countries will need to attract new workers from outside their borders.

Though ageing and declining workforces is the dominant story in many middle- and high-income countries, many countries in the Global South are experiencing a substantial, and oftentimes unexploited, demographic dividend. Between 2005 and 2050, there will be an estimated 570 million new workers aged 15 to 29.¹⁵ Sub-Saharan Africa will produce the largest number of new workers (328 million), followed by India (68 million) and other South Asian countries (89 million), the Middle East and North Africa (44 million), Latin America and the Caribbean (29 million), and the East Asia and Pacific region (12 million).

The young populations of these countries are increasingly mobile, as they seek better earning opportunities outside of their countries of origin. With 36 million people living abroad, South Asians were the largest migrant group as of 2013.¹⁶ Over one-third of South Asian migrants currently reside in the GCC countries. Demand for workers in the oil-producing states of the GCC and rapidly growing economies in Southeast Asia (including Singapore, Malaysia and Thailand) has been a strong pull factor for migration in the past decade. Since 2000, Asia and the Middle East and North Africa together have attracted 20 million migrants.¹⁷

In recent years, immigration has played an important role in stabilising working-age populations. In 2009, net immigration to the European Union was responsible for 63% of total population growth.¹⁸ Approximately 40% of the US population growth in the early 2000s was due to immigration, dropping to 30% in recent years.¹⁹ In Canada, immigration was responsible for two-thirds of 2012 population growth.²⁰

However, the transition towards lower fertility and declines in working-age populations will hit most countries by 2030, decreasing the possibility of demographic arbitrage. With the exception of Sub-Saharan Africa, most regions will see declines in their supply of migrant labour by 2020. India, East Asia and the Pacific, and Latin America and the Caribbean will experience declining labour forces by 2030.²¹ In Eastern European and former Soviet countries, expected shortages in the working-age population may still be offset by migration from younger countries within the region.²² EU and ASEAN countries, however, will increasingly need to attract immigrants from outside of their regional networks to meet labour force needs.

ii) The importance of global talent and diversity for innovation

Though clearly important to combat the effects of population ageing and workforce decline, the added value of migration extends far beyond this. Immigration also leads to increases in trade between home and host countries and contributes to the cultural dynamism that continues to draw populations to regional talent centres, spurring innovation. To start with the impact of migration on trade, there is strong evidence of the positive impact of diasporas on portfolio investments and foreign direct investment.²³ Migrants play a key role in overcoming information asymmetries and leveraging business networks to reduce the search costs for trade partnerships.²⁴ Migrants also spur trade in new goods by consuming commodities from their home country and influencing the choice of commodities of friends and family in their home country.²⁵

Migrants' impacts on innovation are even more pronounced. A report by the Partnership for a New American Economy in 2011 pointed out that a full 40% of companies listed in the 2010 Fortune 500 were founded by immigrants or their children. Looking just at companies founded within the past quarter century, the role of immigrants is even more pronounced. The economic impact of these companies is astounding – combined 2010 revenues of US\$4.2 trillion and over 10 million employees, as well as seven of the ten most valuable brands in the world. Though particularly resonant in the data on immigrant-founded companies in the US, the innovation impact is not limited to this environment. Data from Germany also links diverse cultural backgrounds to enhanced performance of regional research and development sectors²⁶ and OECD research finds that immigrants are more likely than native-born populations to be self-employed.²⁷ Florida and Gates (2001) point to the relationship between diversity within cities and the size and growth of the technology sector, reinforcing the link between diversity and innovation.

Managing migrant flows today, and what needs to change

Because migration by its nature requires international cooperation, initial efforts to regulate movement were attempted within the framework of the World Trade Organization (WTO). Mode 4 of the General Agreement on Trade in Services (GATS) tried to liberalise service provision through the movement of labour for delivery of specific services. However, two central tenets of the multilateral framework make it unsuitable for labour movements. The first is the clause of national treatment, which requires that once a foreign good or service has entered the market it be treated no different from the national good or service – the scope of this tenet has been a challenge in the context of labour. The second tenet is the most favoured nation (MFN) status, which means that once preferential access is granted to some nations it must be extended to all nations. Again, for labour such unconditional access is not politically feasible, as labour migration is often balanced with domestic economic, social and security concerns. Hence the only hope for liberalising labour movements seems to come not from multilateral quarters, but instead from well-crafted bilateral arrangements. The

effectiveness of such arrangements hinges on the commitment and cooperation of governments and key stakeholders to making them work in practice.

The next sections delve further into some of the challenges for workers at all skill levels, and provide guidance on moving the agenda forward.

GIVE US YOUR BEST AND BRIGHTEST – MEETING THE DEMAND FOR HIGH-SKILLED LABOUR

The demand for highly skilled labour

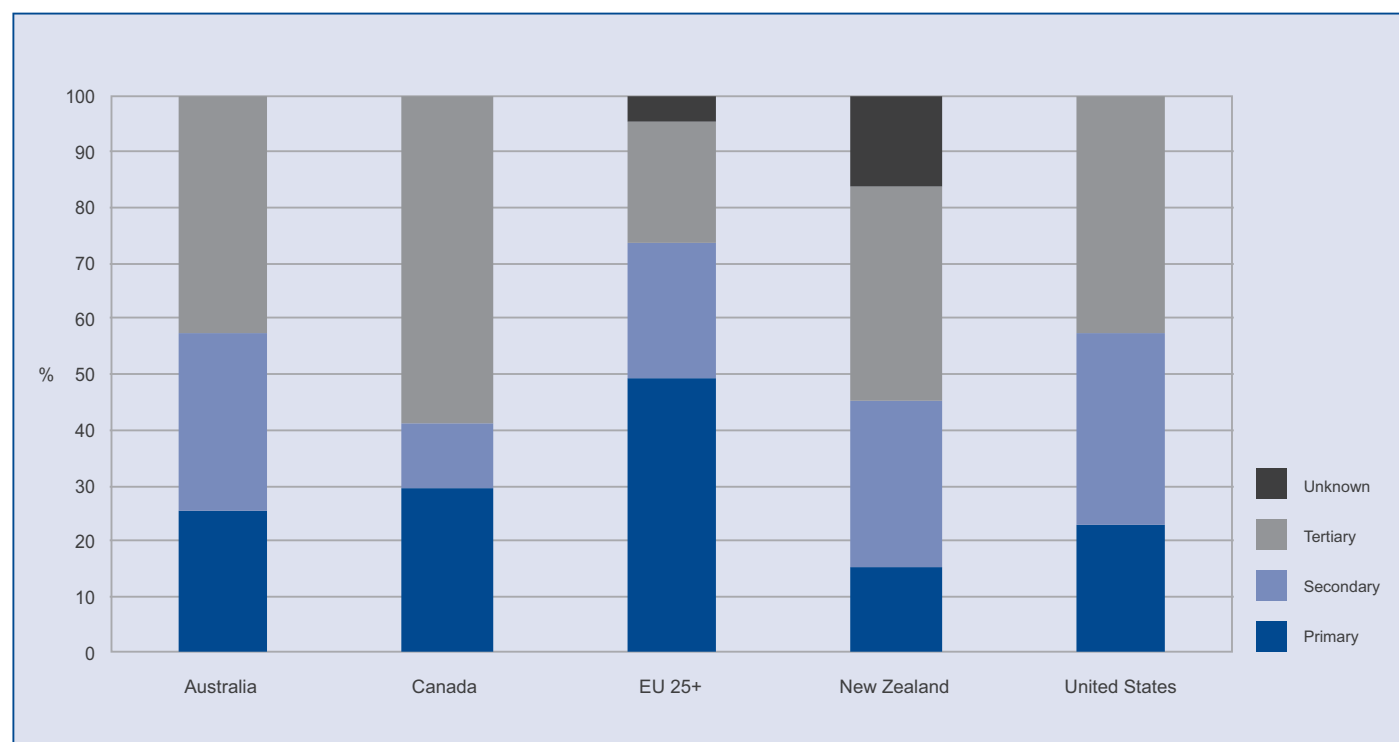
As the role of services, technology and innovation in employment has increased, the share of manufacturing in total employment in many high-income countries has declined. Over the past four decades, most OECD countries experienced declines in the number of manufacturing jobs and a rise in service sector employment.²⁸ The decline in manufacturing jobs was not limited to high-income countries; Brazil, China and Russia have all had decreased manufacturing employment, while employment in industry has largely failed to grow in India and Indonesia. Increasingly, employment and growth in the global economy is linked to innovation and high-skilled sectors,²⁹ though labour-intensive employment in sectors such as agriculture and construction is still a major characteristic of the Asian growth model.

Services, technology and innovation have increasingly driven the competition for highly skilled global talent. However, the pool of global talent has not expanded as quickly as demand, and the current pool of unemployed workers is often ill-equipped to fill vacancies in high-skill fields such as information and communications technology (ICT).³⁰ Skill requirements are expected to increase for most industries in the coming decades, accentuating the skill gap.³¹ A recent survey of Eastern European enterprises identified the shortage of skilled labour as the second most common constraint to growth,³² and a 2010 report by the European Commission predicted that 16 million new jobs requiring higher education would be created by 2020.³³ In the US, the share of jobs requiring post-secondary education will increase from 28% in 1973 to 63% in 2020, with 22 million new jobs requiring degrees created between 2010 and 2018 alone.³⁴ China, middle- and high-income East Asian countries, and Central Asia will also increasingly compete for high-skilled labour as the engine of their continued economic growth.

Winners and losers in the global race for talent

In the race for talent, some countries have fared well whereas others have faltered. In the traditional immigration countries of Australia, New Zealand and North America, 40% of migrants have tertiary education, while 16% to 30% have a primary education (see Figure 2).³⁵ Canada in particular attracts substantial numbers of highly educated migrants – nearly 60% have a tertiary-level education. In contrast, nearly half of the EU25+ migrant population originating from non-EU countries has only a primary education, with just 21% having tertiary

Figure 2: Highest educational attainment of migrant population in select destination regions, 2000



Source: World Bank 2009. Note: Rates for Australia exclude New Zealand (and vice versa), and the EU25+ excludes other EU.

qualification. The ASEAN member states and other East Asian countries traditionally attracted low- or mid-skill migrants to work in construction or farming activities, but there is a trend towards increased high-skill migration within Asia.³⁶

The variations in competitiveness of countries in attracting tertiary-educated migrants can largely be explained by differences in their immigration policies and how proactive they are in attracting global talent. For countries which have so far failed to attract large numbers of highly skilled migrants, a change of mind-set is needed, to move from “managing migration” towards proactively competing in the global race for talent. Particularly among the EU countries, immigration policies are largely driven by humanitarian concerns and family reunification, rather than employment demand and skills shortages. This focus on non-economic migration can create a path dependency, where the comparatively low skill profile of non-economic migrants contributes to public misconceptions of the economic benefits of migration for migrants and the host country economy, undermining public support for labour migration.

Barriers for labour migrants can be substantial, and include policies tying migration status to a specific job or employer, limited opportunities for permanent residency or citizenship, restricted access to education and services for non-citizens, and limited portability of social security and health benefits. Non-policy barriers, such as attitudes towards immigrants, concerns about

social cohesion, language, and skills recognition also limit the attractiveness of some EU countries to high-skilled migrants.³⁷ There are, of course, exceptions. The UK hosts the third-largest number of highly skilled immigrants seeking employment (after Ireland and Canada), due in part to a points-based migration system that favours educational attainment, no restrictions on migration from within the EU, and large numbers of international students.³⁸

Australia, Canada and the US are favourable destinations for highly skilled migrants, and have put in place policies to attract and retain migrants to meet labour market needs.³⁹ In Canada and Australia, scoring systems prioritise immigration that matches labour shortages and favours migrants with tertiary education.⁴⁰ Canada also attracts highly skilled migrants with its clear pathways to citizenship, access to education for migrants’ children, and generally favourable attitudes towards immigrants.⁴¹ The US maintains a separate visa system for workers in high-demand “specialty occupations” and provides the opportunity to obtain citizenship to individuals with high achievements or abilities in their field.⁴² East Asian countries, including Japan, Singapore, South Korea and Malaysia, have also recently introduced special immigration regimes to encourage skilled migration, particularly in the areas of healthcare and ICT.⁴³

The number of high-skilled immigrants is also linked to tertiary education opportunities. In 2008, nearly 19% of tertiary students enrolled in foreign institutions attended university in the

US, followed by 10% in Great Britain, 7% in Germany, France and Australia, 5.5% in Canada, and 4% in Japan.⁴⁴ In advanced research programmes in the US, nearly one-third of students are international. Beyond their contributions to the density of talent in research and educational institutions during their studies, foreign students often develop professional and personal ties which encourage them to remain in their host country after graduation. A 2011 OECD report noted that approximately one-quarter of international students who did not renew their student visas changed their visa status in the host country for largely work-related reasons.

Capturing the benefits and mitigating the risks

In attracting high-skilled workers, countries must develop policies that allow them to capture the benefits from migration while minimising negative externalities. The benefits of high-skilled migration to individuals and the global economy are discussed earlier in this chapter. Beyond the direct economic contributions, however, labour migration can play an important role in influencing human capital formation in home countries.⁴⁵ This can occur as the attractiveness of certain fields grows due to the possibility of migration, or through “brain circulation” as migrants share their knowledge and skills.

However, sending and receiving countries have expressed concern about the possibility of “brain drain” as high-skilled workers seek opportunities abroad. Concerns largely focus on fiscal loss in low-income sending countries due to the public financing of education and skills that are then used in receiving countries, or – particularly in the case of healthcare – where poor health services could be exacerbated as skilled professionals seek opportunities elsewhere. The best countermeasure against brain drain is an effort to grow the overall pool of talent and skills in key sectors. Rather than focusing on restricting the movement

of workers in fields such as healthcare, national governments, international organisations and the private sector would do better to support initiatives that can “expand the pie”. This can be achieved by creating more skilled and qualified workers through better educational services, improved market signalling, training and vocational services with clear employment links, and related policies. Sending and receiving countries and the private sector should invest in skills partnerships to support human capital formation, both for those workers who will migrate and those who will stay. Further, countries can build productive partnerships with the diaspora and returnees to benefit from brain circulation, and better capture technological advances, innovation, education and investment for increased opportunities.

THE MISSING MIDDLE – MID-SKILLED MOVEMENTS

Demand for mid-skilled migrants

While shortages at the highest skill levels have captured the attention of policymakers, and movements of the low-skilled have frightened and paralysed policymakers, the discussion on mid-skill movements often gets missed altogether from policy fora. In fact, substantial deficits in mid-skill workers are expected to occur over the coming decades. By 2050, the EU alone will experience a decline of approximately 35 million mid-skill workers – those working in fields such as construction management and intermediate business services.⁴⁶ In a much shorter time frame – between 2010 and 2018 – the US economy will create or replace approximately 14 million jobs for workers who have either completed some college or obtained an associate’s degree.⁴⁷ Filling these jobs is important in its own right, but even more so because high-skilled workers are attracted to areas where complementary services provided by mid- or low-skill workers are available and permit a higher quality of life.

Engaging the private sector to attract talent

In 2007, the Australian Agency for International Development (AusAID) launched the Australian-Pacific Technical College (APTC), a network of institutes located throughout the Pacific Islands that trains Pacific Islanders in a variety of vocational skills with the goal of facilitating students’ employment in Australia. In an attempt to align itself with the demands of the private sector in Australia, APTC designs its course offering around the list of skills and occupations facing shortages in Australia (the Skills Occupation List, or SOL). After an investment of Aus\$150 million, however, less than 2% of the programme’s 4,000 graduates had left their country of origin, and 61% returned to the same job they had held prior to enrollment in the programme. The lack of active private sector engagement contributed heavily to this failure.

By contrast, the Filipino Technical Education and Skill Development Authority (TESDA) engaged employers prior to designing curricula or enrolling students. TESDA administrators solicited input from domestic and international industry experts, which ensured that the programme produced graduates with the skills necessary to succeed in their target field. Furthermore, the process of working with employers to develop skill standards fostered a sense of trust in the programme, which gave TESDA certificates added value in the labour market. As a result, employers from Germany to Saudi Arabia specifically recruit TESDA graduates and the programme has attracted more than 800,000 students since 1994.

Source: Beyond Skill Visibility: A New Framework for Migration and Development, 2013. NYU Wagner Capstone Report

Recognising the value of mid-skill labour

Mid-skilled migrants face some of the same constraints to labour mobility as those in higher skill categories, but their full labour market participation in host countries is further impeded by problems with skills visibility. Unlike in the case of high-skilled migration, university systems and labour markets for mid-skilled workers are often less integrated globally, making talent harder for companies to find, and harder for migrants to demonstrate. In some cases, migrants are not adequately equipped with the hard and soft skills valued by the private sector in host countries, or have qualifications that are not aligned with the host country standards. In other cases, migrants may have received adequate training, but suffer from insufficient links between training programmes and the private sector. This can limit both the ability of potential employers to identify and recruit workers, and of workers to market themselves and their skills adequately (see box on previous page). For both reasons, migrants are proportionately less likely than host country nationals to be employed in professions that correspond to their levels of education and training.⁴⁸

Partnering for better and more visible skills

As demonstrated in the box on the previous page, extracting the most value from mid-skill workers requires an intensive engagement of government, training centres, migrants, and the private sector to identify, train, and recruit migrants. By working together from the outset, the private sector and education and training facilities can ensure that the skills acquired are appropriately matched to private sector needs, and are valued in host countries. Partnerships on skills development, recognition, and certification can reduce costs for receiving countries and employers by training workers in their home country. Such partnerships can also increase the employability of migrants and their economic outcomes, and improve worker integration upon arrival in the host country.

THE FORGOTTEN MASSES – OPENING DOORS FOR LOW-SKILLED LABOUR MOVEMENT

Why we need low-skill migration

The need for low-skill workers – those in professions such as tourism and hospitality, home healthcare, and agriculture – will continue to increase as workforces decline. Projections in the US predict that more than half of labour demand will occur in low-skill occupations.⁴⁹ Despite the slow recovery in construction, tourism and other low-skill dominated fields, demand for low-skilled jobs in Canada is also projected to continue to grow.⁵⁰ A 2008 mid-term projection for the EU25+ pointed towards a significant expansion in jobs in areas such as retail, distribution and other low-skill areas.⁵¹ In France, four of the top five occupations with the strongest recruitment difficulties are in relatively low-skilled professions, including home help, cooks, nursing assistants, and home and cleaning personnel. Employers also indicate strong demand for agricultural workers, catering apprentices, and other low-skilled service occupations.⁵² As emerging countries

transition towards service-based economies, their demand for low-skill labour will also continue to grow.

The movement of relatively unskilled labour can help improve firm competitiveness, if such labour movements are well-managed and potential migrants are provided with the appropriate training and skills. However, even when the tools to recognise and value migrants' skills are in place, a proper management framework is necessary to facilitate the movement of labour. This is even truer when workers have skills that are more difficult to recognise.

Obstacles to low-skill migration

Lower-skilled migrants face substantial barriers to movement, and in the absence of effective means to regulate migration, are also more prone to irregular movements. Irregular migration exposes migrants to greater risk, as demonstrated by the October 2013 shipwreck off the coast of Lampedusa, Italy. It also limits the benefit to migrants and host countries from job stability, integration and taxes.⁵³ There are undeniable benefits from improving the movement of low-skill workers, but the current regulatory frameworks and systems governing labour market access are suboptimal for the movement of people. The supply-side infrastructure for labour movements, which is essential to target workers for recruitment, prepare them with adequate skills and training, and protect them through insurance and services throughout the migration process, is currently underdeveloped. Similar to programmes for mid-skill workers, inadequate involvement of the private sector in identifying skills gaps and recruiting workers can undermine the commercial viability of labour migration schemes, and lead to overstays and poor employment outcomes for workers. With effective stakeholder engagement, however, it is possible to design programmes that enable migration of lower-skilled workers and provide clear benefits to employers (see box on next page).

Mitigating risks in the migration process

Due to their more limited bargaining power, low-skill migrants are also exposed to greater risk and vulnerability during migration. Such risks can be minimised by better regulation and oversight of international recruitment services, and by engaging a wide range of stakeholders (including migrants' associations, employers, the diaspora, consular services, and migrants themselves) to provide support services to assist workers. Legal and institutional mechanisms that allow for greater flexibility in moving between sending and receiving countries without facing the loss of pensions and health insurance benefits will also be important for workers at all skill levels.

Low-skill migration under the Recognised Seasonal Employer's Scheme

For low-skill migrants in particular, cooperation between sending and receiving countries and the private sector can improve the identification, recruitment and training of workers and ensure the commercial viability of labour schemes. In New Zealand, the Recognised Seasonal Employer's Scheme (RSE) was introduced in 2006 as a combined effort of the governments of New Zealand (Department of Labour, Ministry of Social Development, International Aid and Development Agency) and five Pacific Islands (Kiribati, Samoa, Tonga, Tuvalu and Vanuatu). The programme gives an opportunity for workers in the Pacific to provide seasonal labour in New Zealand's horticulture and viticulture industries, while circumventing local labour shortages in New Zealand. The programme responds to a strong demand from the private sector in New Zealand, and employers are regularly consulted on the design and guidelines of the programme and changes to its structure. The government of New Zealand informs sending governments of the expected demand for seasonal workers annually, and sending countries select and screen workers to maintain a pool of qualified candidates.

The government of New Zealand closely monitors the implementation of the RSE, and has revised and improved the programme in response to monitoring and evaluation findings. The programme now includes substantial pre-departure training and a pooled savings and remittance transfer mechanism, as well as institutional capacity building components. As a result of the careful attention to programme design and close work with the private sector, the programme has had positive development impacts (including improved per capita income and economic welfare, increased remittances, and increases in children's school attendance), and has effectively addressed short-term labour shortages. The overwhelmingly positive impacts point to the RSE being among the most effective development policies evaluated to date, and a best practice model for other labour-receiving countries.⁵⁴

Source: Adapted heavily from Chauffour 2013 (Box 3.8, pg. 136-137) and World Bank 2012.

THE WAY FORWARD

Liberalising international labour markets has tremendous potential to deliver efficiency and development gains to the people that move and the places they go to and come from. However, without improvements in migration policies, it is likely that only a very small number of workers will be able to take part in labour migration opportunities. The unmet demand for migrants in receiving countries has a range of potentially detrimental consequences, from unfilled jobs and underfunded pensions to unrealised potential for innovation and trade. The case for both sending and receiving countries to find workable solutions for mutual benefit is clear – so how can we move from policy paralysis to action?

Leveraging partnerships to increase labour mobility

The first step in moving towards better policy and action on labour mobility is recognising that this requires committed partnerships between government, international institutions, the private sector, policy think tanks and other stakeholders. As shown above, there is a substantial body of research pointing to the benefits of migration – be it high, medium, or low skill – to sending and receiving countries and to migrants themselves. Yet, this research has not been effectively fed into the public discourse on labour migration, and misinformation abounds. We need to find new and better ways to share information and knowledge with policymakers, thought leaders, and the public at large, and provide a more nuanced view on migration than has often been the case. Without such efforts, we risk a continued policy impasse as political economy concerns, bias, and misconceptions override evidence-based policymaking.

Second, we need to amplify the voice of the private sector in migration policymaking. Though firms are clearly best placed to determine their labour shortages and needs, they have too often been left out of discussions on labour migration policy. The resultant skill shortages may contribute to inefficiencies in labour allocations and suboptimal labour productivity. Furthermore, when legal ways of accessing overseas labour do not exist, it gives impetus to illegal flows, which end up increasing the human cost of migration. As firms are prevented from accessing labour, they are also increasingly incentivised to revisit their locational decisions in the first place. In a world where capital is more mobile than labour, owners of capital could choose to locate some businesses where the labour exists, resulting in lost tax revenues and job opportunities for countries with restrictive immigration policies.

We also need to help bridge the divide between sending and receiving country governments, providing space for dialogue and mutual gain from migrant flows. This is particularly the case for the movement of low-skilled workers, who are less likely to be effectively identified by the private sector in receiving countries. Facilitating the flow of low-skill labour requires that both sending and receiving countries are involved in identifying the skills gaps, finding appropriately skilled workers, providing training to upgrade skills where needed, ensuring that workers and employers are complying with labour regulations in the host country, and facilitating return at the closure of a migrant's contract. Without cooperation between sending and receiving countries, bilateral labour agreements will continue to underperform and workers will continue to pursue other, more dangerous, and less beneficial extra-legal means of migration.

The fourth step involves overcoming the disconnect between the global labour market and the skills offered at educational institutions. For mid-skill workers, this entails improving the visibility of skills and certifications gained at home-country education and training institutions, and the link between such institutions in receiving countries and private sector recruiters. Partnerships between the private sector and education and training centres would also ensure that the skills imparted in training centres are well-matched to the labour market. For higher-skill individuals, particularly in fields such as healthcare, engineering and IT, global partnerships could encourage the private and public sectors to invest together in overcoming skills scarcity in both sending and receiving countries.

We also need to look further than the experience of national governments, to capture the voices and actions of city governments around labour migration. Because of the recognised benefits of migration and cultural diversity for innovation, trade, and attraction of a high-skilled workforce, cities are often experimenting and innovating with programmes to welcome and integrate migrants, even as national governments hesitate to liberalise labour migration policies. Many local governments and community organisations have taken the lead on finding innovative ways to facilitate social cohesion through integration policies. Local governments have valuable experiences that should be recognised and, if possible, replicated at the national level.

Given the size of the challenges, multiple actors will need to engage to reduce these disconnects. Public and private actors, non-governmental organisations, the research community, media, and the main international development agencies will need to use their analytical and convening power to create these international public goods that are currently missing or lagging. International labour markets are the last bastion of protection, with detrimental impacts on people, places and economies. The gains from fixing failures in international labour markets are too big to be ignored or foregone, and with strong and proactive leadership to foster cooperation, overcoming barriers to effective labour migration is achievable.

Notes

- ¹ UN (2013)
- ² World Bank (2011)
- ³ Pritchett (2006)
- ⁴ Pritchett (2006)
- ⁵ World Bank (2009)
- ⁶ World Bank (2007)
- ⁷ Bank staff estimates using UN 2010 data.
- ⁸ Bloom et al. (2011)
- ⁹ Chand and Jaeger (2000)
- ¹⁰ OECD (2005)
- ¹¹ OECD (2001)
- ¹² See for example Betcherman et al. (2004) and Kluge (2006)
- ¹³ Jaumotte (2003)
- ¹⁴ Gill and Raiser (2012)
- ¹⁵ World Bank (2009)
- ¹⁶ UN (2013)
- ¹⁷ UN (2013)
- ¹⁸ Gill and Raiser (2012)
- ¹⁹ Mather (2012)
- ²⁰ Gignac (2013)
- ²¹ World Bank (2007)
- ²² World Bank (2007)
- ²³ Leblang (2011)
- ²⁴ Sangita (2013)
- ²⁵ Sangita (2013)
- ²⁶ Niebuhr (2006)
- ²⁷ OECD (2010)
- ²⁸ OECD (2007)
- ²⁹ Gill and Raiser (2012)
- ³⁰ Hüsing et al. (2013)
- ³¹ World Economic Forum and BCG (2013)
- ³² Gill and Raiser (2012)
- ³³ European Commission (2010)
- ³⁴ Carnevale et al. (2010)
- ³⁵ Gill and Raiser (2012)
- ³⁶ Castles and Miller (2009)
- ³⁷ World Bank (2009)
- ³⁸ Gill and Raiser (2012)
- ³⁹ Kapur and McHale (2005)
- ⁴⁰ Gill and Raiser (2012)
- ⁴¹ Gill and Raiser (2012)
- ⁴² Pritchett (2006)
- ⁴³ Castles and Miller (2009)
- ⁴⁴ Gill and Raiser (2012)
- ⁴⁵ Kapur and McHale (2005)
- ⁴⁶ World Bank (2009)
- ⁴⁷ Carnevale et al. (2010)
- ⁴⁸ World Bank (2009)
- ⁴⁹ Pritchett (2006)
- ⁵⁰ Government of Canada (2011)
- ⁵¹ Cedefop (2008)
- ⁵² World Bank (2012)
- ⁵³ World Bank (2009)

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CHAPTER 4

COMPETING FOR TALENT IN A GLOBAL KNOWLEDGE ECONOMY: WHY E-LEADERSHIP MATTERS

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The Conference Board

According to The Conference Board CEO Challenge survey,¹ human capital is the top concern of CEOs around the globe. More than ever, CEOs are focusing on what they can do within their organisations to improve business, and they are particularly concerned with retaining and growing top talent to keep up with competitors. Furthermore, to meet the human capital challenge, several strategies selected by CEOs focus on current and future leadership to build and develop their workforce.

Global leadership development is especially important to do well today – and will be more so tomorrow. The rapidly evolving global and strategic structure of organisations has made leadership development a critical component of success. It is increasingly clear that great leadership drives an engaged workforce and high levels of business performance, and companies with strong leadership practices financially outperform those that do not have these characteristics. However, high levels of engagement require investment and commitment. In today's

knowledge economies, characterised by a shift to “everything online”, and “everything mobile”, it is crucial for a technology component to be added to leadership development at all levels of management, so that managers are able to identify technologies that will increase their company's performance, and allow them to remain competitive and innovative.² Such e-leadership skills are now becoming a vital component of the global competition for talent.

This chapter is organised as follows: Section 1 frames the talent and human capital challenge in a global and regional context and lays out some of the strategies reported in practice to meet the talent and leadership challenge. Section 2 delves into the specific need for e-leadership skills and Section 3 sets out conclusions.

TOP CHALLENGES FOR CEOS GLOBALLY

The Conference Board CEO Challenge annual survey (now in its 14th year) asks CEOs to identify their most critical challenges for the coming year and compares results on a global and regional scale. More than in previous years, the 2013 survey reveals that CEOs globally are focused on the people within their organisations, naming human capital as their top challenge. Other leading priority areas for CEOs are operational excellence, innovation, customer relationships, and global political/economic risk. CEOs this year are less concerned with external factors, such as risk and regulation, than in the past, perhaps due to the slow-growth environment that is causing leaders to focus on more immediate needs that can be controlled.

Regional results

There is a great deal of regional agreement on top challenges, reinforcing the notion that successful approaches can be applied across regions and that regional economic conditions and ideas can affect business strategies on a global scale. In fact, human capital, operational excellence, innovation, and customer relationships make the top five lists in all three surveyed regions – Europe, Asia and the US (see Table 1).

In keeping with the global results, CEOs in Europe are focused on what they can do internally to improve business, with a special focus on talent. Human capital rose from seventh in 2012 to the top challenge for European CEOs in 2013. This dramatic increase could be due to the current economic environment; with investment capital being difficult to obtain, CEOs are turning towards increasing the capabilities of their current employees. Following the human capital challenge are operational excellence, innovation, global political/economic

risk, and customer relationships. CEOs in Europe are focused internally on strong leadership, good management and excellent execution.

In Table 1, CEOs in Europe and Asia are in agreement as to top challenges, with the same challenges making the top five for both regions. In Asia, human capital was followed by innovation, operational excellence, global political/economic risk, and, tied for fifth, customer relationships and global expansion. Asia is the only region to rank both human capital and innovation in its top three, indicating the region's desire to maintain its growth trajectory. Asia includes China, India, and Australia. In China,³ innovation is ranked first, a possible indication that CEOs in China are interested in changing their role in the global economy from making products to creating them. It is also interesting to note that while CEOs across the regions agree that *raising employee engagement and productivity* is the top strategy for meeting the operational excellence challenge, CEOs in Asia rank *invest more in new technologies* second, another indication that CEOs in this region are attempting to connect innovation with human capital to achieve growth.

In the US, the top five challenges are similar, but human capital is ranked relatively lower, and government regulation, which is not a top five challenge in any other region, is ranked second. Perhaps the emphasis on government regulation in this region, where CEOs are faced with increased regulations (e.g., in health care) and the polarisation in Congress over taxes, spending, and other regulations, is taking precedence over other, still pressing, challenges. The relatively lower ranking of human capital in the US may also suggest that CEOs in this region feel relatively more confident than their peers in workforce processes. It may also reflect a “buyer’s market” for talent following the recent crisis.

Table 1: CEO challenges by region

	Global N=729	United States N=138	Europe N=136	Asia N=395	Rest of World N=60
1	Human Capital	Operational Excellence	Human Capital	Human Capital	Operational Excellence
2	Operational Excellence	Government Regulation	Operational Excellence	Innovation	Human Capital
3	Innovation	Customer Relationships	Innovation (T3)	Operational Excellence	Global Political / Economic Risk
4	Customer Relationships	Innovation	Global Political / Economic Risk (T3)	Global Political / Economic Risk	Customer Relationships
5	Global Political / Economic Risk	Human Capital	Customer Relationships	Global Expansion (T5) ⁴	Government Regulation

Note: N=Number of overall responses. The response rate varies for each challenge. Each score represents the mean of the ranks given to the challenge. T=Tie.
Source: The Conference Board (2013a).

Strategies for addressing top challenges

The results show that, based on global averages, CEOs are internalising their efforts: the top four challenges globally relate to what they can do within their organisations to increase their business (see Table 2). Specifically, all four of the top challenges relate in some way to the people in an organisation. The human capital challenge speaks directly to employee needs, but operational excellence, innovation, and customer relationships all have a human element as well. Businesses cannot be successful in these areas without talented and hardworking employees.

Not only are CEOs focused on talent, but they are specifically interested in retaining and growing high-potential individuals who are already part of the organisation. All of the top five global strategies for meeting the human capital challenge focus on developing and retaining current talent as the best approach in this tight global talent market. These strategies are: *grow talent internally, provide employee training and development, raise employee engagement, improve performance management, and retain critical talent*. They represent a movement from the narrower high-potential focus of current management, found

in previous surveys, to a broader capacity-building approach across employees.

In fact, the results reveal a trend towards greater understanding of the role of employee engagement as a human capital challenge; *raise employee engagement*, ranked third globally, rose from eighth last year. Regionally, it rose from fifteenth to eighth in Europe, and from ninth to third in Asia. In the US, however, it has remained highly ranked at fourth for the past two years. Continuing this trend of the importance of engaging people to improve business, the second-ranked strategy for meeting the operational excellence challenge is to *raise employee engagement and productivity*. For the innovation challenge, *find, engage, and incentivise key talent for innovation* is the second-ranked strategy. Finally, a top strategy for improving customer relationships is to *engage personally with key customers/clients*. Today's CEOs may be more clearly realising the importance of the personal aspect of business.

Furthermore, an organisation's leadership has been found to drive workplace culture and has emerged as an important component for raising engagement and meeting the human capital challenge. While many strategies have a leadership

Table 2: Strategies for managing human capital by importance

Global	Importance-adjusted strategies for managing human capital	Asia N=321	Europe N=85	United States N=95
1	Grow talent internally	1	1	1
2	Provide employee training and development	2	3	2
3	Raise employee engagement	3	T8	4
4	Improve performance management processes and accountability	7	T8	3
5	Increase efforts to retain critical talent	4	T5	9
6	Enhance effectiveness of the senior management team	8	11	8
7	Improve corporate brand and employee value propositions to attract talent	6	4	15
8	Hire more talent in the open market	9	7	6
9	Improve effectiveness of front-line supervisors and managers	5	16	10
10	Improve leadership development programmes	12	T12	7
11	Invest in education systems to improve workforce readiness	11	2	12
12	Improve succession planning for current and future needs	13	10	5
13	Redesign financial rewards and incentives	10	T12	13
14	Increase diversity and cross-cultural competencies	14	T5	T17
15	Promote and reward entrepreneurship and risk taking	15	15	11

Note: N=Number of overall responses. The response rate varies for each challenge. Each score represents the mean of the ranks given to the challenge. T=Tie.
Source: The Conference Board (2013a).

Table 3: Key skills in areas of organisational importance

Global	#1 Human Capital	#2 Operational Excellence	#3 Innovation	#4 Customer Relationships	#5 Global Political/ Economic Risk
1	Grow talent internally	Raise employee engagement and productivity	Apply new technologies (product, process, information, etc.)	Enhance quality of products/services	Integrate long-term risk recognition into strategic planning
2	Provide employee training and development	Focus on reduction of baseline costs	Find, engage, and incentivise key talent for innovation (T2)	Sharpen understanding of customer/client needs	Reduce exposure to risky countries/regions
3	Raise employee engagement	Break down internal silos	Engage in strategic alliances with customers, suppliers, and/or other business partners (T2)	Engage personally with key customers/clients	Implement contingency plans for crises (e.g., geographical, political, relocation of employees)
4	Improve performance management processes and accountability	Continual improvement (six sigma, total quality, etc.)	Create culture of innovation by promoting and rewarding entrepreneurship and risk taking	Increase speed of products and services to market	Manage currency risk
5	Increase efforts to retain critical talent	Seek better alignment between strategy, objectives and organisational capabilities	Develop innovation skills for all employees	Use competitive intelligence to better understand customer/client needs	Establish crisis management teams and procedures

Note: T=Tie.

Source: The Conference Board (2013a).

element, three ranked in the top ten relate specifically to leadership: *enhance effectiveness of the senior management team* (ranked 6th), *improve effectiveness of front-line supervisors and managers* (9th), and *improve leadership development programmes* (10th). The focus on senior leadership as the most highly ranked leadership strategy might point to the realisation that senior leaders need support to deal with complexity/ambiguity and to globalise their business. In Asia, where there is a critical leadership shortage, CEOs are under significant pressure to accelerate leadership development. CEOs in this region rank *improve effectiveness of front-line supervisors and managers* as a top-five strategy, higher than any other region.

Need for e-leadership skills

Today's leaders must be master strategists, change managers, relationship/network builders, and talent developers to successfully utilise the strategies listed in Table 3 and meet their human capital needs. This is particularly important when it comes to innovation. In a global knowledge economy, innovative firms require leaders with specific leadership skills,

such as anticipating the future, fostering creativity, having a collaborative mind-set, networking, communicating a strategic vision, and responding to emerging (global) trends.⁵ To do so, it is important that they understand the evolving needs of internal and external stakeholders and stay at the forefront of innovation and technological developments. In fact, according to the CEO Challenge results, innovation in products and processes is no longer just an item on CEOs' wish lists, but rather is a "must-have" to remain relevant today. In addition, research has shown that innovators can succeed even in slow-growth periods and recessions.⁶

In order to remain innovative, CEOs globally believe that it is extremely important to *apply new technologies*. They also realise that innovation cannot occur without strong human capital: in Europe, the top two strategies to meet the innovation challenge are to *create a culture of innovation by promoting and rewarding entrepreneurship and risk taking*, and to *develop innovation skills for all employees*. CEOs understand the importance of diversity in leadership and talent, as well as the utilisation of new technologies, to foster innovation.

The importance of the combination of human capital and technology to innovation is also stressed by van Welsum and Lanvin (2012). They argue that it is important for leaders to possess a degree of technological awareness that allows them to identify new technologies that will transform and shape their business model. This awareness will also allow them to do new things, or do things differently, and to develop new products and services, ways of delivering them, and ways to communicate with their suppliers, customers and employees. Such skills are vital to ensuring future competitiveness and innovation and will become increasingly important as more countries progress to become fully enabled knowledge economies,⁷ and as “the cloud” and big data continue to gain importance. These trends combine with the continued spread of knowledge and information on the internet, and the increasing diffusion of high-speed and mobile connections on ever more powerful devices.

Managing in an increasingly competitive and global business environment presents challenges for business leaders across the globe. As they seek to leverage talent to create value they face increasing demand and competition for that talent and must also deal with the growing importance of technology in emerging economies transitioning to knowledge economies. Many countries are putting their hopes for continued innovation and a new impetus for growth on investments in information and communication technology (ICT). However, the impact of ICT depend on how it is used, which is in turn driven by factors such as skills, and whether or not the business environment enables people and businesses to take advantage of the opportunities offered by ICT.⁸ This is increasingly important in today’s knowledge economies, in which “the creation, acquisition, dissemination, and utilisation of knowledge”⁹ are key to economic performance.

In a fully enabled knowledge economy, different factors need to come together and mutually support each other to be able to maximise the opportunities for innovation, growth and competitiveness. These factors include, in particular, the physical ICT infrastructure, the soft infrastructure (the skills needed to exploit the physical infrastructure), the business environment (factors such as the cost and ease of starting a business, and product and labour market regulations), and the innovation environment (e.g., university and firm collaboration, ability to bring new ideas to market, treatment of R&D, IP protection).¹⁰

The ability to exploit the benefits from a “physical ICT infrastructure” is likely to become ever more important in a cloud computing environment,¹¹ increasingly levelling the playing field in terms of access to computing resources no matter how big or small the user need is (e.g., for hardware, software, storage, and support). Combined with almost unlimited and ubiquitous access to all kinds of information and knowledge on the internet, what will make a difference for companies and countries alike is the ability to exploit the benefits these resources offer. Having the skills to use all this information and turn it into business opportunities will create competitive advantages for those relatively better at doing so. This requires e-leadership skills. As “big data” will increasingly influence the way businesses are run,

these skills are likely to become ever more important.

Indeed, more and more data will be created as we move from an “internet of people”, to an “internet of things”, and possibly to an “internet of everything”,¹² with machines, devices and people communicating with each other constantly. Increased use of mobile broadband will also continue to add tremendous amounts of data as the use of mobile devices creates information about people’s behaviours, preferences, locations and interactions. Being able not only to analyse this information but also to create new business opportunities out of it will be crucial for the competitiveness of firms and countries going forward. It will require technical skills to process, analyse and visualise big data, but it will also require business and management skills. Many companies will also have to go through a profound digital transformation, and the skills required for imagining and implementing such a transformation are currently few and far between. This accentuates the crucial need for e-leadership talent and it will be critical for a technology component to be added to leadership development at all levels of management. Much more remains to be done on this front.

What are e-leaders?¹³

E-leaders combine business and management skills with a degree of technological awareness to create new opportunities for the business – not only to do new things, but also to do existing things differently. Therefore, e-leadership skills can be found at all levels in any organisation.

For CEOs, entrepreneurs and visionaries, e-leadership skills are those that will allow start-ups and companies to create new innovations and bring them to market, and to translate technological advances into business successes, growth and job creation.

E-leadership skills allow the managers of IT departments to act as the interface between the practitioners (engineers, programmers, architects, analysts) and the rest of the organisation (company boards, other business units), enhancing in particular the capacity of business strategies and IT strategies to be fully aligned around competitiveness and innovation objectives. A major challenge is to transform the way IT departments are traditionally viewed – transforming them from performing mostly a cost-cutting function to the business, to becoming an integral part of the business strategy and development.

Throughout firms and organisations it is also important to involve users in any deployment of innovative technologies and to enhance the e-leadership skills of “advanced users” – especially among SMEs and companies from non-ICT sectors. Putting the technology into the hands of willing users will be key to increased (bottom-up user-generated) innovation, accelerated technology adoption and integration, and thereby also the realisation of additional productivity gains.

What are e-leadership skills?

E-leadership combines three essential components: (1) business skills, (2) technical skills, and (3) an entrepreneurial mind-set. These components cover a range of skills, attributes and attitudes that includes:

- Business and management skills
- Technological knowledge and awareness
- The ability to conceive and communicate a vision
- Strategic thinking
- Risk taking
- Identifying opportunities
- Embracing and managing change
- Cultural diversity awareness
- Creativity
- Collaboration
- Networking
- Knowledge exchange
- Flexibility
- Managing knowledge flows
- Managing and using big data – or identifying the right people who can analyse it to the advantage of the business.

Some of these skills and attributes will come naturally to certain people and others can be taught through formal and informal types of education and training. However, formal education and training programmes that offer combinations of business and technical skills in an e-leadership sense do not yet widely exist.¹⁴

When it comes to combining business/management skills and IT skills, three well-known problems remain:

1. There is a mismatch between the skills that are needed in practice and those supplied by the educational system.
2. Many top vacancies remain difficult to fill: baby boomers are retiring and many of the people currently available do not have the right skills.
3. Fewer young people are taking ICT-related courses and degrees, creating a potential lack in the talent pipeline, with more acute gaps and mismatches in the future.

There is some evidence that organisations are starting to put in place measures to deal with these problems. For example, Kaplan et al. (2012) find that to retain and train talent already in-house, technology organisations are increasingly encouraging a combination of technological expertise and operational and project competencies. For example, they are actively rotating high-performers across technology domains and into business and operational functions, providing training that helps technical staff understand the business better, and allowing high-performing staff to engage with external

communities. External skill sourcing strategies are found to include sourcing whole teams, and maintaining a portfolio of locations – including in city centres or near universities to attract cutting-edge technology talents.

The advent of Massive Open Online Courses (MOOCs), including those offered by some of the world's leading academic institutions, could help address some of these issues. They offer focused courses addressing specific skills needs, in some cases in collaboration with businesses.

CONCLUSION

The Conference Board CEO Challenge survey reveals that CEOs globally are most concerned with the human capital challenge of attracting, engaging and retaining employees. Many of their other challenges also require strong talent: an organisation cannot be innovative or achieve operational excellence, for example, without it. Especially in today's rapidly evolving globalised knowledge economies, an organisation's leaders need to develop the skills to retain and grow top talent and must innovate to remain relevant. The use of technology to achieve these results is a must.

As more and more countries worldwide develop and transform themselves into knowledge economies, and as technologies, platforms and devices continue to evolve and diffuse at unprecedented speeds, having the skills to exploit them becomes ever more important to ensuring continued innovation, competitiveness and growth. In many cases, investments in the physical infrastructure are not matched by efforts to develop the right skills needed to optimise its use. In addition to having an enabling regulatory framework, skills will be the crucial game-changer.

A key emerging skills need is for e-leadership skills. These are needed on both the business and technology side of firms and organisations: (i) business leaders and managers with an understanding of – and vision for – what technologies can do for the business, and (ii) business-oriented and demand-oriented technology specialists, who are crucial for innovation, the renewal and digital transformation of any business, and for the creation of new, innovative and high-growth start-ups.

There is an urgent need for educational and training institutions to act now to ensure these skills are being developed. Curricula need to reflect the dual nature of the skills that are needed in practice: the teaching of soft skills needs to be combined with the development of a technological awareness. Technical skills also need to be matched with soft skills to be able to apply and communicate the acquired technological skills and insights to managers and people with less-technical backgrounds to raise awareness of the transformative potential and new business opportunities. In the coming years, and as the international mobility of such skills is likely to increase, the data and analyses described here suggest that e-leadership skills are likely to become one of the most active areas of global competition for talent.

Notes

- ¹ Mitchell, C., R. Ray, and B. van Ark (2013)
- ² In fact, van Welsum and Lanvin (2012) argue that there is an increasing need for e-leadership and “dual-thinkers”: people who have the skills to identify and develop new business opportunities, and the technological savvy to identify the technologies and applications that will allow them to do so. These so called ‘e-leaders’ will need to combine an entrepreneurial mindset with business skills and technical skills.
- ³ China is not listed in the table but based on a sample of (n=54) shows rankings of : 1. Innovation; 2. Human Capital; 3. Sustainability; 4. Global political/economic risk; 5. Operational excellence
- ⁴ Tying with Global Expansion and not listed in this table, Asian leaders see Customer Relationships as a challenge
- ⁵ Abel, A. and R. Ray (2013)
- ⁶ Mitchell, C. (2010)
- ⁷ As illustrated, for example, by the Knowledge Economy Index (http://info.worldbank.org/etools/kam2/KAM_page5.asp), the Global Innovation Index (<http://www.globalinnovationindex.org/content.aspx?page=GII-Home>), and the Networked Readiness Index (http://www3.weforum.org/docs/GITR/2013/GITR_OverallRankings_2013.pdf).
- ⁸ The Conference Board (2013b, 2013c)
- ⁹ Kumar, K. and D. van Welsum (2013)
- ¹⁰ Similarly, see for example, the World Bank’s Knowledge Assessment Methodology (KAM) framework, which identifies four pillars to innovation processes (Chen, D.H.C. and C.J. Dahlman, 2005): Economic incentive and institutional regime (policies and institutions for the protection of intellectual property, the rule of law, the ease of starting a business, etc.), education (human capital), innovation (universities, firms, and research institutes), and ICT (physical capital).
- ¹¹ One useful definition of cloud computing (sometimes abbreviated as “the cloud”) is as follows: “The provision of computing infrastructure, platform or application service as a utility, which can be consumed by any internet-connected device, using open standard protocols where variability in demand is satisfied through the dynamic and automatic provisioning of pooled hardware, network, and software service resources providing the illusion of infinite scalability and are generally billed for on a pay-as-you-go basis.” Thus, there are essentially three layers of cloud computing: infrastructure as a service (IaaS), which is a computing resource management model; platform as a service (PaaS), which is a software development model; and software as a service (SaaS), which is an application delivery model. Source: <http://www.adamalthus.com>.
- ¹² For example, Cisco’s John Chambers refers to the Internet of Everything as ‘the intelligent connection of people, processes, data, and things’ (Bilbao-Osorio, B., S. Dutta, and B. Lanvin eds., 2013).
- ¹³ This sub-section and the following one draw on van Welsum and Lanvin (2012, pp. 14-15).
- ¹⁴ Example of existing programs addressing e-leadership skills include the Executive MBA in Business and IT initiated by the European CIO Association (<http://www.eurocio.org/index.php/executive-education/executive-mba/information>) and the Software Engineering Management Program (SEMP) implemented by European Software Institute – Center Eastern Europe (<http://www.esicenter.bg/news.aspx?nid=72>). Vendors like IBM, Cisco, Microsoft and SAP have also developed courses and platforms providing training to address dual skills needs, combining business and soft skills with technical skills.
- ¹⁵ There is also some anecdotal evidence that companies pair up workers with complementary skills on certain corporate functions to cover a broader spectrum of required skills and for people to learn from each other.
- ¹⁶ See Belkin, D. and C. Porter (2013) for an example of how this might work.

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CHAPTER 5

JRC STATISTICAL AUDIT ON THE GLOBAL TALENT COMPETITIVENESS INDEX 2013

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The GTCI attempts to summarise complex and versatile concepts related to human capital and talent competitiveness at the national scale worldwide. In doing so, it raises some practical challenges related to the quality of data and the combination of these into a single number. The Econometrics and Applied Statistics Unit at the European Commission Joint Research Centre (JRC) in Ispra, Italy, was invited by the developing team to undertake an analysis of the statistical properties of the GTCI, in order to ensure the transparency and reliability of the GTCI, to enable policymakers to derive more accurate and meaningful conclusions, and to potentially guide choices on priority setting and policy formulation.

The JRC assessment of the GTCI 2013 focused on two main issues: the statistical coherence of the structure and the impact of key modelling assumptions on the GTCI scores and ranks.¹ The JRC analysis complements the reported country rankings for the GTCI and the Input and Output sub-indices with

confidence intervals, in order to better appreciate the robustness of these rankings to the computation methodology (in particular imputation, weights, and aggregation formula). In addition, the JRC analysis includes an assessment of potential redundancy of information in the GTCI, and a measure of distance to the efficient frontier of human capital and talent competitiveness by using data envelopment analysis.

STATISTICAL COHERENCE IN THE GTCI FRAMEWORK

An earlier version of the GTCI model was assessed by the JRC in July 2013. Preliminary suggestions by the JRC related to the presence of (a) indicators with strong collinearity; (b) indicators that behave as noise in the overall framework; (c) indicators that point to the opposite direction from the phenomenon being measured; and (d) statistical dimensionality and reliability of the GTCI components. The JRC recommendations were taken into account in the final computation of the rankings by the GTCI

developing team in an iterative process with the JRC, which aimed at setting the foundation for a balanced index. The entire process followed four steps:

Step 1: Relevance

Candidate indicators were selected for their relevance to a specific pillar, on the basis of the literature review, expert opinion, country coverage and timeliness. To represent a fair picture of country differences, indicators were scaled either at the source or by the GTCI team as appropriate and where needed.

Step 2: Data checks

The most recently released data were used for each country with a cut-off at year 2002. Countries were included if data availability was at least 80% at the index level and at least 50% at the sub-pillar level. Potentially problematic indicators that could bias the overall results were identified by the GTCI developing team as those having absolute skewness greater than two and kurtosis greater than 3.5² and were treated by Winsorisation (in case of one to four outliers; variable treated FDI inflow and international students inflow). These criteria follow the WIPO-INSEAD Global Innovation Index practice (discussed with the JRC in 2011).

Step 3: Statistical coherence

i) Principal component analysis and reliability analysis

Principal component analysis (PCA) was used to assess to what extent the conceptual framework is confirmed by statistical approaches. PCA confirms the presence of a single statistical dimension in the majority of the sub-pillars (one component with eigenvalue greater than 1.0) that captures between 50% (*Lifestyle* sub-pillar) and 73% (*Regulatory landscape*) of the total variance in the underlying indicators. A more detailed analysis of the correlation structure within and across the six pillars confirms the expectation that the sub-pillars are more correlated to their own pillar than to any other, and all correlations within a pillar are positive, strong and similar (see Table 1). These results suggest that the conceptual grouping of indicators into pillars is also statistically confirmed and that the six pillars are statistically well-balanced in the underlying sub-pillars.

The six pillars also share a single statistical dimension that summarises almost 80% of the total variance, and the six loadings (correlation coefficients) are very similar to each other. This latter suggests that the six pillars do have an equal contribution to the variation of the GTCI scores, as envisaged by the developing team. The reliability of the GTCI, measured by the Cronbach-alpha value, is very high at 0.94, which is well above the 0.7 threshold for a reliable aggregate (see Nunnally, 1978). Had the GTCI been calculated assigning equal weight to the Input and Output sub-indices (which would translate into assigning 12.5% to each Input pillar and 25% to each Output pillar, the reliability of the GTCI would have been slightly lower, decreasing from 0.94 to 0.91).

Table1: Statistical coherence in the GTCI: Correlations between sub-pillars and pillars

		Enablers	Attract	Grow	Retain	LV	GK
INPUT	Regulatory Landscape	0.93	0.69	0.84	0.76	0.80	0.81
	Market Landscape	0.92	0.62	0.92	0.77	0.84	0.88
	Business Landscape	0.81	0.51	0.56	0.45	0.60	0.49
	External Openness	0.57	0.84	0.55	0.34	0.53	0.40
	Internal Openness	0.61	0.87	0.64	0.50	0.57	0.54
	Formal Education	0.75	0.56	0.87	0.79	0.76	0.83
	Lifelong Learning	0.79	0.69	0.89	0.54	0.69	0.67
	Access to Growth Opportunities	0.79	0.63	0.89	0.59	0.70	0.72
	Sustainability	0.77	0.47	0.73	0.94	0.74	0.75
	Lifestyle	0.61	0.45	0.65	0.91	0.61	0.68
OUTPUT	Employable Skills	0.67	0.56	0.66	0.62	0.90	0.60
	Labour Productivity	0.83	0.57	0.80	0.69	0.86	0.75
	Higher Skills and Competencies	0.81	0.57	0.80	0.81	0.75	0.92
	Talent Impact	0.71	0.45	0.77	0.62	0.65	0.92

Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

An important remark relates to the importance of the two sub-indices with respect to the variation of the GTCI scores. The four Input pillars are assigned a total weight (=4/6) that is twice the weight (=2/6) assigned to the two Output pillars. Yet, this does not imply that the Input aspect is more important than the Output aspect in determining the variation of the GTCI scores. In fact, the correlation coefficient between the GTCI scores and the Input or Output Sub-Index is 0.99 and 0.97 respectively, which suggests that the sub-indices are effectively placed on equal footing.

Overall, the tests so far show that the grouping of indicators into sub-pillars, pillars, and an overall index is statistically coherent, and that the GTCI has a balanced structure, whereby all six pillars are equally important in determining the variation in the GTCI scores.

ii) Assessing potential redundancy of information in the GTCI

A very high statistical reliability may be interpreted by some as a sign of redundancy of information in an index. This is not the case in the GTCI. In fact, for more than 32% (up to 58%) of the 103 countries included in the GTCI 2013, the GTCI ranking and any of the six pillar rankings differ by ten positions or more (see Table 2). This is a desired outcome, because it evidences the added value of the GTCI ranking, which helps to highlight other components of human capital and talent competitiveness that do not emerge directly by looking into the six pillars separately.

Step 4: Qualitative review

Finally, the GTCI results, including overall country classifications and relative performances in terms of the Input or Output sub-indices were evaluated by the developing team and external experts to verify that the overall results were, to a great extent, consistent with current evidence, existing research or prevailing theory.

Notwithstanding these statistical tests and the positive outcomes on the statistical soundness of the GTCI, it is important to mention that the GTCI has to remain open for future improvements as better data, more comprehensive surveys and assessments, and new relevant research studies become available.

IMPACT OF MODELLING ASSUMPTIONS ON THE GTCI RESULTS

Every country score on the GTCI and its two sub-indices depends on modelling choices: six-pillar structure, selected indicators, imputation or not of missing data, normalisation, weights, and aggregation method, among other elements. These choices are based on expert opinion (e.g., selection of indicators), or common practice (e.g., min-max normalisation in the [0, 100] range), driven by statistical analysis (e.g., treatment of outliers) or simplicity (e.g., no imputation of missing data). The robustness analysis is aimed at assessing the simultaneous and joint impact of these modelling choices on the rankings. The data are assumed to be error-free since potential outliers and eventual errors and typos were corrected during the computation phase.

Table 2: Distribution of differences between pillar and GTCI rankings

Shifts with respect to the GTCI	GTCI Input Sub-Index				GTCI Output Sub-Index	
	Enablers	Attract	Grow	Retain	Labour and Vocational	Global Knowledge
more than 30 positions	0%	17%	3%	6%	13%	9%
20 to 29 positions	8%	16%	9%	10%	10%	17%
10 to 19 positions	24%	25%	24%	31%	35%	29%
5 to 9 positions	27%	17%	31%	27%	22%	23%
less than 5 positions	34%	23%	28%	24%	17%	18%
0 positions	7%	1%	5%	2%	3%	4%
Total	100%	100%	100%	100%	100%	100%
More than 10	32%	58%	36%	47%	57%	54%

Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

The robustness assessment of the GTCI was based on a combination of a Monte Carlo experiment and a multi-modelling approach that dealt with three issues: pillar weights, missing data and the aggregation formula. This type of assessment aims to respond to eventual criticism that the country scores associated with aggregate measures are generally not calculated under conditions of certainty, even if they are frequently presented as such.³

The Monte Carlo simulation related to the issue of weighting, and comprised 1,000 runs, each corresponding to a different set of weights of the six pillars, randomly sampled from uniform continuous distributions and ranging $\pm 20\%$ from the reference values. The choice of the range for the weights' variation was driven by two opposite needs: ensure a wide enough interval to have meaningful robustness checks; and respect the rationale of the GTCI that places all six pillars on an equal footing.

Given these considerations, limit values of uncertainty intervals for the pillar weights are: 10% to 30% for the four Input pillars for the calculation of the Input Sub-Index, and 40% to 60% for the two Output pillars for the calculation of the Output Sub-Index (see Table 3). For the calculation of the GTCI, the limit values of uncertainty intervals for all six pillar weights are: 12% to 20%. In all simulations, sampled weights are rescaled to unity sum.

The GTCI developing team, for transparency and replicability, opted not to estimate the few missing data (only 6.2% missing data in the dataset of 103 countries \times 48 indicators). The 'no imputation' choice, which is common in similar contexts, might encourage countries not to report low data values.⁴ To overcome this limitation, the JRC estimated missing data using the Expectation Maximisation (EM) algorithm.⁵

Regarding the aggregation formula, decision-theory practitioners have challenged the use of simple arithmetic averages because of their fully compensatory nature, in which a comparative high advantage on a few indicators can compensate a comparative disadvantage on many indicators.⁶ Despite the arithmetic averaging formula receiving statistical support for the development of the GTCI, as already discussed in the previous section, the geometric average was considered instead,⁷ which is a partially compensatory approach that rewards countries with similar performance in all pillars, and motivates those countries with uneven performance to improve in those pillars in which they perform poorly, and not just in *any* pillar.

Four models were tested based on the combination of no imputation versus EM imputation, and arithmetic versus geometric average, combined with 1,000 simulations per model (random weights versus fixed weights), for a total of 4,000 simulations for the GTCI, and each of the two sub-indices (see Table 3 for a summary of the uncertainties considered in the GTCI 2013).

Table 3: Uncertainty analysis for the GTCI 2013: weights, missing data, aggregation

I. Uncertainty in the treatment of missing values			
Reference: No estimation of missing data		Alternative: Expectation Maximisation (EM)	
II. Uncertainty in the aggregation formula at pillar level			
Reference: Arithmetic average		Alternative: Geometric average	
III. Uncertainty in the weights			
	Pillar	Reference value for the weight (within sub-index)	Distribution assigned for robustness analysis (within sub-index)
INPUT	Enablers	0.25	U[0.10,0.30]
	Attract	0.25	U[0.10,0.30]
	Grow	0.25	U[0.10,0.30]
	Retain	0.25	U[0.10,0.30]
OUTPUT	Labour and Vocational	0.5	U[0.40,0.60]
	Global Knowledge	0.5	U[0.40,0.60]

Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

Uncertainty analysis results

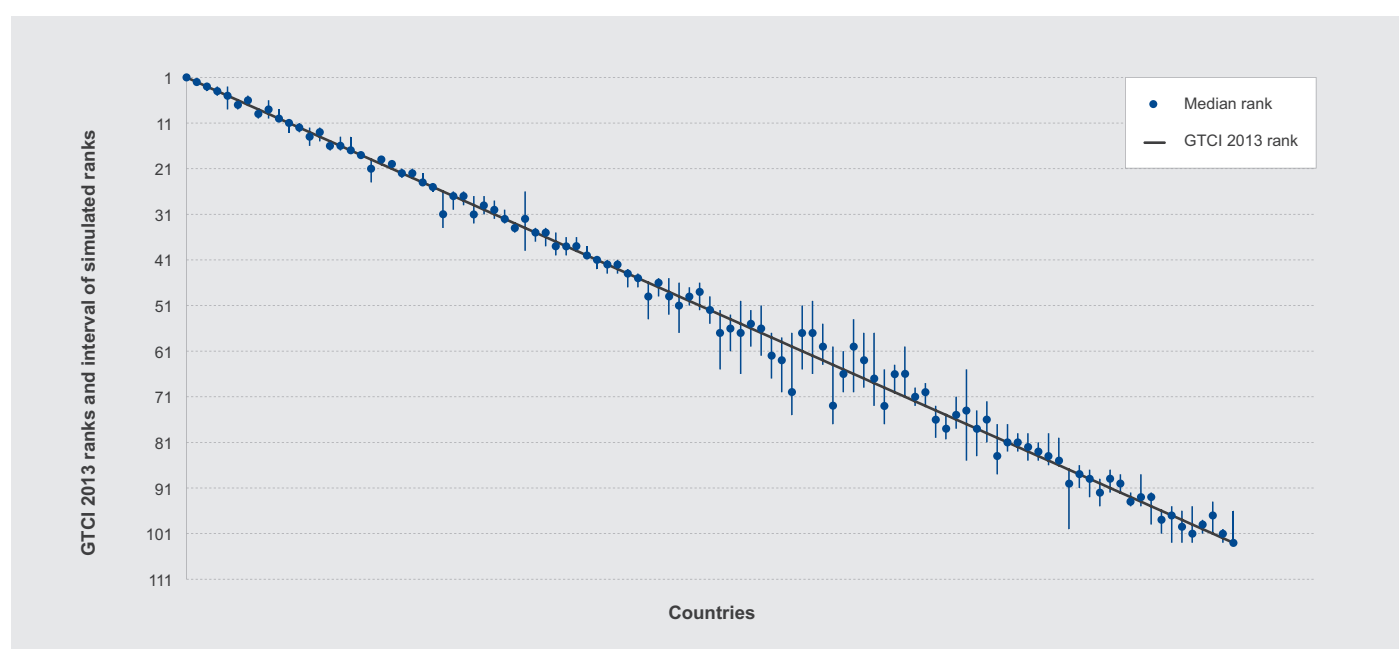
The main results of the robustness analysis are shown in Figure 1 with median ranks and 90% confidence intervals computed across the 4,000 Monte Carlo simulations for the GTCI, and the two sub-indices. Countries are ordered from best to worst according to their reference rank (black line), the dot being the median rank. Error bars represent, for each country, the 90% interval across all simulations. Table 4 reports the published rankings and the 90% confidence intervals that account for uncertainties in the missing data estimation, the pillar weights, and the aggregation formula. All published country ranks lay within the simulated intervals, and these are narrow enough for most countries (less than ten positions) to allow for meaningful inferences to be drawn.

GTCI ranks are shown to be both representative of a plurality of scenarios and robust to changes in the imputation method, the pillar weights and the aggregation formula. If one considers the median rank across the simulated scenarios as being representative of these scenarios, then the fact that the GTCI rank is close to the median rank (less than two positions away) for 75% of the countries suggests that the GTCI is a suitable summary measure. Furthermore, the narrow confidence intervals for the majority of the countries' ranks (less than ± 2 positions for half of the countries) imply that the GTCI ranks are also, for most countries, robust to changes in the pillar weights, the imputation method and the aggregation formula.

Results for the Input and Output sub-indices are also robust and representative of the plurality of scenarios considered. The Input rank is close to the median rank (less than two positions away) for 75% of the countries and the rank intervals are ± 3 positions for half of the countries. Similarly the Output rank is close to the median rank (less than two positions away) for 75% of the countries, and for half of the countries the rank intervals are ± 2 positions.

Overall, country ranks in the GTCI and its two sub-indices are robust to changes in the pillar weights, the imputation method and the aggregation formula for the majority of the countries considered. For full transparency and information, Table 4 reports the GTCI country ranks (and those of the sub-indices) together with the simulated intervals (90% of the 4,000 scenarios) in order to better appreciate the robustness of these ranks to the computation methodology.

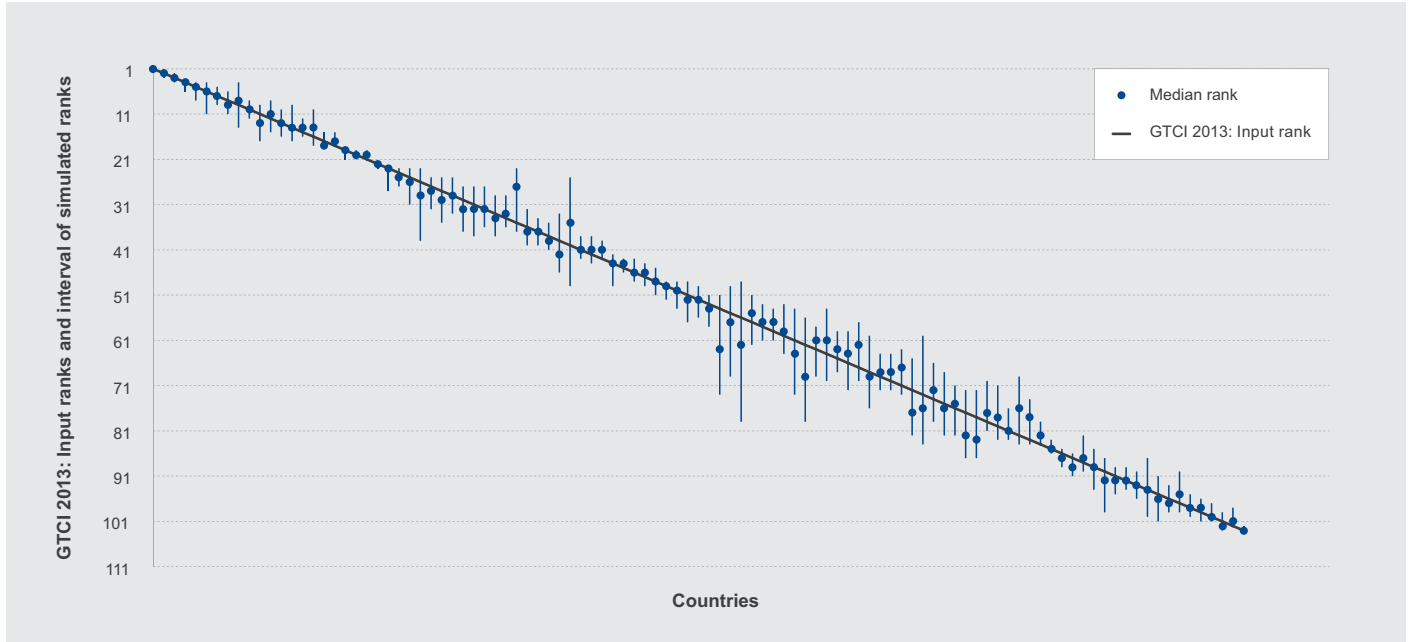
Figure 1a: Robustness analysis (GTCI rank vs. median rank, 90% confidence intervals)



Notes: The Spearman rank correlation between the median rank and the GTCI 2013 rank is 0.997. Simulated intervals are less than ± 2 positions for half of the countries. Median ranks and intervals are calculated over 4,000 simulated scenarios combining random weights, imputed versus missing values, and geometric versus arithmetic average at the pillar level.

Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

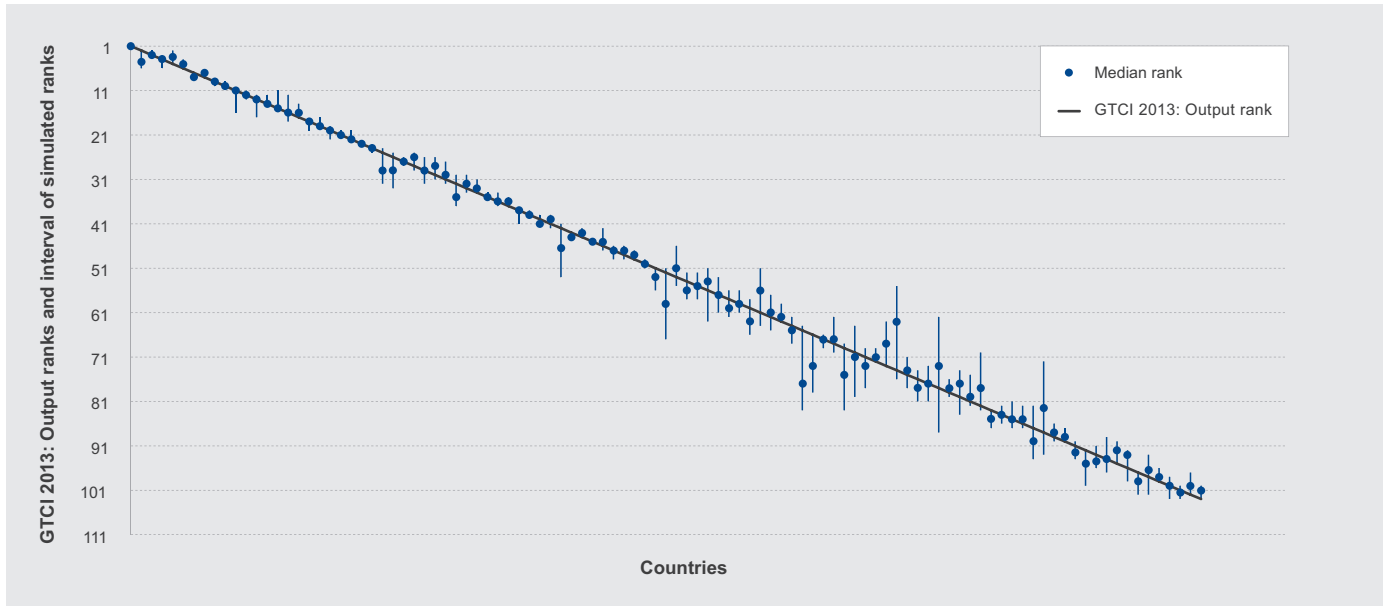
Figure 1b: Robustness analysis (Input rank vs. median rank, 90% confidence intervals)



Notes: The Spearman rank correlation between the median rank and the GTCI 2013 input rank is 0.997. Simulated intervals are less than ± 3 positions for half of the countries. Median ranks and intervals are calculated over 4,000 simulated scenarios combining random weights, imputed versus missing values, and geometric versus arithmetic average at the pillar level.

Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

Figure 1c: Robustness analysis (Output rank vs. median rank, 90% confidence intervals)



Note: The Spearman rank correlation between the median rank and the GTCI 2013 output rank is 0.996. Simulated intervals are less than ± 2 positions for half of the countries. Median ranks and intervals are calculated over 4,000 simulated scenarios combining random weights, imputation versus no imputation of missing values, and geometric versus arithmetic average at the pillar level.

Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

Table 4: Country ranks and 90% intervals for the GTCI 2013 and its Input/Output sub-indices

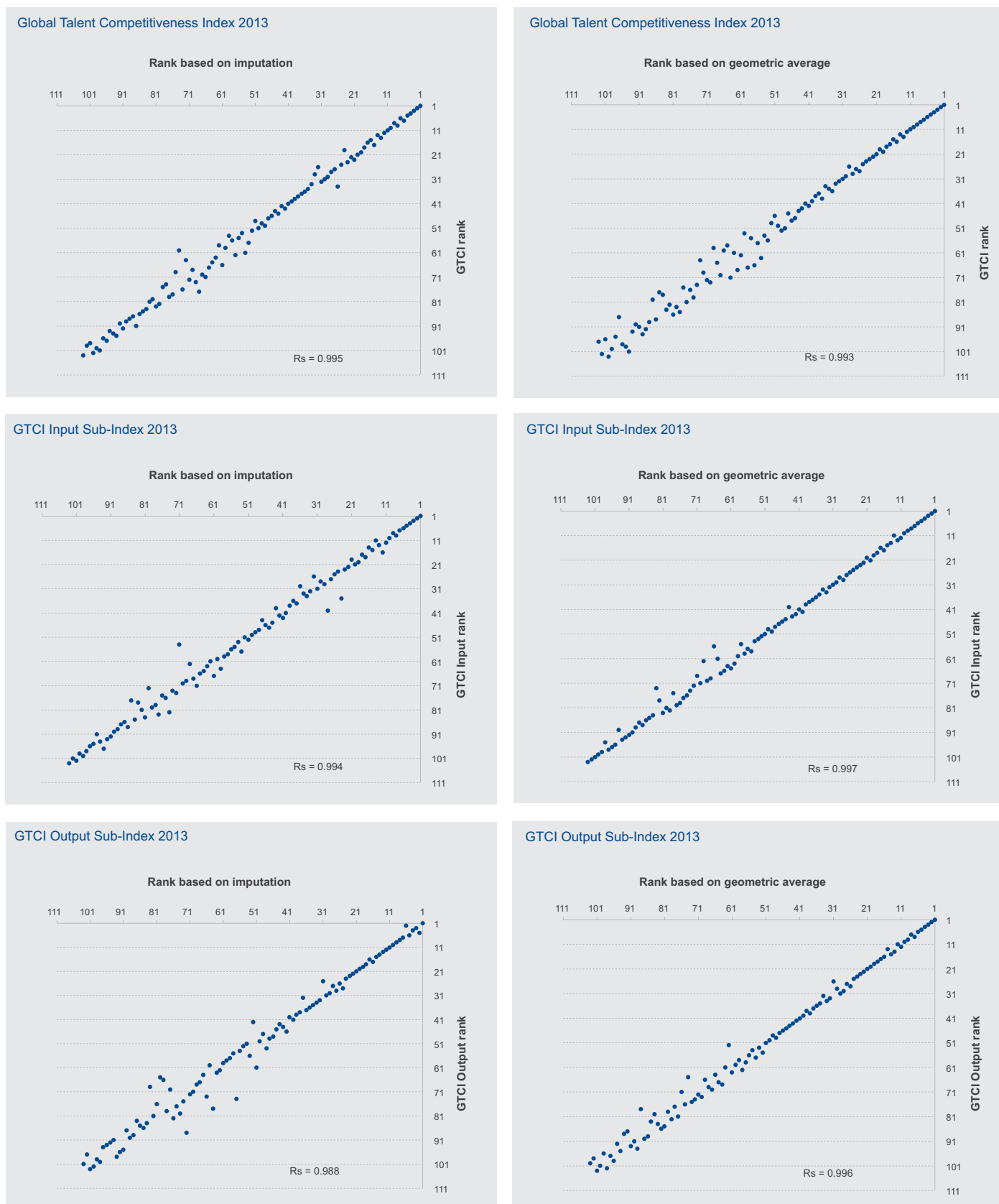
Country	GTCI 2013		Input Sub-Index		Output Sub-Index	
	Rank	Interval	Rank	Interval	Rank	Interval
Switzerland	1	[1, 1]	1	[1, 1]	1	[1, 1]
Singapore	2	[2, 2]	2	[2, 3]	6	[4, 6]
Denmark	3	[3, 4]	7	[5, 9]	3	[2, 3]
Sweden	4	[3, 5]	3	[2, 4]	9	[9, 10]
Luxembourg	5	[3, 8]	9	[4, 14]	2	[2, 6]
Netherlands	6	[6, 8]	4	[4, 6]	10	[9, 10]
United Kingdom	7	[5, 7]	5	[4, 8]	8	[7, 8]
Finland	8	[8, 10]	8	[6, 11]	7	[7, 8]
United States	9	[6, 10]	11	[9, 17]	5	[2, 5]
Iceland	10	[8, 10]	15	[12, 16]	4	[4, 6]
Canada	11	[11, 13]	10	[8, 12]	14	[12, 14]
Norway	12	[11, 13]	12	[8, 15]	12	[11, 13]
Belgium	13	[12, 16]	6	[4, 11]	23	[23, 23]
Austria	14	[12, 15]	14	[9, 17]	11	[11, 16]
Australia	15	[15, 17]	13	[10, 16]	19	[17, 19]
Germany	16	[14, 17]	17	[15, 18]	13	[12, 17]
New Zealand	17	[14, 17]	16	[10, 18]	18	[18, 20]
Ireland	18	[18, 18]	18	[15, 18]	22	[20, 22]
United Arab Emirates	19	[19, 24]	19	[19, 21]	27	[26, 28]
France	20	[19, 20]	21	[19, 21]	15	[11, 15]
Japan	21	[20, 21]	20	[19, 21]	21	[20, 21]
Czech Republic	22	[21, 23]	22	[22, 23]	20	[19, 22]
Estonia	23	[21, 23]	23	[23, 28]	17	[14, 17]
Israel	24	[22, 24]	35	[23, 37]	16	[12, 18]
Slovenia	25	[25, 26]	29	[25, 33]	24	[24, 25]
Montenegro	26	[26, 34]	25	[23, 31]	32	[30, 37]
Slovak Republic	27	[26, 30]	28	[25, 35]	29	[26, 32]
Korea, Rep.	28	[26, 29]	32	[27, 36]	28	[25, 29]
Malta	29	[27, 33]	37	[34, 40]	25	[24, 32]
Latvia	30	[27, 31]	34	[29, 36]	30	[26, 31]
Chile	31	[28, 32]	31	[27, 38]	33	[30, 34]
Poland	32	[30, 33]	36	[32, 40]	31	[27, 32]
Cyprus	33	[33, 35]	30	[27, 37]	35	[34, 35]
Qatar	34	[26, 39]	40	[25, 49]	26	[25, 33]
Spain	35	[34, 37]	27	[25, 32]	39	[38, 39]
Italy	36	[34, 38]	41	[38, 43]	34	[31, 34]
Malaysia	37	[35, 40]	33	[29, 38]	38	[38, 41]
Portugal	38	[36, 40]	24	[23, 27]	48	[46, 49]
Lithuania	39	[36, 39]	38	[35, 41]	36	[34, 37]
Hungary	40	[38, 40]	43	[39, 43]	37	[35, 37]
Costa Rica	41	[41, 43]	26	[23, 39]	58	[56, 62]
Saudi Arabia	42	[41, 44]	44	[42, 49]	43	[43, 44]
Bulgaria	43	[41, 44]	45	[43, 46]	44	[42, 44]
Panama	44	[43, 47]	39	[33, 46]	60	[58, 66]
Croatia	45	[44, 47]	47	[44, 49]	53	[46, 55]
Kazakhstan	46	[46, 54]	48	[45, 51]	52	[51, 67]
China	47	[45, 49]	58	[53, 61]	40	[39, 41]
Lebanon	48	[45, 53]	57	[51, 62]	42	[41, 53]
Uruguay	49	[46, 57]	42	[38, 44]	85	[81, 87]
Georgia	50	[47, 51]	46	[43, 48]	73	[63, 73]
Russian Federation	51	[46, 52]	63	[58, 69]	41	[39, 42]
Macedonia, FYR	52	[49, 55]	50	[48, 54]	63	[59, 63]

Table 4: Country ranks and 90% intervals for the GTCI 2013 and its Input/Output sub-indices (continued)

Country	GTCI 2013		Input Sub-Index		Output Sub-Index	
	Rank	Interval	Rank	Interval	Rank	Interval
Trinidad and Tobago	53	[52, 65]	49	[48, 52]	71	[69, 78]
Argentina	54	[53, 61]	51	[48, 57]	67	[66, 69]
South Africa	55	[50, 66]	56	[48, 79]	51	[51, 56]
Greece	56	[52, 60]	55	[49, 69]	57	[53, 61]
Azerbaijan	57	[51, 62]	59	[54, 61]	61	[51, 64]
Mongolia	58	[57, 67]	60	[53, 64]	64	[62, 68]
Brazil	59	[58, 70]	52	[49, 56]	77	[73, 81]
Kuwait	60	[57, 75]	54	[51, 73]	72	[69, 72]
Armenia	61	[51, 65]	53	[51, 58]	74	[55, 76]
Jordan	62	[50, 66]	64	[54, 70]	56	[51, 63]
Romania	63	[55, 64]	66	[59, 72]	55	[52, 58]
Botswana	64	[60, 77]	61	[54, 73]	65	[64, 83]
Peru	65	[61, 70]	68	[60, 76]	54	[52, 58]
Ukraine	66	[54, 70]	82	[69, 84]	46	[42, 47]
Turkey	67	[57, 69]	74	[66, 79]	50	[49, 51]
Moldova	68	[57, 73]	80	[71, 83]	47	[46, 49]
Namibia	69	[65, 77]	62	[56, 79]	70	[64, 80]
Mexico	70	[64, 70]	69	[64, 72]	59	[56, 61]
Colombia	71	[60, 71]	83	[74, 84]	49	[47, 49]
Thailand	72	[69, 73]	65	[59, 68]	75	[71, 78]
Philippines	73	[68, 73]	70	[64, 72]	68	[62, 70]
Ecuador	74	[73, 80]	78	[72, 87]	62	[57, 65]
Guatemala	75	[75, 80]	72	[65, 82]	79	[76, 80]
Sri Lanka	76	[71, 78]	71	[63, 73]	82	[70, 83]
Albania	77	[65, 85]	67	[57, 70]	88	[72, 93]
Kyrgyz Republic	78	[74, 84]	75	[68, 82]	78	[62, 88]
Serbia	79	[72, 81]	89	[85, 94]	45	[45, 45]
Nicaragua	80	[77, 88]	73	[60, 84]	87	[82, 94]
Dominican Republic	81	[77, 83]	81	[76, 83]	76	[74, 81]
Vietnam	82	[79, 83]	84	[79, 84]	80	[74, 84]
India	83	[79, 85]	76	[71, 82]	89	[86, 90]
Indonesia	84	[81, 85]	79	[70, 81]	90	[87, 89]
El Salvador	85	[79, 86]	86	[85, 89]	69	[68, 83]
Paraguay	86	[80, 86]	87	[86, 91]	66	[66, 79]
Cambodia	87	[87, 100]	77	[72, 87]	98	[93, 102]
Bolivia	88	[86, 91]	91	[89, 95]	84	[82, 86]
Egypt, Arab Rep.	89	[87, 93]	94	[87, 100]	86	[82, 87]
Morocco	90	[89, 95]	85	[83, 86]	99	[96, 99]
Bosnia and Herzegovina	91	[87, 92]	88	[82, 90]	95	[90, 95]
Venezuela, RB	92	[88, 92]	97	[90, 99]	83	[83, 87]
Senegal	93	[92, 95]	95	[91, 101]	91	[90, 94]
Pakistan	94	[88, 95]	100	[97, 101]	81	[75, 82]
Kenya	95	[92, 99]	93	[90, 96]	96	[92, 99]
Uganda	96	[96, 101]	90	[87, 99]	101	[100, 103]
Tanzania	97	[95, 103]	92	[89, 94]	100	[98, 103]
Bangladesh	98	[96, 103]	98	[95, 100]	97	[97, 102]
Ethiopia	99	[95, 103]	101	[99, 103]	92	[92, 100]
Mali	100	[98, 101]	96	[93, 99]	102	[97, 102]
Iran, Islamic Rep.	101	[94, 101]	102	[98, 102]	93	[91, 96]
Burkina Faso	102	[100, 103]	99	[96, 101]	103	[100, 103]
Algeria	103	[96, 103]	103	[102, 103]	94	[89, 97]

Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

Figure 2: Sensitivity analysis: Impact of modelling choices



Source: Saisana and Rossetti, European Commission Joint Research Centre, 2013.

Sensitivity analysis results

Complementary to the uncertainty analysis, sensitivity analysis has been used to identify which of the modelling assumptions have the highest impact on certain country ranks. Figure 2 plots the GTCI and Sub-Index rankings versus one-at-a-time changes of either the EM imputation method or the geometric aggregation formula (assuming equal weights for the six pillars as in the GTCI).

The most influential assumption is the choice of no imputation versus EM imputation for the Output Sub-Index. For example, in the most extreme case, a country improves by merely two positions in the Output ranking if a geometric aggregation is applied, although it is found to improve by 17 positions if EM imputation is applied. If both assumptions are changed (assuming equal pillar weights), the country improves by 19 positions. Notably, the country in question has 73% data availability for the Output Sub-Index, which despite being satisfactory in general, appears not to suffice in this particular case. Another example relates to two countries that move 15 positions in the Output rank when EM imputation is applied, yet their data availability for the Output Sub-Index is 64% and 73%. These results suggest that the inclusion criteria based on data availability are suitable in general for the GTCI and its sub-indices, yet for some countries stricter data availability criteria may be needed.

The JRC recommendation is not to alter the GTCI inclusion criteria on data availability, but to consider country ranks in the GTCI 2013 and in the Input and Output sub-indices within the 90% confidence intervals, as those are reported in Table 4, in order to better appreciate to what degree a country's rank depends on the modelling choices. It is reassuring that for over 80% of the countries included in the GTCI, the overall rank and those in the Input and Output sub-indices are the result of the underlying data and not of the modelling choices.

CONCLUSION

The JRC analysis suggests that the conceptualised multi-level structure of the GTCI 2013 is statistically coherent and balanced (i.e., not dominated by any pillar or sub-pillar; all indicators contribute to the variation of the respective Input/Output sub-indices and to the overall GTCI). The reliability of the GTCI, as measured by the Cronbach-alpha value, is very high at 0.94 (well above the recommended 0.7 threshold for a reliable aggregate). Furthermore, the analysis has offered statistical justification for the equal weights and the use of arithmetic averaging at the various levels of aggregation. It has also shown that the GTCI is "statistically" more reliable in the current form, namely built as the average of the six pillars, instead of the average of the Input and Output sub-indices.

The GTCI and sub-index country ranks are robust to methodological assumptions related to the estimation of missing data, weighting, and aggregation formula (less than three position shifts on average for 94 out of 103 countries). Consequently, inferences can be drawn for most countries in the GTCI, while some caution may be needed for a few countries. Note that perfect robustness would have been undesirable as this would have implied that the GTCI components are perfectly correlated and hence redundant, which is not the case for the GTCI 2013. In fact, one way in which the GTCI helps to highlight other components of human capital and talent competitiveness is by pinpointing the differences in rankings that emerge from a comparison between the GTCI and each of the six pillars: for more than 32% (up to 58%) of the countries, the GTCI ranking and any of the six pillar rankings differ by ten positions or more.

Notes

- ¹ The JRC analysis was based on the recommendations of the OECD (2008) Handbook on Composite Indicators, and on more recent research from the JRC. The JRC auditing studies of composite indicators are available at <http://composite-indicators.jrc.ec.europa.eu/> (all audits were carried upon request of the Index developers).
- ² Groeneveld and Meeden (1984) set the criteria for absolute skewness above 1 and kurtosis above 3.5. The skewness criterion was relaxed to account for the small sample (+100 countries).
- ³ Saisana, M., A. Saltelli, and S. Tarantola (2005); Saisana, M., B. D'Hombres, and A. Saltelli (2011)
- ⁴ With arithmetic average, the 'no imputation' choice is equivalent to replacing missing values with the average of the available (normalised) data within each sub-pillar.
- ⁵ The Expectation-Maximisation (EM) algorithm (Little and Rubin, 2002) is an iterative procedure that finds the maximum likelihood estimates of the parameter vector by repeating two steps: (1) The expectation E-step: Given a set of parameter estimates, such as a mean vector and covariance matrix for a multivariate normal distribution, the E-step calculates the conditional expectation of the complete-data log likelihood given the observed data and the parameter estimates. (2) The maximisation M-step: Given a complete-data log likelihood, the M-step finds the parameter estimates to maximise the complete-data log likelihood from the E-step. The two steps are iterated until the iterations converge.
- ⁶ Munda, G. (2008)
- ⁷ In the geometric average, pillars are multiplied as opposed to summed in the arithmetic average. Pillar weights appear as exponents in the multiplication. All pillar scores were greater than 1.0, hence there was no reason to rescale them (so as to avoid zero values that would have led to zero geometric averages).

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COUNTRY PROFILES

How to read the country profiles

COUNTRY PROFILE

ALBANIA

RANK (out of 103) **77**

- Population (millions) **3.16**
 GDP per capita (PPPS) **8,052.18**
 GDP (US\$ billions) **12.69**

Global Talent Competitiveness Index Score **38.82**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**
-
- | VARIABLE | SCORE | RANK/103 |
|---|-------|----------|
| 1 Enablers | 46.02 | 62 |
| 1.1 Regulatory landscape | 58.46 | 52 |
| 1.1.1 Government efficiency | 26.98 | 69 |
| 1.1.2 Political stability | 59.54 | 63 |
| 1.1.2 Political stability (grey) | | |
| 1.1.3 Starting a foreign business | 88.87 | 5 |
| 1.2 Market landscape | 31.77 | 89 |
| 1.2.1 Intensity of local competition | 47.62 | 94 |
| 1.2.1 Intensity of local competition (grey) | | |
| 1.2.2 Venture capital availability | 14.08 | 97 |
| 1.2.3 Firm-level technology absorption | 60.74 | 64 |
| 1.2.4 R&D expenditure | 3.00 | 82 |
| 1.2.5 ICT access | 26.90 | 77 |
| 1.2.6 Ease of doing business | 38.30 | 64 |
| 1.3 Business landscape | 47.82 | 65 |
| 1.3.1 Labour market flexibility | 42.57 | 65 |
| 1.3.2 Reliance on professional management | 53.08 | 51 |
| 2 Attract | 45.80 | 80 |
| 2.1 External openness | 49.36 | 32 |
| 2.1.1 FDI inflow | 60.93 | 9 |
| 2.1.1 FDI inflow (grey) | | |
| 2.1.2 Qualified labour inflow | 35.01 | 71 |
| 2.1.3 Prevalence of foreign ownership | 52.15 | 76 |
| 2.2 Internal openness | 42.24 | 97 |
| 2.2.1 Tolerance of minorities | 55.65 | 89 |
| 2.2.2 Tolerance of immigrants | 48.03 | 90 |
| 2.2.3 Social mobility | n/a | n/a |
| 2.2.4 Female professionals and technical workers | n/a | n/a |
| 2.2.5 Female parliamentarians | 23.04 | 67 |
| 3 Grow | 41.38 | 76 |
| 3.1 Formal education | 31.15 | 73 |
| 3.1.1 Pupil-teacher ratio | 75.62 | 60 |
| 3.1.2 Technical/vocational enrolment | 11.12 | 78 |
| 3.1.3 Tertiary enrolment | 40.35 | 51 |
| 3.1.4 Reading, maths and science scores | 23.58 | 61 |
| 3.1.5 OS university ranking | n/a | n/a |
| 3.1.6 International students inflow | 5.05 | 61 |
| 3.2 Lifelong learning | 55.48 | 42 |
| 3.2.1 Further education and training climate | | |
| 3.2.2 Quality of management schools | 54.92 | 53 |
| 3.2.2 Quality of management schools (grey) | | |
| 3.2.3 Access to growth opportunities | 37.51 | 100 |
| 3.3.1 Use of virtual social networks | 74.64 | 57 |
| 3.3.2 State of cluster development | 17.19 | 103 |
| 3.3.3 Quality of scientific research institutions | 23.53 | 99 |
| 3.3.4 Voicing concern to officials | 34.67 | 72 |
| 4 Retain | 51.83 | 54 |
| 4.1 Sustainability | 43.45 | 57 |
| 4.1.1 Pension system | 38.93 | 52 |
| 4.1.2 Extent and effect of taxation | 47.97 | 30 |
| 4.2 Lifestyle | 60.52 | 44 |
| 4.2.1 Environmental performance | 75.22 | 15 |
| 4.2.2 Property stolen | 72.51 | 40 |
| 4.2.3 Safety at night | 74.55 | 37 |
| 4.2.4 Physicians density | 18.59 | 70 |
| 5 Labour and Vocational | 38.72 | 54 |
| 5.1 Employable skills | 42.91 | 49 |
| 5.1.1 Vocationally trained workforce | 44.43 | 42 |
| 5.1.2 Secondary-educated workforce | n/a | n/a |
| 5.1.2 Technical and associate professionals | n/a | n/a |
| 5.1.3 Youth employment | 41.40 | 50 |
| 5.2 Labour productivity | 34.52 | 61 |
| 5.2.1 Labour productivity per employee | 13.03 | 65 |
| 5.2.2 Relationship of pay to productivity | 56.01 | 28 |
| 6 Global Knowledge | 9.18 | 93 |
| 6.1 Higher skills and competencies | 4.13 | 95 |
| 6.1.1 Educated workforce | 3.42 | 84 |
| 6.1.1 Tertiary-educated workforce | | |
| 6.1.2 Knowledge workers | n/a | n/a |
| 6.1.3 Legislators, senior officials and managers | n/a | n/a |
| 6.1.3 Professionals | n/a | n/a |
| 6.1.4 Researchers | 4.85 | 67 |
| 6.2 Talent impact | 14.23 | 84 |
| 6.2.1 Innovation output | | |
| 6.2.2 Entrepreneurship | 14.23 | 84 |
| 6.2.2 New product entrepreneurial activity | n/a | n/a |

91 The Global Talent Competitiveness Index 2013

The country profiles provide more granular information on how each of the 103 countries performs in the various dimensions of the Global Talent Competitiveness Index (GTCI).

Each country profile consists of three parts:

- 1 Key indicators,
- 2 Radar chart, and
- 3 Scores and Ranks.

1 The first section comprises the respective country's rank (out of 103 countries), GTCI score, and income group average GTCI score. The income group is based on the World Bank Income Group Classification, as of July 2013. Additionally, basic indicators are included to put the country under review in context. These include population (in millions) drawn from *World Population Prospects: The 2012 Revision, Population Division, United Nations*, and GDP per capita (PPP\$) and GDP (current US\$ in billions) from *World Economic Outlook, International Monetary Fund*.

2 The second section presents a radar chart that outlines the respective country's performance along the six pillars and its position with respect to its income group peers. The black line plots the country's score on each of the six pillars while the blue line represents its income group average.

3 The third section lays out the country's normalised scores and ranks across all pillars, sub-pillars, and variables. The pillars are identified by a bold single-digit notation (e.g., **1 Enablers**) and sub-pillars by a bold two-digit notation (e.g., **1.1 Regulatory landscape**). Under selected sub-pillars, components are provided in grey colour. There are no values attached to the components as they only contextualise the theoretical framework. The 48 variables are indicated by a three-digit notation (e.g., **1.1.1 Government effectiveness**).

For more information about variable definitions and the method of calculation, please refer to the Sources and Definitions and Technical Notes sections in the Appendices.

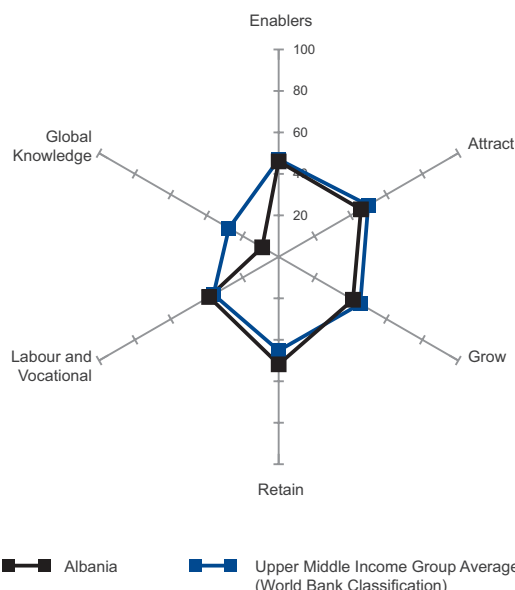
ALBANIA

RANK
(out of 103)

77

Population (millions) **3.16**
 GDP per capita (PPP\$) **8,052.18**
 GDP (US\$ billions) **12.69**

Global Talent Competitiveness Index Score **38.82**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	46.02	62
1.1 Regulatory landscape	58.46	52
Government efficiency		
1.1.1 Government effectiveness	26.98	69
1.1.2 Political stability	59.54	63
FDI climate		
1.1.3 Starting a foreign business	88.87	5
1.2 Market landscape	31.77	89
Competition climate		
1.2.1 Intensity of local competition	47.62	94
Innovation climate		
1.2.2 Venture capital availability	14.08	97
1.2.3 Firm-level technology absorption	60.74	64
1.2.4 R&D expenditure	3.00	82
Connectivity		
1.2.5 ICT access	26.90	77
Ease of doing business		
1.2.6 Ease of doing business	38.30	64
1.3 Business landscape	47.82	65
Labour market flexibility		
1.3.1 Labour market flexibility	42.57	65
Ownership and governance		
1.3.2 Reliance on professional management	53.08	51
2 Attract	45.80	80
2.1 External openness	49.36	32
FDI		
2.1.1 FDI inflow	60.93	9
Brain gain		
2.1.2 Qualified labour inflow	35.01	71
Foreign companies		
2.1.3 Prevalence of foreign ownership	52.15	76
2.2 Internal openness	42.24	97
Diversity		
2.2.1 Tolerance of minorities	55.65	89
2.2.2 Tolerance of immigrants	48.03	90
Social mobility		
2.2.3 Social mobility	n/a	n/a
Gender mobility		
2.2.4 Female professionals and technical workers	n/a	n/a
2.2.5 Female parliamentarians	23.04	67
3 Grow	41.38	76
3.1 Formal education	31.15	73
Education climate		
3.1.1 Pupil-teacher ratio	75.62	60
3.1.2 Technical/vocational enrolment	11.12	78
3.1.3 Tertiary enrolment	40.35	51
Performance of education system		
3.1.4 Reading, maths and science scores	23.58	61
Top universities		
3.1.5 QS university ranking	n/a	n/a
International students		
3.1.6 International students inflow	5.05	61

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	55.48	42
Further education and training climate		
3.2.1 Quality of management schools	54.92	53
3.2.2 Extent of staff training	56.03	29
3.3 Access to growth opportunities	37.51	100
Networks		
3.3.1 Use of virtual social networks	74.64	57
3.3.2 State of cluster development	17.19	103
Research quality		
3.3.3 Quality of scientific research institutions	23.53	99
Voice		
3.3.4 Voicing concern to officials	34.67	72
4 Retain	51.83	54
4.1 Sustainability	43.45	57
Social protection		
4.1.1 Pension system	38.93	52
Taxation		
4.1.2 Extent and effect of taxation	47.97	30
4.2 Lifestyle	60.22	44
Quality of life		
4.2.1 Environmental performance	75.22	15
4.2.2 Property stolen	72.51	40
4.2.3 Safety at night	74.55	37
Services		
4.2.4 Physicians density	18.59	70
5 Labour and Vocational	38.72	54
5.1 Employable skills	42.91	49
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	44.43	42
Technical professions		
5.1.2 Technicians and associate professionals	n/a	n/a
Youth employment		
5.1.3 Youth employment	41.40	50
5.2 Labour productivity	34.52	61
Productivity per employee		
5.2.1 Labour productivity per employee	13.03	65
Pay and productivity		
5.2.2 Relationship of pay to productivity	56.01	28
6 Global Knowledge	9.18	93
6.1 Higher skills and competencies	4.13	95
Educated workforce		
6.1.1 Tertiary-educated workforce	3.42	84
Knowledge workers		
6.1.2 Legislators, senior officials and managers	n/a	n/a
6.1.3 Professionals	n/a	n/a
6.1.4 Researchers	4.85	67
6.2 Talent impact	14.23	91
Innovation		
6.2.1 Innovation output	14.23	84
Entrepreneurship		
6.2.2 New product entrepreneurial activity	n/a	n/a

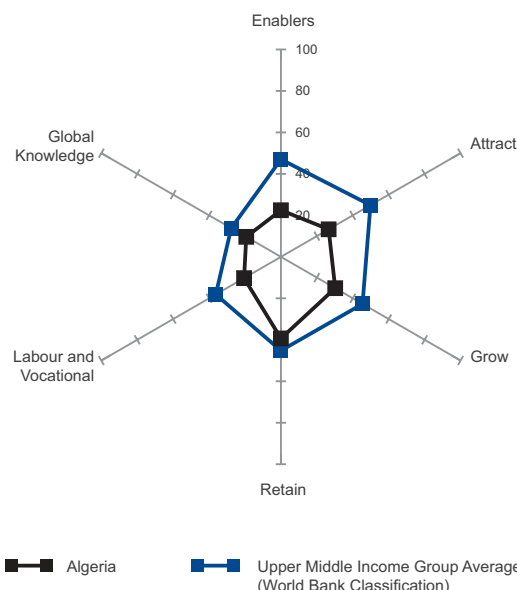
ALGERIA

RANK
(out of 103)

103

Population (millions) **38.41**
 GDP per capita (PPP\$) **7,477.07**
 GDP (US\$ billions) **207.79**

Global Talent Competitiveness Index Score **26.40**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	22.48	103
1.1 Regulatory landscape	23.17	101
Government efficiency		
1.1.1 Government effectiveness.....	13.36	92
1.1.2 Political stability.....	32.97	97
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	19.31	103
Competition climate		
1.2.1 Intensity of local competition.....	35.75	103
Innovation climate		
1.2.2 Venture capital availability.....	12.98	102
1.2.3 Firm-level technology absorption.....	36.01	103
1.2.4 R&D expenditure.....	1.03	90
Connectivity		
1.2.5 ICT access.....	26.07	79
Ease of doing business		
1.2.6 Ease of doing business.....	4.00	99
1.3 Business landscape	24.97	103
Labour market flexibility		
1.3.1 Labour market flexibility.....	28.64	85
Ownership and governance		
1.3.2 Reliance on professional management.....	21.31	103
2 Attract	26.56	102
2.1 External openness	19.52	103
FDI		
2.1.1 FDI inflow.....	11.73	80
Brain gain		
2.1.2 Qualified labour inflow.....	9.00	103
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	37.83	100
2.2 Internal openness	33.60	102
Diversity		
2.2.1 Tolerance of minorities.....	23.80	101
2.2.2 Tolerance of immigrants.....	52.40	85
Social mobility		
2.2.3 Social mobility.....	33.33	96
Gender mobility		
2.2.4 Female professionals and technical workers.....	47.69	80
2.2.5 Female parliamentarians.....	10.76	92
3 Grow	30.22	102
3.1 Formal education	27.07	85
Education climate		
3.1.1 Pupil-teacher ratio.....	59.70	71
3.1.2 Technical/vocational enrolment.....	17.60	65
3.1.3 Tertiary enrolment.....	28.44	69
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	2.53	69

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	29.98	103
Further education and training climate		
3.2.1 Quality of management schools.....	33.78	100
3.2.2 Extent of staff training.....	26.18	103
3.3 Access to growth opportunities	33.60	102
Networks		
3.3.1 Use of virtual social networks.....	70.64	75
3.3.2 State of cluster development.....	22.79	100
Research quality		
3.3.3 Quality of scientific research institutions.....	18.33	102
Voice		
3.3.4 Voicing concern to officials.....	22.64	91
4 Retain	39.34	78
4.1 Sustainability	37.04	73
Social protection		
4.1.1 Pension system.....	37.69	53
Taxation		
4.1.2 Extent and effect of taxation.....	36.39	68
4.2 Lifestyle	41.65	84
Quality of life		
4.2.1 Environmental performance.....	35.70	72
4.2.2 Property stolen.....	59.00	70
4.2.3 Safety at night.....	52.41	78
Services		
4.2.4 Physicians density.....	19.47	68
5 Labour and Vocational	20.53	103
5.1 Employable skills	22.60	97
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	10.57	82
Technical professions		
5.1.2 Technicians and associate professionals.....	40.82	50
Youth employment		
5.1.3 Youth employment.....	16.40	84
5.2 Labour productivity	18.46	102
Productivity per employee		
5.2.1 Labour productivity per employee.....	13.84	64
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	23.07	103
6 Global Knowledge	19.30	81
6.1 Higher skills and competencies	15.87	81
Educated workforce		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	33.15	37
6.1.3 Professionals.....	11.89	78
6.1.4 Researchers.....	2.56	72
6.2 Talent impact	22.73	77
Innovation		
6.2.1 Innovation output.....	0.00	103
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	45.45	30

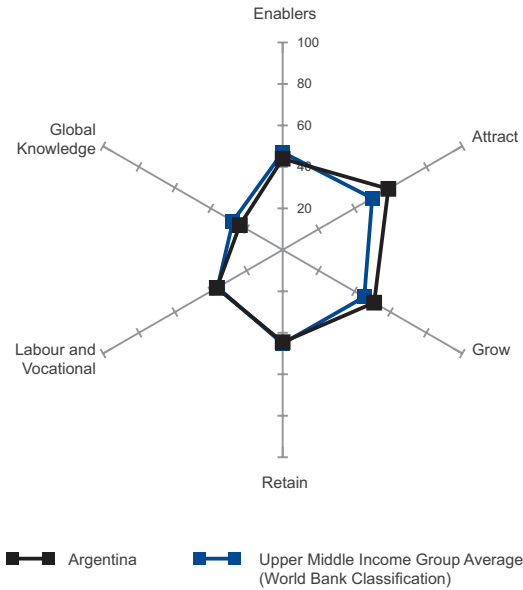
ARGENTINA

RANK
(out of 103)

54

Population (millions) **41.11**
 GDP per capita (PPP\$) **18,112.33**
 GDP (US\$ billions) **474.95**

Global Talent Competitiveness Index Score **43.13**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	43.96	71
1.1 Regulatory landscape	53.66	55
Government efficiency		
1.1.1 Government effectiveness	28.18	68
1.1.2 Political stability	70.97	46
FDI climate		
1.1.3 Starting a foreign business	61.83	38
1.2 Market landscape	34.40	81
Competition climate		
1.2.1 Intensity of local competition	51.22	87
Innovation climate		
1.2.2 Venture capital availability	13.71	100
1.2.3 Firm-level technology absorption	55.24	84
1.2.4 R&D expenditure	13.10	50
Connectivity		
1.2.5 ICT access	55.45	50
Ease of doing business		
1.2.6 Ease of doing business	17.70	85
1.3 Business landscape	43.80	78
Labour market flexibility		
1.3.1 Labour market flexibility	30.46	82
Ownership and governance		
1.3.2 Reliance on professional management	57.15	41
2 Attract	58.83	30
2.1 External openness	39.70	69
FDI		
2.1.1 FDI inflow	13.47	75
Brain gain		
2.1.2 Qualified labour inflow	40.26	52
Foreign companies		
2.1.3 Prevalence of foreign ownership	65.37	42
2.2 Internal openness	77.96	14
Diversity		
2.2.1 Tolerance of minorities	84.57	28
2.2.2 Tolerance of immigrants	88.15	18
Social mobility		
2.2.3 Social mobility	43.17	82
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	73.91	11
3 Grow	50.95	41
3.1 Formal education	48.19	40
Education climate		
3.1.1 Pupil-teacher ratio	87.97	30
3.1.2 Technical/vocational enrolment	16.34	67
3.1.3 Tertiary enrolment	71.48	13
Performance of education system		
3.1.4 Reading, maths and science scores	28.11	58
Top universities		
3.1.5 QS university ranking	37.04	29
International students		
3.1.6 International students inflow	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	56.13	39
Further education and training climate		
3.2.1 Quality of management schools	64.82	30
3.2.2 Extent of staff training	47.44	60
3.3 Access to growth opportunities	48.52	63
Networks		
3.3.1 Use of virtual social networks	79.42	42
3.3.2 State of cluster development	38.61	74
Research quality		
3.3.3 Quality of scientific research institutions	51.30	43
Voice		
3.3.4 Voicing concern to officials	24.76	88
4 Retain	44.54	67
4.1 Sustainability	35.41	75
Social protection		
4.1.1 Pension system	48.66	48
Taxation		
4.1.2 Extent and effect of taxation	22.16	96
4.2 Lifestyle	53.67	56
Quality of life		
4.2.1 Environmental performance	53.81	46
4.2.2 Property stolen	54.03	82
4.2.3 Safety at night	54.87	72
Services		
4.2.4 Physicians density	51.99	26
5 Labour and Vocational	36.68	61
5.1 Employable skills	46.62	36
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	40.29	45
Technical professions		
5.1.2 Technicians and associate professionals	63.27	28
Youth employment		
5.1.3 Youth employment	36.31	55
5.2 Labour productivity	26.74	87
Productivity per employee		
5.2.1 Labour productivity per employee	24.13	44
Pay and productivity		
5.2.2 Relationship of pay to productivity	29.34	100
6 Global Knowledge	23.83	72
6.1 Higher skills and competencies	13.88	85
Educated workforce		
6.1.1 Tertiary-educated workforce	31.21	59
Knowledge workers		
6.1.2 Legislators, senior officials and managers	1.12	90
6.1.3 Professionals	11.59	80
6.1.4 Researchers	11.58	46
6.2 Talent impact	33.79	57
Innovation		
6.2.1 Innovation output	27.32	59
Entrepreneurship		
6.2.2 New product entrepreneurial activity	40.26	40

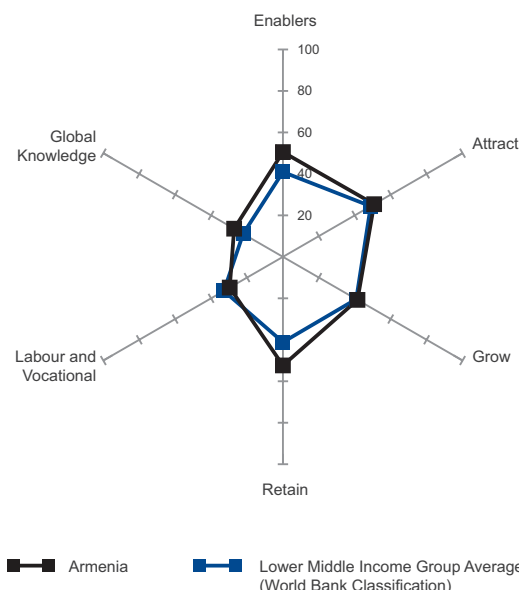
ARMENIA

RANK
(out of 103)

61

Population (millions) **2.97**
 GDP per capita (PPP\$) **5,838.26**
 GDP (US\$ billions) **10.07**

Global Talent Competitiveness Index Score **42.00**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	50.52	56
1.1 Regulatory landscape	58.51	50
Government efficiency.....		
1.1.1 Government effectiveness.....	30.35	63
1.1.2 Political stability.....	63.79	58
FDI climate.....		
1.1.3 Starting a foreign business.....	81.41	14
1.2 Market landscape	41.13	63
Competition climate.....		
1.2.1 Intensity of local competition.....	47.47	96
Innovation climate.....		
1.2.2 Venture capital availability.....	22.82	71
1.2.3 Firm-level technology absorption.....	57.10	76
1.2.4 R&D expenditure.....	5.66	65
Connectivity.....		
1.2.5 ICT access.....	n/a	n/a
Ease of doing business.....		
1.2.6 Ease of doing business.....	72.60	29
1.3 Business landscape	51.92	56
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	55.09	47
Ownership and governance.....		
1.3.2 Reliance on professional management.....	48.76	66
2 Attract	50.78	55
2.1 External openness	43.48	53
FDI.....		
2.1.1 FDI inflow.....	38.86	23
Brain gain.....		
2.1.2 Qualified labour inflow.....	36.66	65
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	54.92	70
2.2 Internal openness	58.08	62
Diversity.....		
2.2.1 Tolerance of minorities.....	62.39	78
2.2.2 Tolerance of immigrants.....	66.06	61
Social mobility.....		
2.2.3 Social mobility.....	50.62	65
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	11.34	91
3 Grow	41.50	74
3.1 Formal education	40.85	54
Education climate.....		
3.1.1 Pupil-teacher ratio.....	100.00	1
3.1.2 Technical/vocational enrolment.....	4.22	89
3.1.3 Tertiary enrolment.....	45.42	45
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	13.76	42

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	40.19	92
Further education and training climate.....		
3.2.1 Quality of management schools.....	36.42	98
3.2.2 Extent of staff training.....	43.97	73
3.3 Access to growth opportunities	43.47	86
Networks.....		
3.3.1 Use of virtual social networks.....	73.93	59
3.3.2 State of cluster development.....	44.06	57
Research quality.....		
3.3.3 Quality of scientific research institutions.....	32.79	89
Voice.....		
3.3.4 Voicing concern to officials.....	23.11	90
4 Retain	52.37	53
4.1 Sustainability	39.93	68
Social protection.....		
4.1.1 Pension system.....	32.80	59
Taxation.....		
4.1.2 Extent and effect of taxation.....	47.06	33
4.2 Lifestyle	64.81	29
Quality of life.....		
4.2.1 Environmental performance.....	33.23	75
4.2.2 Property stolen.....	82.70	11
4.2.3 Safety at night.....	82.35	25
Services.....		
4.2.4 Physicians density.....	60.95	12
5 Labour and Vocational	29.63	87
5.1 Employable skills	25.70	92
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions.....		
5.1.2 Technicians and associate professionals.....	41.84	49
Youth employment.....		
5.1.3 Youth employment.....	9.55	96
5.2 Labour productivity	33.57	66
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	10.55	73
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	56.58	26
6 Global Knowledge	27.16	62
6.1 Higher skills and competencies	27.75	54
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	25.28	55
6.1.3 Professionals.....	45.43	32
6.1.4 Researchers.....	12.55	44
6.2 Talent impact	26.57	71
Innovation.....		
6.2.1 Innovation output.....	26.57	61
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

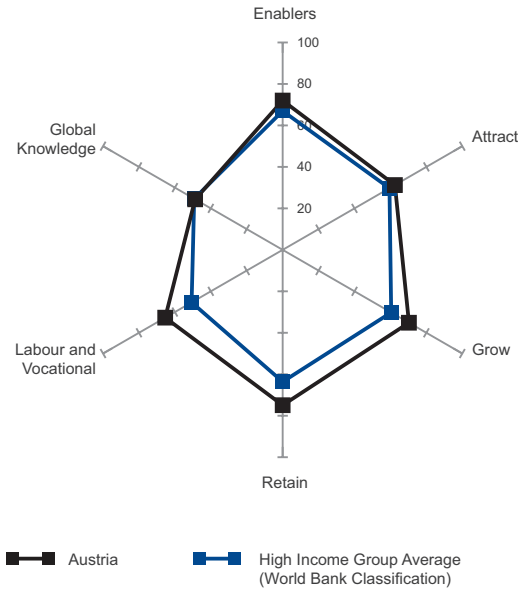
AUSTRIA

RANK
(out of 103)

14

Population (millions) **8.46**
 GDP per capita (PPP\$) **42,408.58**
 GDP (US\$ billions) **398.59**

Global Talent Competitiveness Index Score **65.64**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	72.00	18
1.1 Regulatory landscape	83.95	14
Government efficiency.....		
1.1.1 Government effectiveness.....	82.50	13
1.1.2 Political stability.....	95.26	10
FDI climate.....		
1.1.3 Starting a foreign business.....	74.08	22
1.2 Market landscape	70.00	17
Competition climate.....		
1.2.1 Intensity of local competition.....	80.50	6
Innovation climate.....		
1.2.2 Venture capital availability.....	33.42	32
1.2.3 Firm-level technology absorption.....	82.17	12
1.2.4 R&D expenditure.....	62.32	10
Connectivity.....		
1.2.5 ICT access.....	86.07	14
Ease of doing business.....		
1.2.6 Ease of doing business.....	75.50	26
1.3 Business landscape	62.06	31
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	49.94	56
Ownership and governance.....		
1.3.2 Reliance on professional management.....	74.17	17
2 Attract	62.49	23
2.1 External openness	50.53	28
FDI.....		
2.1.1 FDI inflow.....	26.45	40
Brain gain.....		
2.1.2 Qualified labour inflow.....	56.84	26
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	68.29	35
2.2 Internal openness	74.46	23
Diversity.....		
2.2.1 Tolerance of minorities.....	78.59	38
2.2.2 Tolerance of immigrants.....	75.24	37
Social mobility.....		
2.2.3 Social mobility.....	84.45	8
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	86.14	63
2.2.5 Female parliamentarians.....	47.87	23
3 Grow	70.30	10
3.1 Formal education	72.60	2
Education climate.....		
3.1.1 Pupil-teacher ratio.....	90.61	23
3.1.2 Technical/vocational enrolment.....	83.12	4
3.1.3 Tertiary enrolment.....	64.82	20
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	64.28	28
Top universities.....		
3.1.5 QS university ranking.....	42.67	25
International students.....		
3.1.6 International students inflow.....	90.11	7

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	65.18	22
Further education and training climate.....		
3.2.1 Quality of management schools.....	63.16	33
3.2.2 Extent of staff training.....	67.19	12
3.3 Access to growth opportunities	73.13	10
Networks.....		
3.3.1 Use of virtual social networks.....	85.96	17
3.3.2 State of cluster development.....	62.98	16
Research quality.....		
3.3.3 Quality of scientific research institutions.....	68.09	20
Voice.....		
3.3.4 Voicing concern to officials.....	75.47	9
4 Retain	74.92	2
4.1 Sustainability	67.62	13
Social protection.....		
4.1.1 Pension system.....	98.20	5
Taxation.....		
4.1.2 Extent and effect of taxation.....	37.04	66
4.2 Lifestyle	82.22	1
Quality of life.....		
4.2.1 Environmental performance.....	82.24	7
4.2.2 Property stolen.....	77.73	22
4.2.3 Safety at night.....	90.27	8
Services.....		
4.2.4 Physicians density.....	78.67	2
5 Labour and Vocational	65.39	2
5.1 Employable skills	76.70	2
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	71.71	13
Technical professions.....		
5.1.2 Technicians and associate professionals.....	89.29	6
Youth employment.....		
5.1.3 Youth employment.....	69.11	18
5.2 Labour productivity	54.09	13
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	58.28	9
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	49.90	52
6 Global Knowledge	48.73	26
6.1 Higher skills and competencies	44.11	29
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	39.86	48
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	28.09	50
6.1.3 Professionals.....	42.38	35
6.1.4 Researchers.....	66.12	8
6.2 Talent impact	53.34	24
Innovation.....		
6.2.1 Innovation output.....	58.63	21
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	48.05	27

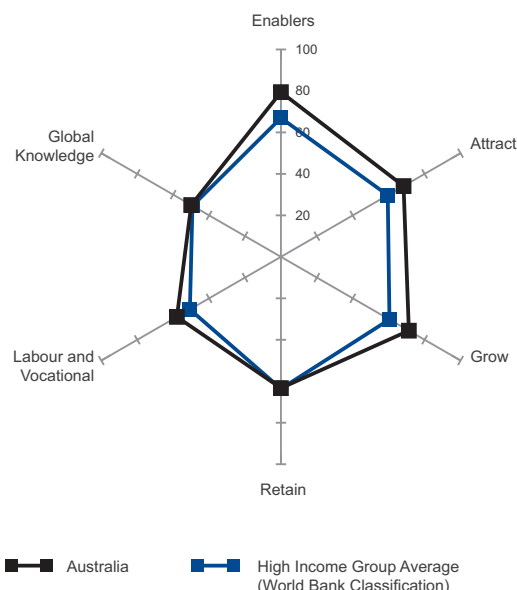
AUSTRALIA

RANK
(out of 103)

15

Population (millions) **23.05**
 GDP per capita (PPP\$) **42,640.28**
 GDP (US\$ billions) **1,541.80**

Global Talent Competitiveness Index Score **65.01**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	79.43	9
1.1 Regulatory landscape	86.14	12
Government efficiency		
1.1.1 Government effectiveness.....	84.85	10
1.1.2 Political stability.....	87.43	25
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	71.73	15
Competition climate		
1.2.1 Intensity of local competition.....	80.86	5
Innovation climate		
1.2.2 Venture capital availability.....	38.93	22
1.2.3 Firm-level technology absorption.....	81.61	14
1.2.4 R&D expenditure.....	53.72	13
Connectivity		
1.2.5 ICT access.....	83.03	18
Ease of doing business		
1.2.6 Ease of doing business.....	92.20	9
1.3 Business landscape	80.44	7
Labour market flexibility		
1.3.1 Labour market flexibility.....	78.70	13
Ownership and governance		
1.3.2 Reliance on professional management.....	82.17	10
2 Attract	68.27	14
2.1 External openness	53.10	21
FDI		
2.1.1 FDI inflow.....	21.55	49
Brain gain		
2.1.2 Qualified labour inflow.....	57.25	25
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	80.51	7
2.2 Internal openness	83.45	10
Diversity		
2.2.1 Tolerance of minorities.....	97.61	3
2.2.2 Tolerance of immigrants.....	96.69	3
Social mobility		
2.2.3 Social mobility.....	82.35	9
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	40.58	29
3 Grow	71.22	7
3.1 Formal education	80.95	1
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	69.36	14
3.1.3 Tertiary enrolment.....	76.63	8
Performance of education system		
3.1.4 Reading, maths and science scores.....	76.98	8
Top universities		
3.1.5 QS university ranking.....	84.04	4
International students		
3.1.6 International students inflow.....	97.72	6

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	65.69	20
Further education and training climate		
3.2.1 Quality of management schools.....	71.20	16
3.2.2 Extent of staff training.....	60.18	24
3.3 Access to growth opportunities	67.01	19
Networks		
3.3.1 Use of virtual social networks.....	86.48	14
3.3.2 State of cluster development.....	53.93	33
Research quality		
3.3.3 Quality of scientific research institutions.....	79.29	7
Voice		
3.3.4 Voicing concern to officials.....	48.35	43
4 Retain	63.30	26
4.1 Sustainability	65.48	17
Social protection		
4.1.1 Pension system.....	95.02	15
Taxation		
4.1.2 Extent and effect of taxation.....	35.94	70
4.2 Lifestyle	61.11	40
Quality of life		
4.2.1 Environmental performance.....	54.10	44
4.2.2 Property stolen.....	71.33	44
4.2.3 Safety at night.....	70.59	47
Services		
4.2.4 Physicians density.....	48.43	32
5 Labour and Vocational	57.91	17
5.1 Employable skills	62.40	11
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	44.57	41
Technical professions		
5.1.2 Technicians and associate professionals.....	64.29	27
Youth employment		
5.1.3 Youth employment.....	78.34	8
5.2 Labour productivity	53.42	15
Productivity per employee		
5.2.1 Labour productivity per employee.....	60.58	8
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	46.26	66
6 Global Knowledge	49.96	23
6.1 Higher skills and competencies	57.09	16
Educated workforce		
6.1.1 Tertiary-educated workforce.....	87.47	4
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	62.36	7
6.1.3 Professionals.....	54.57	17
6.1.4 Researchers.....	23.97	33
6.2 Talent impact	42.82	39
Innovation		
6.2.1 Innovation output.....	46.68	30
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	38.96	44

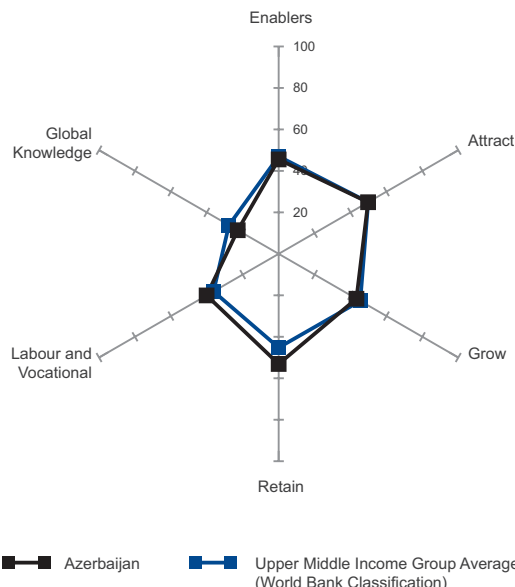
AZERBAIJAN

RANK
(out of 103)

57

Population (millions) **9.32**
 GDP per capita (PPP\$) **10,478.23**
 GDP (US\$ billions) **68.80**

Global Talent Competitiveness Index Score **42.44**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	45.53	66
1.1 Regulatory landscape	44.26	75
Government efficiency		
1.1.1 Government effectiveness	9.41	96
1.1.2 Political stability	52.25	75
FDI climate		
1.1.3 Starting a foreign business	71.13	26
1.2 Market landscape	39.23	71
Competition climate		
1.2.1 Intensity of local competition	47.07	97
Innovation climate		
1.2.2 Venture capital availability	29.40	48
1.2.3 Firm-level technology absorption	62.45	59
1.2.4 R&D expenditure	5.21	67
Connectivity		
1.2.5 ICT access	41.24	61
Ease of doing business		
1.2.6 Ease of doing business	50.00	52
1.3 Business landscape	53.09	54
Labour market flexibility		
1.3.1 Labour market flexibility	59.78	41
Ownership and governance		
1.3.2 Reliance on professional management	46.40	76
2 Attract	49.78	62
2.1 External openness	37.87	72
FDI		
2.1.1 FDI inflow	18.57	56
Brain gain		
2.1.2 Qualified labour inflow	40.23	53
Foreign companies		
2.1.3 Prevalence of foreign ownership	54.81	71
2.2 Internal openness	61.70	54
Diversity		
2.2.1 Tolerance of minorities	65.11	72
2.2.2 Tolerance of immigrants	72.79	41
Social mobility		
2.2.3 Social mobility	47.02	75
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	23.56	64
3 Grow	43.30	69
3.1 Formal education	32.51	69
Education climate		
3.1.1 Pupil-teacher ratio	93.38	13
3.1.2 Technical/vocational enrolment	36.73	38
3.1.3 Tertiary enrolment	15.91	79
Performance of education system		
3.1.4 Reading, maths and science scores	25.27	59
Top universities		
3.1.5 QS university ranking	10.91	50
International students		
3.1.6 International students inflow	12.89	45

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	44.68	77
Further education and training climate		
3.2.1 Quality of management schools	38.05	95
3.2.2 Extent of staff training	51.31	45
3.3 Access to growth opportunities	52.70	52
Networks		
3.3.1 Use of virtual social networks	81.58	35
3.3.2 State of cluster development	45.16	55
Research quality		
3.3.3 Quality of scientific research institutions	44.20	59
Voice		
3.3.4 Voicing concern to officials	39.86	61
4 Retain	53.12	50
4.1 Sustainability	40.96	65
Social protection		
4.1.1 Pension system	36.29	54
Taxation		
4.1.2 Extent and effect of taxation	45.64	35
4.2 Lifestyle	65.27	25
Quality of life		
4.2.1 Environmental performance	23.25	89
4.2.2 Property stolen	95.50	2
4.2.3 Safety at night	81.07	26
Services		
4.2.4 Physicians density	61.28	10
5 Labour and Vocational	40.11	47
5.1 Employable skills	43.76	45
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	83.71	4
Technical professions		
5.1.2 Technicians and associate professionals	14.29	81
Youth employment		
5.1.3 Youth employment	33.28	63
5.2 Labour productivity	36.46	56
Productivity per employee		
5.2.1 Labour productivity per employee	12.77	66
Pay and productivity		
5.2.2 Relationship of pay to productivity	60.15	16
6 Global Knowledge	22.78	75
6.1 Higher skills and competencies	30.00	49
Educated workforce		
6.1.1 Tertiary-educated workforce	57.18	27
Knowledge workers		
6.1.2 Legislators, senior officials and managers	6.74	84
6.1.3 Professionals	45.43	32
6.1.4 Researchers	10.67	51
6.2 Talent impact	15.56	89
Innovation		
6.2.1 Innovation output	15.56	82
Entrepreneurship		
6.2.2 New product entrepreneurial activity	n/a	n/a

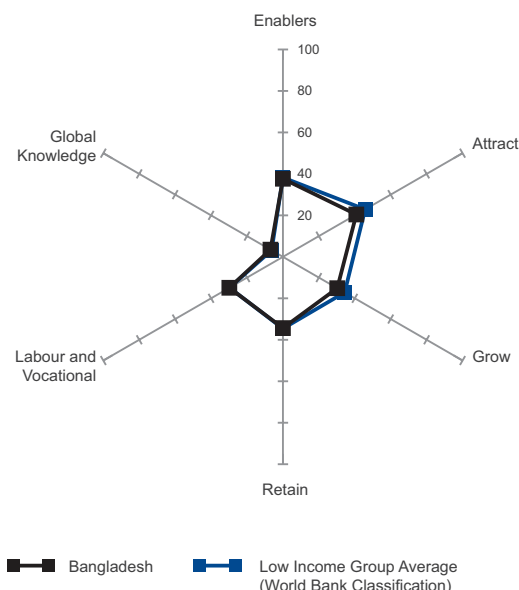
BANGLADESH

RANK
(out of 103)

98

Population (millions) **155.05**
 GDP per capita (PPP\$) **2,039.48**
 GDP (US\$ billions) **122.72**

Global Talent Competitiveness Index Score **29.98**
 Global Talent Competitiveness Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	37.65	89
1.1 Regulatory landscape	28.33	96
Government efficiency		
1.1.1 Government effectiveness.....	7.41	101
1.1.2 Political stability.....	29.40	100
FDI climate		
1.1.3 Starting a foreign business.....	48.17	53
1.2 Market landscape	36.43	76
Competition climate		
1.2.1 Intensity of local competition.....	60.97	67
Innovation climate		
1.2.2 Venture capital availability.....	16.84	93
1.2.3 Firm-level technology absorption.....	54.11	85
1.2.4 R&D expenditure.....	n/a	n/a
Connectivity		
1.2.5 ICT access.....	n/a	n/a
Ease of doing business		
1.2.6 Ease of doing business.....	13.80	89
1.3 Business landscape	48.20	64
Labour market flexibility		
1.3.1 Labour market flexibility.....	54.50	48
Ownership and governance		
1.3.2 Reliance on professional management.....	41.90	89
2 Attract	40.85	94
2.1 External openness	29.43	94
FDI		
2.1.1 FDI inflow.....	9.27	86
Brain gain		
2.1.2 Qualified labour inflow.....	29.48	82
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	49.53	85
2.2 Internal openness	52.28	83
Diversity		
2.2.1 Tolerance of minorities.....	97.50	4
2.2.2 Tolerance of immigrants.....	85.17	22
Social mobility		
2.2.3 Social mobility.....	48.37	69
Gender mobility		
2.2.4 Female professionals and technical workers.....	0.00	93
2.2.5 Female parliamentarians.....	30.35	53
3 Grow	30.24	101
3.1 Formal education	10.38	100
Education climate		
3.1.1 Pupil-teacher ratio.....	38.43	82
3.1.2 Technical/vocational enrolment.....	6.66	87
3.1.3 Tertiary enrolment.....	6.78	88
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	0.00	61
International students		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	40.79	90
Further education and training climate		
3.2.1 Quality of management schools.....	47.91	69
3.2.2 Extent of staff training.....	33.66	100
3.3 Access to growth opportunities	39.55	94
Networks		
3.3.1 Use of virtual social networks.....	58.10	94
3.3.2 State of cluster development.....	48.80	47
Research quality		
3.3.3 Quality of scientific research institutions.....	25.81	96
Voice		
3.3.4 Voicing concern to officials.....	25.47	87
4 Retain	34.36	92
4.1 Sustainability	25.91	96
Social protection		
4.1.1 Pension system.....	1.38	89
Taxation		
4.1.2 Extent and effect of taxation.....	50.44	22
4.2 Lifestyle	42.81	81
Quality of life		
4.2.1 Environmental performance.....	21.97	91
4.2.2 Property stolen.....	57.11	75
4.2.3 Safety at night.....	87.49	13
Services		
4.2.4 Physicians density.....	4.66	87
5 Labour and Vocational	29.84	86
5.1 Employable skills	37.32	64
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions		
5.1.2 Technicians and associate professionals.....	11.73	83
Youth employment		
5.1.3 Youth employment.....	62.90	23
5.2 Labour productivity	22.36	96
Productivity per employee		
5.2.1 Labour productivity per employee.....	2.57	86
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	42.15	80
6 Global Knowledge	6.94	98
6.1 Higher skills and competencies	7.43	91
Educated workforce		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	21.91	62
6.1.3 Professionals.....	0.00	93
6.1.4 Researchers.....	0.38	90
6.2 Talent impact	6.45	99
Innovation		
6.2.1 Innovation output.....	12.9	89
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	0.00	77

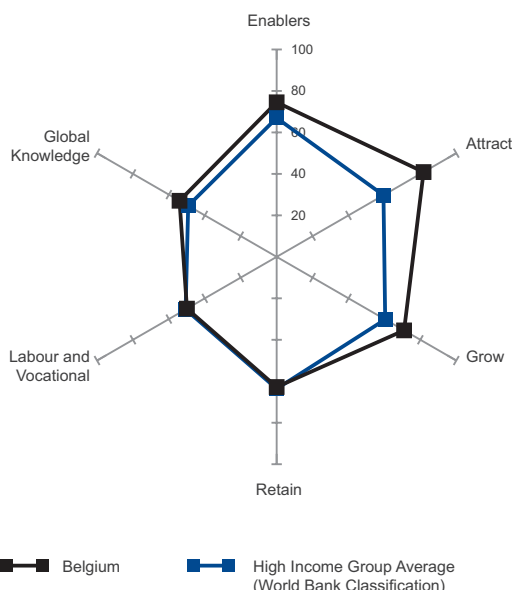
BELGIUM

RANK
(out of 103)

13

Population (millions) **11.06**
 GDP per capita (PPP\$) **37,883.06**
 GDP (US\$ billions) **484.69**

Global Talent Competitiveness Index Score **65.67**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	74.53	16
1.1 Regulatory landscape	85.21	13
Government efficiency.....		
1.1.1 Government effectiveness.....	82.68	12
1.1.2 Political stability.....	87.74	24
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	66.85	21
Competition climate.....		
1.2.1 Intensity of local competition.....	82.70	3
Innovation climate.....		
1.2.2 Venture capital availability.....	42.15	19
1.2.3 Firm-level technology absorption.....	75.88	27
1.2.4 R&D expenditure.....	44.89	16
Connectivity.....		
1.2.5 ICT access.....	83.86	17
Ease of doing business.....		
1.2.6 Ease of doing business.....	71.60	30
1.3 Business landscape	71.54	16
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	69.30	31
Ownership and governance.....		
1.3.2 Reliance on professional management.....	73.77	19
2 Attract	81.79	1
2.1 External openness	80.37	3
FDI.....		
2.1.1 FDI inflow.....	100.00	1
Brain gain.....		
2.1.2 Qualified labour inflow.....	62.46	16
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	78.66	10
2.2 Internal openness	83.20	11
Diversity.....		
2.2.1 Tolerance of minorities.....	83.91	30
2.2.2 Tolerance of immigrants.....	81.86	27
Social mobility.....		
2.2.3 Social mobility.....	80.71	13
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	93.72	54
2.2.5 Female parliamentarians.....	75.82	10
3 Grow	70.93	8
3.1 Formal education	68.58	5
Education climate.....		
3.1.1 Pupil-teacher ratio.....	88.90	28
3.1.2 Technical/vocational enrolment.....	84.29	2
3.1.3 Tertiary enrolment.....	67.23	18
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	73.18	13
Top universities.....		
3.1.5 QS university ranking.....	60.55	14
International students.....		
3.1.6 International students inflow.....	37.31	15

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	73.72	5
Further education and training climate.....		
3.2.1 Quality of management schools.....	83.61	2
3.2.2 Extent of staff training.....	63.83	19
3.3 Access to growth opportunities	70.50	14
Networks.....		
3.3.1 Use of virtual social networks.....	85.96	16
3.3.2 State of cluster development.....	60.59	17
Research quality.....		
3.3.3 Quality of scientific research institutions.....	82.39	4
Voice.....		
3.3.4 Voicing concern to officials.....	53.07	35
4 Retain	62.77	27
4.1 Sustainability	58.68	35
Social protection.....		
4.1.1 Pension system.....	95.78	13
Taxation.....		
4.1.2 Extent and effect of taxation.....	21.57	100
4.2 Lifestyle	66.86	20
Quality of life.....		
4.2.1 Environmental performance.....	68.75	24
4.2.2 Property stolen.....	74.17	36
4.2.3 Safety at night.....	75.72	33
Services.....		
4.2.4 Physicians density.....	48.79	30
5 Labour and Vocational	49.94	25
5.1 Employable skills	46.95	35
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	42.57	43
Technical professions.....		
5.1.2 Technicians and associate professionals.....	75.51	17
Youth employment.....		
5.1.3 Youth employment.....	22.77	74
5.2 Labour productivity	52.93	19
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	61.92	7
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	43.94	72
6 Global Knowledge	54.08	18
6.1 Higher skills and competencies	50.05	21
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	68.34	16
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	40.45	29
6.1.3 Professionals.....	61.59	13
6.1.4 Researchers.....	29.83	28
6.2 Talent impact	58.11	15
Innovation.....		
6.2.1 Innovation output.....	61.67	18
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	54.55	16

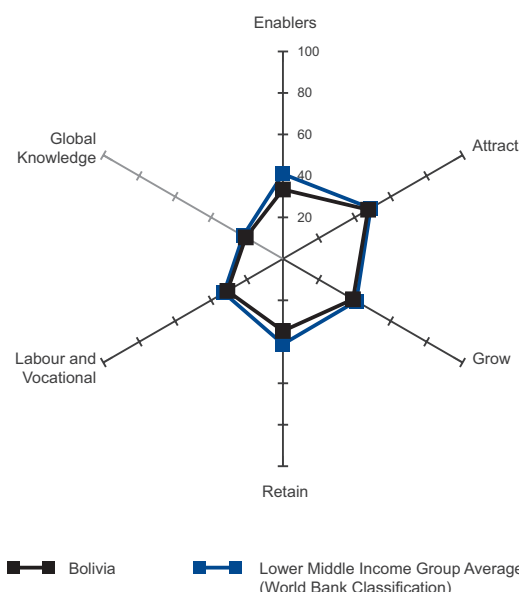
BOLIVIA

RANK
(out of 103)

88

Population (millions) **10.52**
GDP per capita (PPP\$) **5,099.27**
GDP (US\$ billions) **27.43**

Global Talent Competitiveness
Index Score **34.38**
Global Talent Competitiveness
Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	33.44	94
1.1 Regulatory landscape	44.54	74
Government efficiency		
1.1.1 Government effectiveness.....	20.55	78
1.1.2 Political stability.....	53.78	72
FDI climate		
1.1.3 Starting a foreign business.....	59.30	41
1.2 Market landscape	25.82	98
Competition climate		
1.2.1 Intensity of local competition.....	45.09	98
Innovation climate		
1.2.2 Venture capital availability.....	38.00	24
1.2.3 Firm-level technology absorption.....	44.84	99
1.2.4 R&D expenditure.....	3.09	80
Connectivity		
1.2.5 ICT access.....	21.93	85
Ease of doing business		
1.2.6 Ease of doing business.....	2.00	101
1.3 Business landscape	29.95	97
Labour market flexibility		
1.3.1 Labour market flexibility.....	17.20	95
Ownership and governance		
1.3.2 Reliance on professional management.....	42.70	85
2 Attract	47.42	73
2.1 External openness	36.26	76
FDI		
2.1.1 FDI inflow.....	27.43	38
Brain gain		
2.1.2 Qualified labour inflow.....	39.49	58
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	41.86	96
2.2 Internal openness	58.57	60
Diversity		
2.2.1 Tolerance of minorities.....	66.96	66
2.2.2 Tolerance of immigrants.....	73.00	40
Social mobility		
2.2.3 Social mobility.....	47.71	72
Gender mobility		
2.2.4 Female professionals and technical workers.....	63.07	75
2.2.5 Female parliamentarians.....	42.12	26
3 Grow	39.00	86
3.1 Formal education	28.67	81
Education climate		
3.1.1 Pupil-teacher ratio.....	67.32	67
3.1.2 Technical/vocational enrolment.....	9.99	80
3.1.3 Tertiary enrolment.....	35.05	61
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	2.30	71

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	41.51	89
Further education and training climate		
3.2.1 Quality of management schools.....	39.66	92
3.2.2 Extent of staff training.....	43.37	78
3.3 Access to growth opportunities	46.82	73
Networks		
3.3.1 Use of virtual social networks.....	48.77	101
3.3.2 State of cluster development.....	40.84	66
Research quality		
3.3.3 Quality of scientific research institutions.....	38.49	78
Voice		
3.3.4 Voicing concern to officials.....	59.20	21
4 Retain	34.78	90
4.1 Sustainability	26.17	95
Social protection		
4.1.1 Pension system.....	11.70	76
Taxation		
4.1.2 Extent and effect of taxation.....	40.63	52
4.2 Lifestyle	43.40	80
Quality of life		
4.2.1 Environmental performance.....	49.44	56
4.2.2 Property stolen.....	33.18	96
4.2.3 Safety at night.....	47.59	85
Services		
4.2.4 Physicians density.....	n/a	n/a
5 Labour and Vocational	30.93	81
5.1 Employable skills	36.50	67
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	22.00	71
Technical professions		
5.1.2 Technicians and associate professionals.....	23.98	73
Youth employment		
5.1.3 Youth employment.....	63.54	22
5.2 Labour productivity	25.35	91
Productivity per employee		
5.2.1 Labour productivity per employee.....	6.96	78
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	43.75	73
6 Global Knowledge	20.69	79
6.1 Higher skills and competencies	20.87	71
Educated workforce		
6.1.1 Tertiary-educated workforce.....	51.71	32
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	10.67	81
6.1.3 Professionals.....	19.82	67
6.1.4 Researchers.....	1.29	79
6.2 Talent impact	20.50	82
Innovation		
6.2.1 Innovation output.....	8.54	96
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	32.47	53

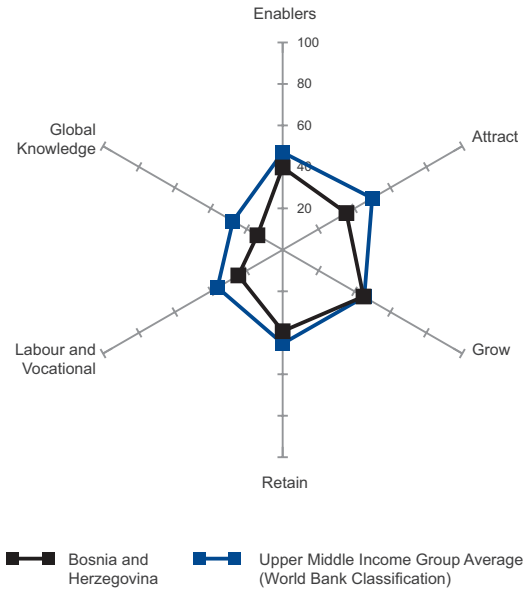
BOSNIA AND HERZEGOVINA

RANK
(out of 103)

91

Population (millions) **3.83**
 GDP per capita (PPP\$) **8,215.95**
 GDP (US\$ billions) **17.33**

Global Talent Competitiveness Index Score **33.04**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	39.74.....	85
1.1 Regulatory landscape	39.06.....	82
Government efficiency		
1.1.1 Government effectiveness.....	10.24.....	95
1.1.2 Political stability.....	43.99.....	86
FDI climate		
1.1.3 Starting a foreign business.....	62.96.....	34
1.2 Market landscape	28.78.....	95
Competition climate		
1.2.1 Intensity of local competition.....	43.36.....	100
Innovation climate		
1.2.2 Venture capital availability.....	15.50.....	95
1.2.3 Firm-level technology absorption.....	55.36.....	83
1.2.4 R&D expenditure.....	0.00.....	96
Connectivity		
1.2.5 ICT access.....	41.79.....	59
Ease of doing business		
1.2.6 Ease of doing business.....	16.70.....	86
1.3 Business landscape	51.36.....	57
Labour market flexibility		
1.3.1 Labour market flexibility.....	51.72.....	53
Ownership and governance		
1.3.2 Reliance on professional management.....	51.01.....	59
2 Attract	35.49.....	99
2.1 External openness	30.55.....	92
FDI		
2.1.1 FDI inflow.....	19.14.....	53
Brain gain		
2.1.2 Qualified labour inflow.....	15.35.....	101
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	57.18.....	61
2.2 Internal openness	40.43.....	98
Diversity		
2.2.1 Tolerance of minorities.....	50.22.....	94
2.2.2 Tolerance of immigrants.....	61.26.....	70
Social mobility		
2.2.3 Social mobility.....	16.58.....	99
Gender mobility		
2.2.4 Female professionals and technical workers.....	n/a.....	n/a
2.2.5 Female parliamentarians.....	33.68.....	45
3 Grow	45.01.....	59
3.1 Formal education	44.05.....	49
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a.....	n/a
3.1.2 Technical/vocational enrolment.....	75.47.....	9
3.1.3 Tertiary enrolment.....	34.49.....	63
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a.....	n/a
Top universities		
3.1.5 QS university ranking.....	n/a.....	n/a
International students		
3.1.6 International students inflow.....	22.19.....	26

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	49.63.....	61
Further education and training climate		
3.2.1 Quality of management schools.....	57.40.....	44
3.2.2 Extent of staff training.....	41.86.....	83
3.3 Access to growth opportunities	41.34.....	90
Networks		
3.3.1 Use of virtual social networks.....	75.90.....	54
3.3.2 State of cluster development.....	26.33.....	98
Research quality		
3.3.3 Quality of scientific research institutions.....	42.86.....	65
Voice		
3.3.4 Voicing concern to officials.....	20.28.....	93
4 Retain	39.25.....	79
4.1 Sustainability	29.66.....	88
Social protection		
4.1.1 Pension system.....	24.77.....	66
Taxation		
4.1.2 Extent and effect of taxation.....	34.56.....	76
4.2 Lifestyle	48.84.....	69
Quality of life		
4.2.1 Environmental performance.....	8.73.....	95
4.2.2 Property stolen.....	87.44.....	6
4.2.3 Safety at night.....	72.73.....	43
Services		
4.2.4 Physicians density.....	26.47.....	63
5 Labour and Vocational	24.69.....	99
5.1 Employable skills	17.09.....	101
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	31.00.....	54
Technical professions		
5.1.2 Technicians and associate professionals.....	n/a.....	n/a
Youth employment		
5.1.3 Youth employment.....	3.18.....	100
5.2 Labour productivity	32.29.....	69
Productivity per employee		
5.2.1 Labour productivity per employee.....	21.63.....	51
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	42.95.....	75
6 Global Knowledge	14.05.....	89
6.1 Higher skills and competencies	9.78.....	87
Educated workforce		
6.1.1 Tertiary-educated workforce.....	12.98.....	79
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	n/a.....	n/a
6.1.3 Professionals.....	n/a.....	n/a
6.1.4 Researchers.....	6.57.....	54
6.2 Talent impact	18.32.....	85
Innovation		
6.2.1 Innovation output.....	21.06.....	70
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	15.58.....	70

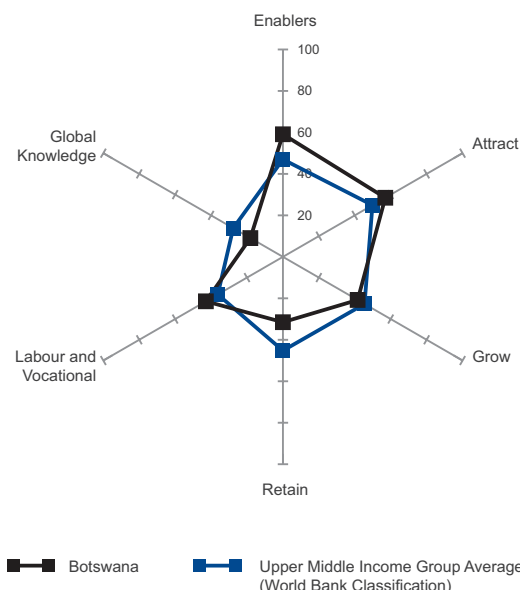
BOTSWANA

RANK
(out of 103)

64

Population (millions) **2.01**
GDP per capita (PPP\$) **16,820.29**
GDP (US\$ billions) **17.62**

Global Talent Competitiveness
Index Score **41.70**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	59.11	32
1.1 Regulatory landscape	70.23	33
Government efficiency.....		
1.1.1 Government effectiveness.....	48.89	42
1.1.2 Political stability.....	91.58	16
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	40.48	65
Competition climate.....		
1.2.1 Intensity of local competition.....	63.33	62
Innovation climate.....		
1.2.2 Venture capital availability.....	32.01	40
1.2.3 Firm-level technology absorption.....	56.58	77
1.2.4 R&D expenditure.....	11.29	53
Connectivity.....		
1.2.5 ICT access.....	25.66	80
Ease of doing business.....		
1.2.6 Ease of doing business.....	54.00	48
1.3 Business landscape	66.62	21
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	63.92	38
Ownership and governance.....		
1.3.2 Reliance on professional management.....	69.31	26
2 Attract	56.99	34
2.1 External openness	48.39	34
FDI.....		
2.1.1 FDI inflow.....	26.26	42
Brain gain.....		
2.1.2 Qualified labour inflow.....	47.42	36
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	71.49	28
2.2 Internal openness	65.59	35
Diversity.....		
2.2.1 Tolerance of minorities.....	77.72	41
2.2.2 Tolerance of immigrants.....	78.12	33
Social mobility.....		
2.2.3 Social mobility.....	61.48	32
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	10.61	94
3 Grow	41.59	73
3.1 Formal education	28.14	82
Education climate.....		
3.1.1 Pupil-teacher ratio.....	79.51	50
3.1.2 Technical/vocational enrolment.....	10.32	79
3.1.3 Tertiary enrolment.....	3.60	95
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	19.14	31

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	48.53	62
Further education and training climate.....		
3.2.1 Quality of management schools.....	47.90	70
3.2.2 Extent of staff training.....	49.16	51
3.3 Access to growth opportunities	48.11	68
Networks.....		
3.3.1 Use of virtual social networks.....	65.98	82
3.3.2 State of cluster development.....	43.59	59
Research quality.....		
3.3.3 Quality of scientific research institutions.....	42.76	66
Voice.....		
3.3.4 Voicing concern to officials.....	40.09	58
4 Retain	31.52	96
4.1 Sustainability	35.39	76
Social protection.....		
4.1.1 Pension system.....	8.28	81
Taxation.....		
4.1.2 Extent and effect of taxation.....	62.49	9
4.2 Lifestyle	27.65	101
Quality of life.....		
4.2.1 Environmental performance.....	47.54	58
4.2.2 Property stolen.....	24.88	100
4.2.3 Safety at night.....	32.83	101
Services.....		
4.2.4 Physicians density.....	5.33	85
5 Labour and Vocational	42.89	40
5.1 Employable skills	37.58	63
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions.....		
5.1.2 Technicians and associate professionals.....	27.55	67
Youth employment.....		
5.1.3 Youth employment.....	47.61	39
5.2 Labour productivity	48.21	29
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	n/a	n/a
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	48.21	57
6 Global Knowledge	18.13	87
6.1 Higher skills and competencies	17.43	78
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	31.46	43
6.1.3 Professionals.....	14.63	75
6.1.4 Researchers.....	6.18	57
6.2 Talent impact	18.83	84
Innovation.....		
6.2.1 Innovation output.....	7.78	97
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	29.87	59

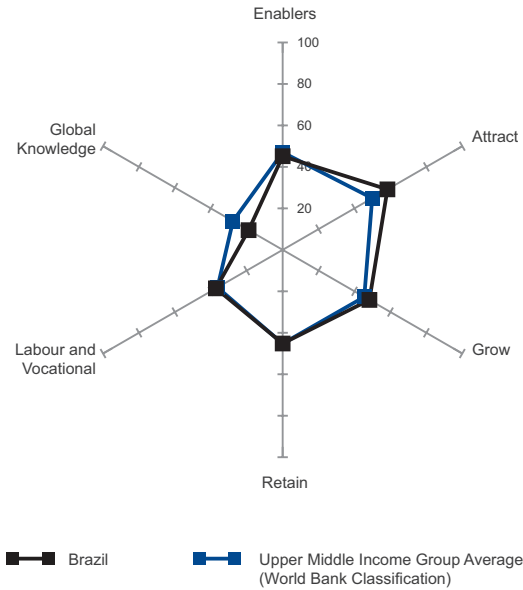
BRAZIL

RANK
(out of 103)

59

Population (millions) **198.83**
 GDP per capita (PPP\$) **11,875.26**
 GDP (US\$ billions) **2,395.97**

Global Talent Competitiveness Index Score **42.18**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	45.15	69
1.1 Regulatory landscape	52.08	57
Government efficiency		
1.1.1 Government effectiveness	32.67	59
1.1.2 Political stability	65.25	56
FDI climate		
1.1.3 Starting a foreign business	58.31	44
1.2 Market landscape	43.10	51
Competition climate		
1.2.1 Intensity of local competition	69.01	40
Innovation climate		
1.2.2 Venture capital availability	30.36	43
1.2.3 Firm-level technology absorption	69.24	42
1.2.4 R&D expenditure	26.01	30
Connectivity		
1.2.5 ICT access	51.17	54
Ease of doing business		
1.2.6 Ease of doing business	12.80	90
1.3 Business landscape	40.27	85
Labour market flexibility		
1.3.1 Labour market flexibility	15.75	96
Ownership and governance		
1.3.2 Reliance on professional management	64.79	31
2 Attract	58.33	32
2.1 External openness	46.81	42
FDI		
2.1.1 FDI inflow	21.91	48
Brain gain		
2.1.2 Qualified labour inflow	59.63	22
Foreign companies		
2.1.3 Prevalence of foreign ownership	58.88	57
2.2 Internal openness	69.84	29
Diversity		
2.2.1 Tolerance of minorities	91.30	16
2.2.2 Tolerance of immigrants	85.38	21
Social mobility		
2.2.3 Social mobility	60.89	33
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	11.64	89
3 Grow	48.30	50
3.1 Formal education	30.09	77
Education climate		
3.1.1 Pupil-teacher ratio	71.59	62
3.1.2 Technical/vocational enrolment	12.79	73
3.1.3 Tertiary enrolment	21.93	74
Performance of education system		
3.1.4 Reading, maths and science scores	30.20	54
Top universities		
3.1.5 QS university ranking	44.05	23
International students		
3.1.6 International students inflow	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	56.86	37
Further education and training climate		
3.2.1 Quality of management schools	57.08	46
3.2.2 Extent of staff training	56.65	27
3.3 Access to growth opportunities	57.94	40
Networks		
3.3.1 Use of virtual social networks	79.44	41
3.3.2 State of cluster development	58.42	25
Research quality		
3.3.3 Quality of scientific research institutions	51.93	42
Voice		
3.3.4 Voicing concern to officials	41.98	54
4 Retain	45.17	65
4.1 Sustainability	40.29	66
Social protection		
4.1.1 Pension system	61.66	40
Taxation		
4.1.2 Extent and effect of taxation	18.91	103
4.2 Lifestyle	50.05	65
Quality of life		
4.2.1 Environmental performance	63.91	28
4.2.2 Property stolen	64.69	62
4.2.3 Safety at night	43.10	95
Services		
4.2.4 Physicians density	28.51	61
5 Labour and Vocational	37.15	59
5.1 Employable skills	45.30	39
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	34.86	49
Technical professions		
5.1.2 Technicians and associate professionals	33.67	61
Youth employment		
5.1.3 Youth employment	67.36	20
5.2 Labour productivity	29.00	84
Productivity per employee		
5.2.1 Labour productivity per employee	11.93	69
Pay and productivity		
5.2.2 Relationship of pay to productivity	46.07	67
6 Global Knowledge	18.97	82
6.1 Higher skills and competencies	21.62	66
Educated workforce		
6.1.1 Tertiary-educated workforce	25.74	68
Knowledge workers		
6.1.2 Legislators, senior officials and managers	27.53	52
6.1.3 Professionals	19.82	67
6.1.4 Researchers	13.41	41
6.2 Talent impact	16.32	88
Innovation		
6.2.1 Innovation output	32.64	50
Entrepreneurship		
6.2.2 New product entrepreneurial activity	0.00	77

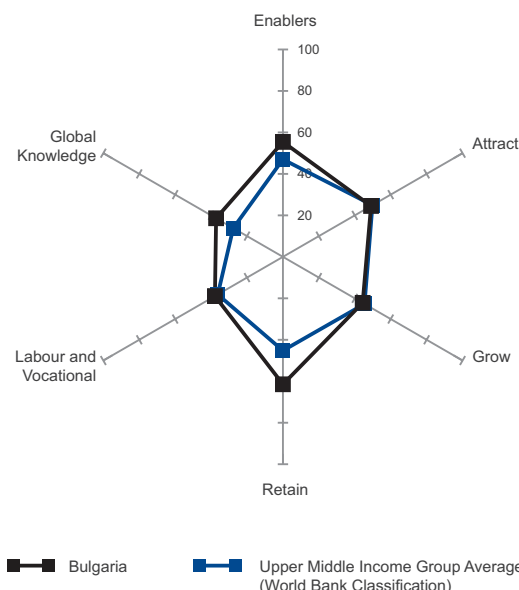
BULGARIA

RANK
(out of 103)

43

Population (millions) **7.27**
GDP per capita (PPP\$) **14,311.58**
GDP (US\$ billions) **51.02**

Global Talent Competitiveness
Index Score **47.56**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	55.42	42
1.1 Regulatory landscape	62.74	45
Government efficiency		
1.1.1 Government effectiveness	33.22	57
1.1.2 Political stability	73.58	43
FDI climate		
1.1.3 Starting a foreign business	81.41	14
1.2 Market landscape	43.10	52
Competition climate		
1.2.1 Intensity of local competition	55.45	76
Innovation climate		
1.2.2 Venture capital availability	29.42	47
1.2.3 Firm-level technology absorption	49.87	93
1.2.4 R&D expenditure	13.11	49
Connectivity		
1.2.5 ICT access	59.72	44
Ease of doing business		
1.2.6 Ease of doing business	51.00	51
1.3 Business landscape	60.43	37
Labour market flexibility		
1.3.1 Labour market flexibility	75.88	17
Ownership and governance		
1.3.2 Reliance on professional management	44.99	79
2 Attract	49.05	64
2.1 External openness	33.69	82
FDI		
2.1.1 FDI inflow	27.25	39
Brain gain		
2.1.2 Qualified labour inflow	22.57	92
Foreign companies		
2.1.3 Prevalence of foreign ownership	51.23	79
2.2 Internal openness	64.42	38
Diversity		
2.2.1 Tolerance of minorities	81.63	33
2.2.2 Tolerance of immigrants	65.85	62
Social mobility		
2.2.3 Social mobility	42.12	84
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	32.49	47
3 Grow	44.38	61
3.1 Formal education	43.38	50
Education climate		
3.1.1 Pupil-teacher ratio	84.61	40
3.1.2 Technical/vocational enrolment	63.59	19
3.1.3 Tertiary enrolment	53.40	38
Performance of education system		
3.1.4 Reading, maths and science scores	42.57	43
Top universities		
3.1.5 QS university ranking	0.00	61
International students		
3.1.6 International students inflow	16.11	38

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	41.65	87
Further education and training climate		
3.2.1 Quality of management schools	45.76	78
3.2.2 Extent of staff training	37.55	89
3.3 Access to growth opportunities	48.11	67
Networks		
3.3.1 Use of virtual social networks	71.59	70
3.3.2 State of cluster development	40.28	70
Research quality		
3.3.3 Quality of scientific research institutions	42.13	67
Voice		
3.3.4 Voicing concern to officials	38.44	65
4 Retain	61.46	33
4.1 Sustainability	61.07	27
Social protection		
4.1.1 Pension system	82.23	30
Taxation		
4.1.2 Extent and effect of taxation	39.91	56
4.2 Lifestyle	61.86	35
Quality of life		
4.2.1 Environmental performance	53.35	48
4.2.2 Property stolen	75.36	29
4.2.3 Safety at night	58.29	66
Services		
4.2.4 Physicians density	60.43	15
5 Labour and Vocational	37.86	57
5.1 Employable skills	39.43	55
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	69.57	14
Technical professions		
5.1.2 Technicians and associate professionals	34.69	58
Youth employment		
5.1.3 Youth employment	14.01	86
5.2 Labour productivity	36.29	57
Productivity per employee		
5.2.1 Labour productivity per employee	17.04	58
Pay and productivity		
5.2.2 Relationship of pay to productivity	55.53	31
6 Global Knowledge	37.21	43
6.1 Higher skills and competencies	36.46	39
Educated workforce		
6.1.1 Tertiary-educated workforce	47.15	37
Knowledge workers		
6.1.2 Legislators, senior officials and managers	35.96	33
6.1.3 Professionals	46.34	30
6.1.4 Researchers	16.41	40
6.2 Talent impact	37.95	49
Innovation		
6.2.1 Innovation output	37.95	41
Entrepreneurship		
6.2.2 New product entrepreneurial activity	n/a	n/a

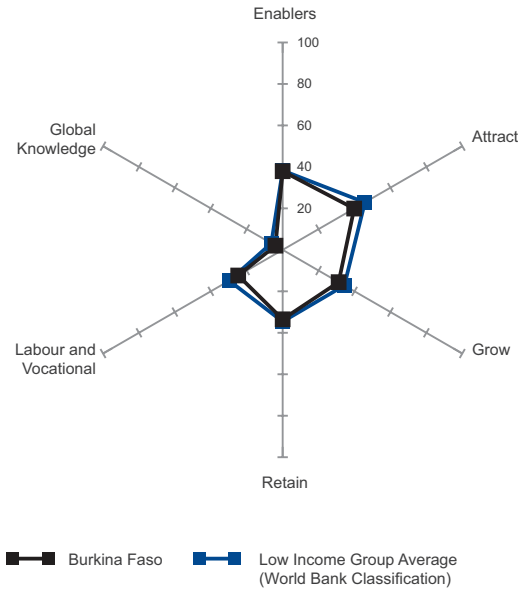
BURKINA FASO

RANK
(out of 103)

102

Population (millions) **16.52**
 GDP per capita (PPP\$) **1,399.50**
 GDP (US\$ billions) **10.46**

Global Talent Competitiveness Index Score **28.53**
 Global Talent Competitiveness Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	37.93	88
1.1 Regulatory landscape	34.37	90
Government efficiency		
1.1.1 Government effectiveness.....	17.02	83
1.1.2 Political stability.....	52.85	73
FDI climate		
1.1.3 Starting a foreign business.....	33.24	60
1.2 Market landscape	21.51	101
Competition climate		
1.2.1 Intensity of local competition.....	54.31	80
Innovation climate		
1.2.2 Venture capital availability.....	13.67	101
1.2.3 Firm-level technology absorption.....	51.49	89
1.2.4 R&D expenditure.....	4.09	75
Connectivity		
1.2.5 ICT access.....	2.48	96
Ease of doing business		
1.2.6 Ease of doing business.....	3.00	100
1.3 Business landscape	57.90	41
Labour market flexibility		
1.3.1 Labour market flexibility.....	74.30	24
Ownership and governance		
1.3.2 Reliance on professional management.....	41.50	94
2 Attract	39.81	95
2.1 External openness	27.66	97
FDI		
2.1.1 FDI inflow.....	2.10	98
Brain gain		
2.1.2 Qualified labour inflow.....	29.38	83
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	51.51	77
2.2 Internal openness	51.96	86
Diversity		
2.2.1 Tolerance of minorities.....	90.33	18
2.2.2 Tolerance of immigrants.....	84.31	23
Social mobility		
2.2.3 Social mobility.....	40.24	89
Gender mobility		
2.2.4 Female professionals and technical workers.....	22.58	88
2.2.5 Female parliamentarians.....	22.35	68
3 Grow	31.17	100
3.1 Formal education	17.18	95
Education climate		
3.1.1 Pupil-teacher ratio.....	43.67	80
3.1.2 Technical/vocational enrolment.....	8.55	83
3.1.3 Tertiary enrolment.....	0.00	99
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	16.49	36

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	38.49	96
Further education and training climate		
3.2.1 Quality of management schools.....	44.57	82
3.2.2 Extent of staff training.....	32.41	101
3.3 Access to growth opportunities	37.83	98
Networks		
3.3.1 Use of virtual social networks.....	52.07	100
3.3.2 State of cluster development.....	24.79	99
Research quality		
3.3.3 Quality of scientific research institutions.....	45.67	54
Voice		
3.3.4 Voicing concern to officials.....	28.77	82
4 Retain	33.49	94
4.1 Sustainability	19.32	102
Social protection		
4.1.1 Pension system.....	0.00	90
Taxation		
4.1.2 Extent and effect of taxation.....	38.64	62
4.2 Lifestyle	47.67	72
Quality of life		
4.2.1 Environmental performance.....	n/a	n/a
4.2.2 Property stolen.....	75.36	29
4.2.3 Safety at night.....	66.74	53
Services		
4.2.4 Physicians density.....	0.91	93
5 Labour and Vocational	24.75	98
5.1 Employable skills	32.27	78
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	0.00	91
Technical professions		
5.1.2 Technicians and associate professionals.....	0.00	91
Youth employment		
5.1.3 Youth employment.....	96.82	2
5.2 Labour productivity	17.23	103
Productivity per employee		
5.2.1 Labour productivity per employee.....	0.46	93
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	34.01	95
6 Global Knowledge	4.03	101
6.1 Higher skills and competencies	0.47	102
Educated workforce		
6.1.1 Tertiary-educated workforce.....	0.46	88
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	0.00	93
6.1.3 Professionals.....	0.91	92
6.1.4 Researchers.....	0.49	88
6.2 Talent impact	7.59	97
Innovation		
6.2.1 Innovation output.....	7.59	98
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

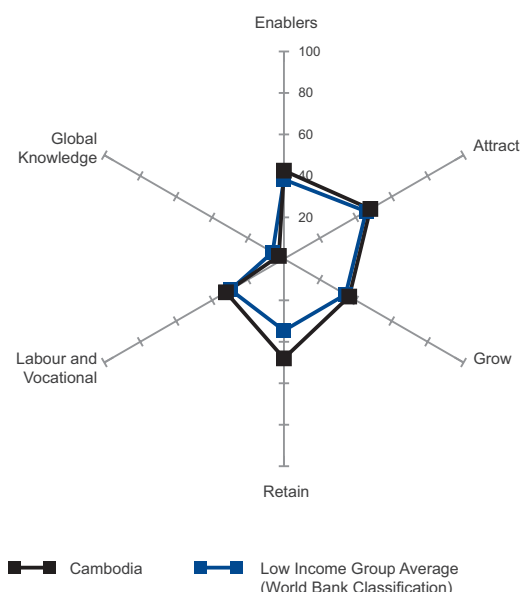
CAMBODIA

RANK
(out of 103)

87

Population (millions) **14.89**
GDP per capita (PPP\$) **2,402.33**
GDP (US\$ billions) **14.24**

Global Talent Competitiveness
Index Score **35.01**
Global Talent Competitiveness
Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	42.54	78
1.1 Regulatory landscape	33.06	92
Government efficiency.....		
1.1.1 Government effectiveness.....	10.60	94
1.1.2 Political stability.....	55.33	69
FDI climate.....		
1.1.3 Starting a foreign business.....	33.24	60
1.2 Market landscape	30.66	91
Competition Climate.....		
1.2.1 Intensity of local competition.....	63.47	60
Innovation climate.....		
1.2.2 Venture capital availability.....	32.40	37
1.2.3 Firm-level technology absorption.....	64.38	52
1.2.4 R&D expenditure.....	0.64	94
Connectivity.....		
1.2.5 ICT access.....	12.28	88
Ease of doing business.....		
1.2.6 Ease of doing business.....	10.80	92
1.3 Business landscape	63.89	26
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	71.72	28
Ownership and governance.....		
1.3.2 Reliance on professional management.....	56.07	43
2 Attract	48.11	71
2.1 External openness	53.75	18
FDI.....		
2.1.1 FDI inflow.....	52.79	15
Brain gain.....		
2.1.2 Qualified labour inflow.....	52.44	28
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	56.02	68
2.2 Internal openness	42.47	96
Diversity.....		
2.2.1 Tolerance of minorities.....	59.46	83
2.2.2 Tolerance of immigrants.....	34.69	98
Social mobility.....		
2.2.3 Social mobility.....	47.60	74
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	39.09	86
2.2.5 Female parliamentarians.....	31.51	49
3 Grow	36.35	92
3.1 Formal education	13.07	98
Education climate.....		
3.1.1 Pupil-teacher ratio.....	36.76	84
3.1.2 Technical/vocational enrolment.....	4.81	88
3.1.3 Tertiary enrolment.....	10.72	84
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	47.22	68
Further education and training climate.....		
3.2.1 Quality of management schools.....	46.32	74
3.2.2 Extent of staff training.....	48.11	56
3.3 Access to growth opportunities	48.77	62
Networks.....		
3.3.1 Use of virtual social networks.....	64.83	86
3.3.2 State of cluster development.....	50.60	42
Research quality.....		
3.3.3 Quality of scientific research institutions.....	43.34	62
Voice.....		
3.3.4 Voicing concern to officials.....	36.32	68
4 Retain	48.00	62
4.1 Sustainability	49.90	50
Social protection.....		
4.1.1 Pension system.....	n/a	n/a
Taxation.....		
4.1.2 Extent and effect of taxation.....	49.90	24
4.2 Lifestyle	46.09	76
Quality of life.....		
4.2.1 Environmental performance.....	51.09	53
4.2.2 Property stolen.....	56.64	78
4.2.3 Safety at night.....	73.05	41
Services.....		
4.2.4 Physicians density.....	3.60	89
5 Labour and Vocational	32.26	73
5.1 Employable skills	34.78	72
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	5.71	86
Technical professions.....		
5.1.2 Technicians and associate professionals.....	6.12	88
Youth employment.....		
5.1.3 Youth employment.....	92.52	4
5.2 Labour productivity	29.73	81
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	2.16	87
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	57.31	25
6 Global Knowledge	2.80	102
6.1 Higher skills and competencies	2.76	99
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	3.37	89
6.1.3 Professionals.....	4.57	89
6.1.4 Researchers.....	0.33	91
6.2 Talent impact	2.85	102
Innovation.....		
6.2.1 Innovation output.....	2.85	101
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

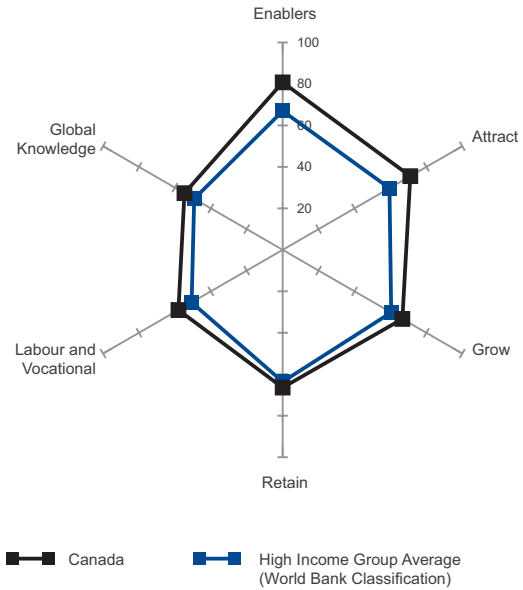
CANADA

RANK
(out of 103)

11

Population (millions) **34.83**
 GDP per capita (PPP\$) **42,734.36**
 GDP (US\$ billions) **1819.08**

Global Talent Competitiveness Index Score **66.27**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	80.77	6
1.1 Regulatory landscape	88.32	10
Government efficiency		
1.1.1 Government effectiveness	88.13	7
1.1.2 Political stability	91.62	15
FDI climate		
1.1.3 Starting a foreign business	85.21	8
1.2 Market landscape	67.51	20
Competition climate		
1.2.1 Intensity of local competition	77.12	16
Innovation climate		
1.2.2 Venture capital availability	43.77	16
1.2.3 Firm-level technology absorption	75.91	26
1.2.4 R&D expenditure	40.59	18
Connectivity		
1.2.5 ICT access	81.38	21
Ease of doing business		
1.2.6 Ease of doing business	86.30	15
1.3 Business landscape	86.48	3
Labour market flexibility		
1.3.1 Labour market flexibility	89.65	4
Ownership and governance		
1.3.2 Reliance on professional management	83.30	7
2 Attract	71.06	7
2.1 External openness	57.50	12
FDI		
2.1.1 FDI inflow	18.94	54
Brain gain		
2.1.2 Qualified labour inflow	74.76	7
Foreign companies		
2.1.3 Prevalence of foreign ownership	78.79	9
2.2 Internal openness	84.63	8
Diversity		
2.2.1 Tolerance of minorities	100.00	1
2.2.2 Tolerance of immigrants	96.91	2
Social mobility		
2.2.3 Social mobility	85.43	5
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	40.80	28
3 Grow	66.65	13
3.1 Formal education	60.28	16
Education climate		
3.1.1 Pupil-teacher ratio	n/a	n/a
3.1.2 Technical/vocational enrolment	n/a	n/a
3.1.3 Tertiary enrolment	56.55	31
Performance of education system		
3.1.4 Reading, maths and science scores	80.05	6
Top universities		
3.1.5 QS university ranking	86.36	3
International students		
3.1.6 International students inflow	18.17	33

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	70.36	9
Further education and training climate		
3.2.1 Quality of management schools	79.03	5
3.2.2 Extent of staff training	61.69	21
3.3 Access to growth opportunities	69.31	16
Networks		
3.3.1 Use of virtual social networks	88.80	9
3.3.2 State of cluster development	64.22	14
Research quality		
3.3.3 Quality of scientific research institutions	74.19	16
Voice		
3.3.4 Voicing concern to officials	50.00	41
4 Retain	66.43	16
4.1 Sustainability	71.46	6
Social protection		
4.1.1 Pension system	91.46	21
Taxation		
4.1.2 Extent and effect of taxation	51.45	18
4.2 Lifestyle	61.41	37
Quality of life		
4.2.1 Environmental performance	58.22	35
4.2.2 Property stolen	70.14	51
4.2.3 Safety at night	85.35	20
Services		
4.2.4 Physicians density	31.94	56
5 Labour and Vocational	58.02	16
5.1 Employable skills	58.84	16
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	33.14	52
Technical professions		
5.1.2 Technicians and associate professionals	73.47	18
Youth employment		
5.1.3 Youth employment	69.90	16
5.2 Labour productivity	57.21	9
Productivity per employee		
5.2.1 Labour productivity per employee	55.51	12
Pay and productivity		
5.2.2 Relationship of pay to productivity	58.91	20
6 Global Knowledge	54.67	17
6.1 Higher skills and competencies	57.37	15
Educated workforce		
6.1.1 Tertiary-educated workforce	100.00	1
Knowledge workers		
6.1.2 Legislators, senior officials and managers	52.25	10
6.1.3 Professionals	53.05	19
6.1.4 Researchers	24.18	32
6.2 Talent impact	51.98	27
Innovation		
6.2.1 Innovation output	61.10	20
Entrepreneurship		
6.2.2 New product entrepreneurial activity	42.86	33

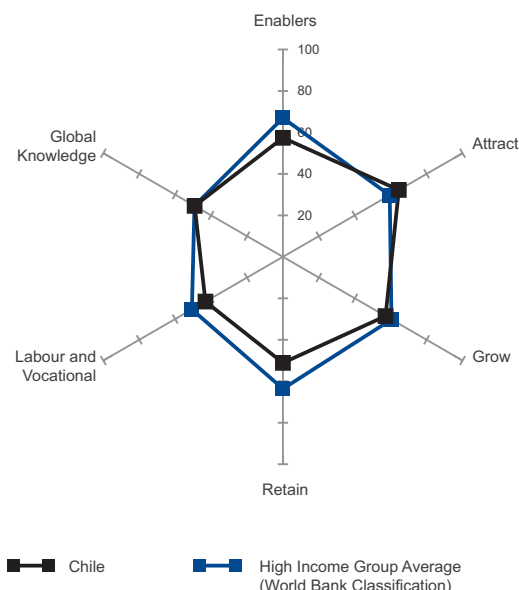
CHILE

RANK
(out of 103)

31

Population (millions) **17.48**
 GDP per capita (PPP\$) **18,419.04**
 GDP (US\$ billions) **268.18**

Global Talent Competitiveness Index Score **53.75**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	57.40	39
1.1 Regulatory landscape	69.01	36
Government efficiency.....		
1.1.1 Government effectiveness.....	67.94	25
1.1.2 Political stability.....	79.80	35
FDI climate.....		
1.1.3 Starting a foreign business.....	59.30	41
1.2 Market landscape	50.93	37
Competition climate.....		
1.2.1 Intensity of local competition.....	71.01	35
Innovation climate.....		
1.2.2 Venture capital availability.....	36.79	25
1.2.3 Firm-level technology absorption.....	69.90	39
1.2.4 R&D expenditure.....	8.07	63
Connectivity.....		
1.2.5 ICT access.....	52.14	53
Ease of doing business.....		
1.2.6 Ease of doing business.....	67.70	34
1.3 Business landscape	52.25	55
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	40.08	69
Ownership and governance.....		
1.3.2 Reliance on professional management.....	64.42	33
2 Attract	64.51	21
2.1 External openness	66.64	5
FDI.....		
2.1.1 FDI inflow.....	56.08	11
Brain gain.....		
2.1.2 Qualified labour inflow.....	66.00	13
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	77.85	12
2.2 Internal openness	62.39	46
Diversity.....		
2.2.1 Tolerance of minorities.....	74.35	54
2.2.2 Tolerance of immigrants.....	73.21	38
Social mobility.....		
2.2.3 Social mobility.....	59.90	37
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	84.00	66
2.2.5 Female parliamentarians.....	20.47	71
3 Grow	57.14	30
3.1 Formal education	41.52	53
Education climate.....		
3.1.1 Pupil-teacher ratio.....	56.81	72
3.1.2 Technical/vocational enrolment.....	50.11	26
3.1.3 Tertiary enrolment.....	62.73	22
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	45.41	42
Top universities.....		
3.1.5 QS university ranking.....	34.07	31
International students.....		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong Learning	64.29	24
Further education and training climate.....		
3.2.1 Quality of management schools.....	73.10	14
3.2.2 Extent of staff training.....	55.47	30
3.3 Access to Growth Opportunities	65.60	22
Networks.....		
3.3.1 Use of virtual social networks.....	83.42	26
3.3.2 State of cluster development.....	58.50	24
Research quality.....		
3.3.3 Quality of scientific research institutions.....	53.26	38
Voice.....		
3.3.4 Voicing concern to officials.....	67.22	15
4 Retain	51.13	56
4.1 Sustainability	57.12	39
Social protection.....		
4.1.1 Pension system.....	59.94	43
Taxation.....		
4.1.2 Extent and effect of taxation.....	54.30	14
4.2 Lifestyle	45.13	78
Quality of life.....		
4.2.1 Environmental performance.....	51.20	52
4.2.2 Property stolen.....	62.32	65
4.2.3 Safety at night.....	50.48	82
Services.....		
4.2.4 Physicians density.....	16.53	73
5 Labour and Vocational	43.14	38
5.1 Employable skills	47.81	34
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	49.29	33
Technical professions.....		
5.1.2 Technicians and associate professionals.....	60.71	30
Youth employment.....		
5.1.3 Youth employment.....	33.44	62
5.2 Labour productivity	38.46	50
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	22.42	49
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	54.50	36
6 Global Knowledge	49.17	24
6.1 Higher skills and competencies	26.79	55
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	41.00	44
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	32.02	41
6.1.3 Professionals.....	27.74	57
6.1.4 Researchers.....	6.41	56
6.2 Talent impact	71.54	2
Innovation.....		
6.2.1 Innovation output.....	43.07	33
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	100.00	1

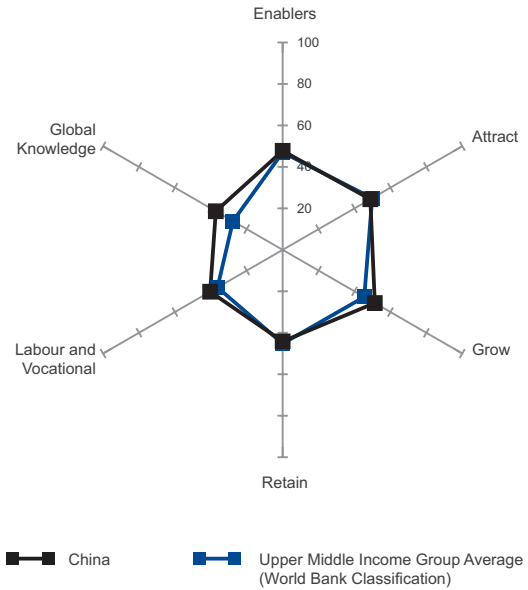
CHINA

RANK
(out of 103)

47

Population (millions) **1,376.57**
 GDP per capita (PPP\$) **9,161.97**
 GDP (US\$ billions) **8,227.04**

Global Talent Competitiveness Index Score **44.94**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	47.76	59
1.1 Regulatory landscape	48.50	69
Government efficiency		
1.1.1 Government effectiveness	36.49	51
1.1.2 Political stability	49.00	78
FDI climate		
1.1.3 Starting a foreign business	60.00	40
1.2 Market landscape	47.23	46
Competition climate		
1.2.1 Intensity of local competition	71.71	33
Innovation climate		
1.2.2 Venture capital availability	42.20	18
1.2.3 Firm-level technology absorption	62.49	58
1.2.4 R&D expenditure	38.38	21
Connectivity		
1.2.5 ICT access	34.21	68
Ease of doing business		
1.2.6 Ease of doing business	34.40	68
1.3 Business landscape	47.54	67
Labour market flexibility		
1.3.1 Labour market flexibility	35.99	75
Ownership and governance		
1.3.2 Reliance on professional management	59.09	38
2 Attract	48.81	65
2.1 External openness	40.34	67
FDI		
2.1.1 FDI inflow	14.49	69
Brain gain		
2.1.2 Qualified labour inflow	51.90	32
Foreign companies		
2.1.3 Prevalence of foreign ownership	54.62	72
2.2 Internal openness	57.29	65
Diversity		
2.2.1 Tolerance of minorities	56.85	87
2.2.2 Tolerance of immigrants	41.52	94
Social mobility		
2.2.3 Social mobility	54.59	53
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	33.48	46
3 Grow	51.30	40
3.1 Formal education	52.88	32
Education climate		
3.1.1 Pupil-teacher ratio	75.88	58
3.1.2 Technical/vocational enrolment	44.01	30
3.1.3 Tertiary enrolment	23.10	73
Performance of education system		
3.1.4 Reading, maths and science scores	100.00	1
Top universities		
3.1.5 QS university ranking	74.28	8
International students		
3.1.6 International students inflow	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	53.52	47
Further education and training climate		
3.2.1 Quality of management schools	53.62	57
3.2.2 Extent of staff training	53.43	36
3.3 Access to growth opportunities	47.49	70
Networks		
3.3.1 Use of virtual social networks	64.48	87
3.3.2 State of cluster development	59.68	20
Research quality		
3.3.3 Quality of scientific research institutions	53.06	40
Voice		
3.3.4 Voicing concern to officials	12.74	100
4 Retain	44.16	68
4.1 Sustainability	41.17	64
Social protection		
4.1.1 Pension system	34.32	57
Taxation		
4.1.2 Extent and effect of taxation	48.03	29
4.2 Lifestyle	47.14	74
Quality of life		
4.2.1 Environmental performance	21.26	92
4.2.2 Property stolen	56.87	76
4.2.3 Safety at night	87.59	12
Services		
4.2.4 Physicians density	22.84	66
5 Labour and Vocational	40.38	46
5.1 Employable skills	44.53	43
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	19.00	76
Technical professions		
5.1.2 Technicians and associate professionals	n/a	n/a
Youth employment		
5.1.3 Youth employment	70.06	15
5.2 Labour productivity	36.23	58
Productivity per employee		
5.2.1 Labour productivity per employee	10.89	71
Pay and productivity		
5.2.2 Relationship of pay to productivity	61.57	13
6 Global Knowledge	37.22	42
6.1 Higher skills and competencies	11.97	86
Educated workforce		
6.1.1 Tertiary-educated workforce	8.20	80
Knowledge workers		
6.1.2 Legislators, senior officials and managers	9.55	82
6.1.3 Professionals	16.77	73
6.1.4 Researchers	13.36	42
6.2 Talent impact	62.46	8
Innovation		
6.2.1 Innovation output	61.29	19
Entrepreneurship		
6.2.2 New product entrepreneurial activity	63.64	11

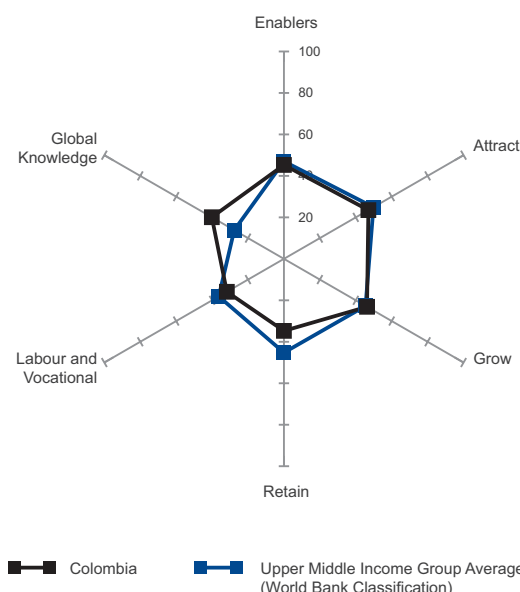
COLOMBIA

RANK
(out of 103)

71

Population (millions) **47.78**
GDP per capita (PPP\$) **10,791.73**
GDP (US\$ billions) **366.02**

Global Talent Competitiveness
Index Score **40.87**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	45.28	68
1.1 Regulatory landscape	47.41	70
Government efficiency		
1.1.1 Government effectiveness.....	40.21	50
1.1.2 Political stability.....	35.38	92
FDI climate		
1.1.3 Starting a foreign business.....	66.62	31
1.2 Market landscape	41.57	59
Competition climate		
1.2.1 Intensity of local competition.....	61.94	65
Innovation climate		
1.2.2 Venture capital availability.....	30.31	44
1.2.3 Firm-level technology absorption.....	57.40	74
1.2.4 R&D expenditure.....	3.05	81
Connectivity		
1.2.5 ICT access.....	34.90	66
Ease of doing business		
1.2.6 Ease of doing business.....	61.80	40
1.3 Business landscape	46.87	70
Labour market flexibility		
1.3.1 Labour market flexibility.....	41.77	66
Ownership and governance		
1.3.2 Reliance on professional management.....	51.98	58
2 Attract	47.00	75
2.1 External openness	41.50	63
FDI		
2.1.1 FDI inflow.....	30.85	36
Brain gain		
2.1.2 Qualified labour inflow.....	36.59	66
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	57.05	62
2.2 Internal openness	52.51	82
Diversity		
2.2.1 Tolerance of minorities.....	75.54	52
2.2.2 Tolerance of immigrants.....	75.45	36
Social mobility		
2.2.3 Social mobility.....	42.03	85
Gender mobility		
2.2.4 Female professionals and technical workers.....	n/a	n/a
2.2.5 Female parliamentarians.....	17.03	77
3 Grow	46.26	56
3.1 Formal education	30.13	76
Education climate		
3.1.1 Pupil-teacher ratio.....	46.25	78
3.1.2 Technical/vocational enrolment.....	11.87	76
3.1.3 Tertiary enrolment.....	39.33	55
Performance of education system		
3.1.4 Reading, maths and science scores.....	29.25	56
Top universities		
3.1.5 QS university ranking.....	23.96	36
International students		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong Learning	48.22	64
Further education and training climate		
3.2.1 Quality of management schools.....	52.48	61
3.2.2 Extent of staff training.....	43.96	74
3.3 Access to growth opportunities	60.42	36
Networks		
3.3.1 Use of virtual social networks.....	72.80	66
3.3.2 State of cluster development.....	47.58	49
Research quality		
3.3.3 Quality of scientific research institutions.....	40.17	71
Voice		
3.3.4 Voicing concern to officials.....	81.13	4
4 Retain	34.74	91
4.1 Sustainability	30.67	85
Social protection		
4.1.1 Pension system.....	28.18	61
Taxation		
4.1.2 Extent and effect of taxation.....	33.16	82
4.2 Lifestyle	38.81	89
Quality of life		
4.2.1 Environmental performance.....	67.18	26
4.2.2 Property stolen.....	38.63	92
4.2.3 Safety at night.....	47.17	86
Services		
4.2.4 Physicians density.....	2.26	90
5 Labour and Vocational	31.77	76
5.1 Employable skills	35.15	70
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	31.29	53
Technical professions		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment		
5.1.3 Youth employment.....	39.01	52
5.2 Labour productivity	28.40	86
Productivity per employee		
5.2.1 Labour productivity per employee.....	14.22	63
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	42.58	77
6 Global Knowledge	40.14	37
6.1 Higher skills and competencies	23.24	62
Educated workforce		
6.1.1 Tertiary-educated workforce.....	44.87	40
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	n/a	n/a
6.1.3 Professionals.....	n/a	n/a
6.1.4 Researchers.....	1.61	76
6.2 Talent impact	57.04	17
Innovation		
6.2.1 Innovation output.....	24.48	64
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	89.61	2

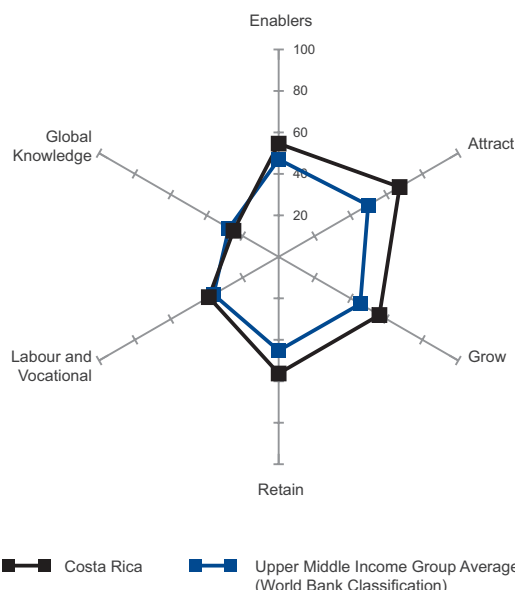
COSTA RICA

RANK
(out of 103)

41

Population (millions) **4.81**
 GDP per capita (PPP\$) **12,606.29**
 GDP (US\$ billions) **45.13**

Global Talent Competitiveness Index Score **49.72**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	54.60	46
1.1 Regulatory landscape	66.13	39
Government efficiency.....		
1.1.1 Government effectiveness.....	43.40	47
1.1.2 Political stability.....	80.90	32
FDI climate.....		
1.1.3 Starting a foreign business.....	74.08	22
1.2 Market landscape	40.35	67
Competition climate.....		
1.2.1 Intensity of local competition.....	65.92	52
Innovation climate.....		
1.2.2 Venture capital availability.....	20.70	78
1.2.3 Firm-level technology absorption.....	67.89	45
1.2.4 R&D expenditure.....	11.87	51
Connectivity.....		
1.2.5 ICT access.....	50.21	55
Ease of doing business.....		
1.2.6 Ease of doing business.....	25.50	77
1.3 Business landscape	57.32	43
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	53.97	49
Ownership and governance.....		
1.3.2 Reliance on professional management.....	60.67	35
2 Attract	67.34	16
2.1 External openness	59.21	11
FDI.....		
2.1.1 FDI inflow.....	39.75	22
Brain gain.....		
2.1.2 Qualified labour inflow.....	62.45	17
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	75.45	17
2.2 Internal openness	75.46	22
Diversity.....		
2.2.1 Tolerance of minorities.....	86.52	25
2.2.2 Tolerance of immigrants.....	77.27	34
Social mobility.....		
2.2.3 Social mobility.....	66.26	25
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	69.50	71
2.2.5 Female parliamentarians.....	77.77	9
3 Grow	56.10	32
3.1 Formal education	39.06	57
Education climate.....		
3.1.1 Pupil-teacher ratio.....	76.54	57
3.1.2 Technical/vocational enrolment.....	32.04	50
3.1.3 Tertiary enrolment.....	39.42	54
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	40.72	44
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	6.60	56

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	65.11	23
Further education and training climate.....		
3.2.1 Quality of management schools.....	70.27	18
3.2.2 Extent of staff training.....	59.96	25
3.3 Access to growth opportunities	64.11	23
Networks.....		
3.3.1 Use of virtual social networks.....	80.31	37
3.3.2 State of cluster development.....	49.16	45
Research quality.....		
3.3.3 Quality of scientific research institutions.....	60.70	31
Voice.....		
3.3.4 Voicing concern to officials.....	66.27	17
4 Retain	56.26	43
4.1 Sustainability	51.28	46
Social protection.....		
4.1.1 Pension system.....	60.89	42
Taxation.....		
4.1.2 Extent and effect of taxation.....	41.66	47
4.2 Lifestyle	61.23	39
Quality of life.....		
4.2.1 Environmental performance.....	82.49	5
4.2.2 Property stolen.....	56.40	79
4.2.3 Safety at night.....	44.81	93
Services.....		
4.2.4 Physicians density.....	n/a	n/a
5 Labour and Vocational	38.89	53
5.1 Employable skills	43.36	46
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	22.71	69
Technical professions.....		
5.1.2 Technicians and associate professionals.....	63.27	28
Youth employment.....		
5.1.3 Youth employment.....	44.11	46
5.2 Labour productivity	34.41	64
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	19.45	55
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	49.37	53
6 Global Knowledge	25.16	65
6.1 Higher skills and competencies	23.80	60
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	42.82	41
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	15.73	69
6.1.3 Professionals.....	30.79	51
6.1.4 Researchers.....	5.85	59
6.2 Talent impact	26.52	72
Innovation.....		
6.2.1 Innovation output.....	32.26	51
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	20.78	68

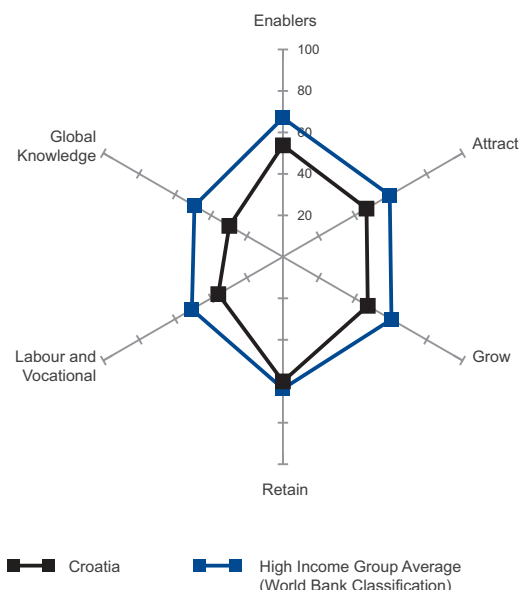
CROATIA

RANK
(out of 103)

45

Population (millions) **4.31**
GDP per capita (PPP\$) **17,810.14**
GDP (US\$ billions) **57.10**

Global Talent Competitiveness
Index Score **45.57**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	53.76	47
1.1 Regulatory landscape	71.32	31
Government efficiency.....		
1.1.1 Government effectiveness.....	49.47	40
1.1.2 Political stability.....	79.29	39
FDI climate.....		
1.1.3 Starting a foreign business.....	85.21	8
1.2 Market landscape	42.63	55
Competition climate.....		
1.2.1 Intensity of local competition.....	50.74	89
Innovation climate.....		
1.2.2 Venture capital availability.....	19.00	86
1.2.3 Firm-level technology absorption.....	61.19	61
1.2.4 R&D expenditure.....	16.18	42
Connectivity.....		
1.2.5 ICT access.....	69.38	32
Ease of doing business.....		
1.2.6 Ease of doing business.....	39.30	63
1.3 Business landscape	47.33	69
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	51.25	54
Ownership and governance.....		
1.3.2 Reliance on professional management.....	43.41	82
2 Attract	46.52	77
2.1 External openness	30.76	91
FDI.....		
2.1.1 FDI inflow.....	18.80	55
Brain gain.....		
2.1.2 Qualified labour inflow.....	22.73	91
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	50.76	80
2.2 Internal openness	62.29	48
Diversity.....		
2.2.1 Tolerance of minorities.....	70.11	60
2.2.2 Tolerance of immigrants.....	59.02	76
Social mobility.....		
2.2.3 Social mobility.....	43.66	81
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	38.64	32
3 Grow	47.23	54
3.1 Formal education	48.03	42
Education climate.....		
3.1.1 Pupil-teacher ratio.....	95.79	6
3.1.2 Technical/vocational enrolment.....	78.05	6
3.1.3 Tertiary enrolment.....	50.65	43
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	59.19	34
Top universities.....		
3.1.5 QS university ranking.....	1.91	58
International students.....		
3.1.6 International students inflow.....	2.57	68

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	42.47	83
Further education and training climate.....		
3.2.1 Quality of management schools.....	48.86	66
3.2.2 Extent of staff training.....	36.08	92
3.3 Access to growth opportunities	51.21	55
Networks.....		
3.3.1 Use of virtual social networks.....	70.47	77
3.3.2 State of cluster development.....	38.58	75
Research quality.....		
3.3.3 Quality of scientific research institutions.....	50.97	44
Voice.....		
3.3.4 Voicing concern to officials.....	44.81	50
4 Retain	60.07	36
4.1 Sustainability	50.78	48
Social protection.....		
4.1.1 Pension system.....	79.42	32
Taxation.....		
4.1.2 Extent and effect of taxation.....	22.14	97
4.2 Lifestyle	69.36	15
Quality of life.....		
4.2.1 Environmental performance.....	71.36	20
4.2.2 Property stolen.....	91.23	4
4.2.3 Safety at night.....	72.73	43
Services.....		
4.2.4 Physicians density.....	42.10	44
5 Labour and Vocational	35.98	64
5.1 Employable skills	34.50	74
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions.....		
5.1.2 Technicians and associate professionals.....	58.16	33
Youth employment.....		
5.1.3 Youth employment.....	10.83	92
5.2 Labour productivity	37.47	52
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	32.11	37
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	42.83	76
6 Global Knowledge	29.84	57
6.1 Higher skills and competencies	29.23	51
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	24.16	56
6.1.3 Professionals.....	40.24	40
6.1.4 Researchers.....	23.28	34
6.2 Talent impact	30.46	61
Innovation.....		
6.2.1 Innovation output.....	36.24	44
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	24.68	62

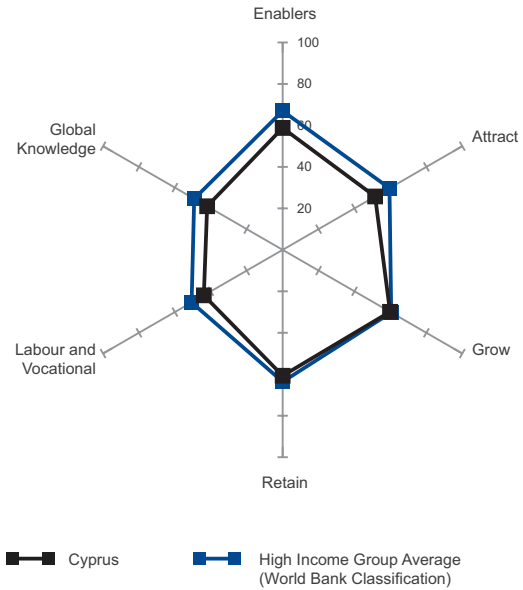
CYPRUS

RANK
(out of 103)

33

Population (millions) **1.13**
 GDP per capita (PPP\$) **27,085.98**
 GDP (US\$ billions) **23.01**

Global Talent Competitiveness Index Score **52.78**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	58.78.....	35
1.1 Regulatory landscape	78.97.....	22
Government efficiency.....		
1.1.1 Government effectiveness.....	78.58.....	17
1.1.2 Political stability.....	79.35.....	37
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a.....	n/a
1.2 Market landscape	52.90.....	34
Competition climate.....		
1.2.1 Intensity of local competition.....	69.14.....	38
Innovation climate.....		
1.2.2 Venture capital availability.....	32.31.....	38
1.2.3 Firm-level technology absorption.....	69.98.....	38
1.2.4 R&D expenditure.....	10.82.....	54
Connectivity.....		
1.2.5 ICT access.....	66.48.....	38
Ease of doing business.....		
1.2.6 Ease of doing business.....	68.70.....	33
1.3 Business landscape	44.45.....	76
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	47.08.....	59
Ownership and governance.....		
1.3.2 Reliance on professional management.....	41.83.....	91
2 Attract	51.47.....	53
2.1 External openness	38.32.....	71
FDI.....		
2.1.1 FDI inflow.....	9.72.....	85
Brain gain.....		
2.1.2 Qualified labour inflow.....	42.99.....	46
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	62.25.....	49
2.2 Internal openness	64.62.....	36
Diversity.....		
2.2.1 Tolerance of minorities.....	77.39.....	45
2.2.2 Tolerance of immigrants.....	68.41.....	54
Social mobility.....		
2.2.3 Social mobility.....	63.30.....	26
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	99.18.....	50
2.2.5 Female parliamentarians.....	14.82.....	83
3 Grow	59.77.....	25
3.1 Formal education	62.52.....	14
Education climate.....		
3.1.1 Pupil-teacher ratio.....	91.22.....	19
3.1.2 Technical/vocational enrolment.....	14.06.....	69
3.1.3 Tertiary enrolment.....	44.79.....	47
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a.....	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a.....	n/a
International students.....		
3.1.6 International students inflow.....	100.00.....	1

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	56.29.....	38
Further education and training climate.....		
3.2.1 Quality of management schools.....	66.08.....	27
3.2.2 Extent of staff training.....	46.51.....	64
3.3 Access to growth opportunities	60.50.....	35
Networks.....		
3.3.1 Use of virtual social networks.....	78.82.....	43
3.3.2 State of cluster development.....	51.00.....	39
Research quality.....		
3.3.3 Quality of scientific research institutions.....	50.41.....	47
Voice.....		
3.3.4 Voicing concern to officials.....	61.79.....	19
4 Retain	60.71.....	34
4.1 Sustainability	60.37.....	31
Social protection.....		
4.1.1 Pension system.....	n/a.....	n/a
Taxation.....		
4.1.2 Extent and effect of taxation.....	60.37.....	11
4.2 Lifestyle	61.06.....	41
Quality of life.....		
4.2.1 Environmental performance.....	55.34.....	40
4.2.2 Property stolen.....	70.62.....	49
4.2.3 Safety at night.....	76.47.....	31
Services.....		
4.2.4 Physicians density.....	41.82.....	45
5 Labour and Vocational	43.88.....	37
5.1 Employable skills	44.56.....	42
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	46.71.....	37
Technical professions.....		
5.1.2 Technicians and associate professionals.....	60.20.....	31
Youth employment.....		
5.1.3 Youth employment.....	26.75.....	71
5.2 Labour productivity	43.21.....	37
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	38.99.....	32
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	47.42.....	61
6 Global Knowledge	42.04.....	34
6.1 Higher skills and competencies	39.49.....	33
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	70.39.....	14
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	23.03.....	61
6.1.3 Professionals.....	51.22.....	22
6.1.4 Researchers.....	13.31.....	43
6.2 Talent impact	44.59.....	38
Innovation.....		
6.2.1 Innovation output.....	44.59.....	31
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a.....	n/a

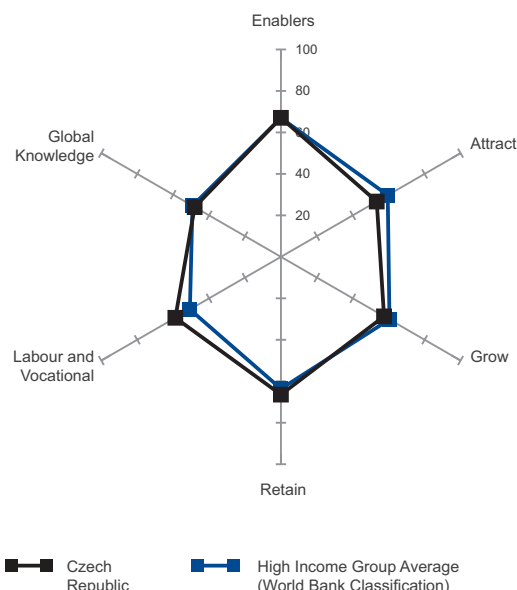
CZECH REPUBLIC

RANK
(out of 103)

22

Population (millions) **10.65**
 GDP per capita (PPP\$) **27,190.92**
 GDP (US\$ billions) **196.07**

Global Talent Competitiveness Index Score **58.51**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	67.04	22
1.1 Regulatory landscape	80.69	19
Government efficiency.....		
1.1.1 Government effectiveness.....	63.33	28
1.1.2 Political stability.....	93.53	12
FDI climate.....		
1.1.3 Starting a foreign business.....	85.21	8
1.2 Market landscape	54.10	31
Competition climate.....		
1.2.1 Intensity of local competition.....	78.50	11
Innovation climate.....		
1.2.2 Venture capital availability.....	23.50	66
1.2.3 Firm-level technology absorption.....	67.93	44
1.2.4 R&D expenditure.....	35.22	26
Connectivity.....		
1.2.5 ICT access.....	67.45	36
Ease of doing business.....		
1.2.6 Ease of doing business.....	52.00	50
1.3 Business landscape	66.34	22
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	74.57	23
Ownership and governance.....		
1.3.2 Reliance on professional management.....	58.11	39
2 Attract	53.34	47
2.1 External openness	44.97	45
FDI.....		
2.1.1 FDI inflow.....	20.06	52
Brain gain.....		
2.1.2 Qualified labour inflow.....	38.42	64
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	76.42	15
2.2 Internal openness	61.72	53
Diversity.....		
2.2.1 Tolerance of minorities.....	59.24	84
2.2.2 Tolerance of immigrants.....	61.69	68
Social mobility.....		
2.2.3 Social mobility.....	62.36	28
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	90.40	59
2.2.5 Female parliamentarians.....	34.89	41
3 Grow	57.40	29
3.1 Formal education	59.25	19
Education climate.....		
3.1.1 Pupil-teacher ratio.....	87.75	32
3.1.2 Technical/vocational enrolment.....	83.57	3
3.1.3 Tertiary enrolment.....	60.13	27
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	65.73	25
Top universities.....		
3.1.5 QS university ranking.....	21.52	41
International students.....		
3.1.6 International students inflow.....	36.79	16

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	49.85	59
Further education and training climate.....		
3.2.1 Quality of management schools.....	47.07	73
3.2.2 Extent of staff training.....	52.62	38
3.3 Access to growth opportunities	63.10	27
Networks.....		
3.3.1 Use of virtual social networks.....	82.85	30
3.3.2 State of cluster development.....	50.44	43
Research quality.....		
3.3.3 Quality of scientific research institutions.....	64.86	25
Voice.....		
3.3.4 Voicing concern to officials.....	54.25	31
4 Retain	66.44	15
4.1 Sustainability	67.61	14
Social protection.....		
4.1.1 Pension system.....	100.00	1
Taxation.....		
4.1.2 Extent and effect of taxation.....	35.23	72
4.2 Lifestyle	65.27	24
Quality of life.....		
4.2.1 Environmental performance.....	72.80	18
4.2.2 Property stolen.....	61.85	66
4.2.3 Safety at night.....	66.95	51
Services.....		
4.2.4 Physicians density.....	59.49	16
5 Labour and Vocational	58.79	13
5.1 Employable skills	71.03	5
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	100.00	1
Technical professions.....		
5.1.2 Technicians and associate professionals.....	92.86	4
Youth employment.....		
5.1.3 Youth employment.....	20.22	77
5.2 Labour productivity	46.55	33
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	35.22	35
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	57.87	24
6 Global Knowledge	48.03	28
6.1 Higher skills and competencies	36.13	40
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	37.59	50
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	26.40	54
6.1.3 Professionals.....	38.11	47
6.1.4 Researchers.....	42.44	21
6.2 Talent impact	59.92	11
Innovation.....		
6.2.1 Innovation output.....	57.50	23
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	62.34	13

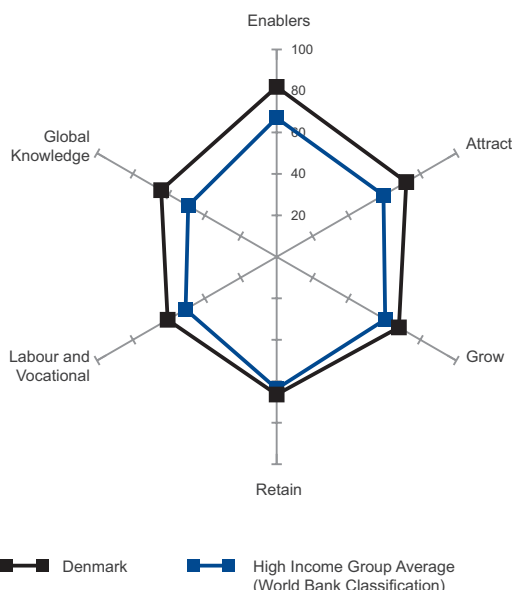
DENMARK

RANK
(out of 103)

3

Population (millions) **5.60**
 GDP per capita (PPP\$) **37,657.20**
 GDP (US\$ billions) **313.64**

Global Talent Competitiveness Index Score **68.93**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	81.97	4
1.1 Regulatory landscape	95.51	2
Government efficiency.....		
1.1.1 Government effectiveness.....	97.71	2
1.1.2 Political stability.....	93.30	13
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	73.42	10
Competition climate.....		
1.2.1 Intensity of local competition.....	73.73	26
Innovation climate.....		
1.2.2 Venture capital availability.....	26.79	57
1.2.3 Firm-level technology absorption.....	80.71	17
1.2.4 R&D expenditure.....	69.39	6
Connectivity.....		
1.2.5 ICT access.....	92.83	8
Ease of doing business.....		
1.2.6 Ease of doing business.....	97.10	4
1.3 Business landscape	76.97	11
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	70.80	29
Ownership and governance.....		
1.3.2 Reliance on professional management.....	83.14	8
2 Attract	72.16	5
2.1 External openness	53.22	19
FDI.....		
2.1.1 FDI inflow.....	34.49	30
Brain gain.....		
2.1.2 Qualified labour inflow.....	54.42	27
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	70.74	30
2.2 Internal openness	91.09	3
Diversity.....		
2.2.1 Tolerance of minorities.....	95.00	10
2.2.2 Tolerance of immigrants.....	94.88	5
Social mobility.....		
2.2.3 Social mobility.....	86.17	4
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	79.43	8
3 Grow	68.05	12
3.1 Formal education	59.44	18
Education climate.....		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	55.29	23
3.1.3 Tertiary enrolment.....	71.07	14
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	69.17	18
Top universities.....		
3.1.5 QS university ranking.....	66.99	12
International students.....		
3.1.6 International students inflow.....	34.66	17

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	68.39	13
Further education and training climate.....		
3.2.1 Quality of management schools.....	68.07	23
3.2.2 Extent of staff training.....	68.72	10
3.3 Access to growth opportunities	76.32	6
Networks.....		
3.3.1 Use of virtual social networks.....	83.89	24
3.3.2 State of cluster development.....	58.59	23
Research quality.....		
3.3.3 Quality of scientific research institutions.....	72.01	18
Voice.....		
3.3.4 Voicing concern to officials.....	90.80	2
4 Retain	66.40	17
4.1 Sustainability	61.86	23
Social protection.....		
4.1.1 Pension system.....	97.31	8
Taxation.....		
4.1.2 Extent and effect of taxation.....	26.40	93
4.2 Lifestyle	70.93	11
Quality of life.....		
4.2.1 Environmental performance.....	70.10	21
4.2.2 Property stolen.....	70.14	51
4.2.3 Safety at night.....	88.02	11
Services.....		
4.2.4 Physicians density.....	55.46	23
5 Labour and Vocational	60.69	9
5.1 Employable skills	70.27	6
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	59.00	23
Technical professions.....		
5.1.2 Technicians and associate professionals.....	78.57	12
Youth employment.....		
5.1.3 Youth employment.....	73.25	11
5.2 Labour productivity	51.11	24
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	50.55	21
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	51.66	43
6 Global Knowledge	64.30	4
6.1 Higher skills and competencies	61.31	11
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	69.93	15
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	15.17	71
6.1.3 Professionals.....	75.30	3
6.1.4 Researchers.....	84.82	3
6.2 Talent impact	67.29	5
Innovation.....		
6.2.1 Innovation output.....	69.64	9
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	64.94	10

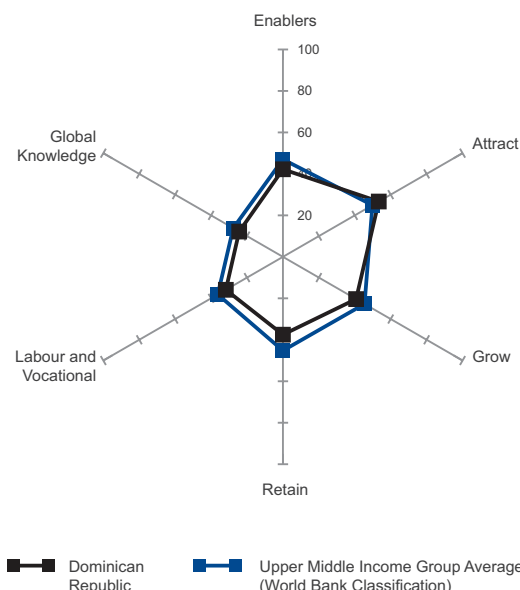
DOMINICAN REPUBLIC

RANK
(out of 103)

81

Population (millions) **10.3**
GDP per capita (PPP\$) **9,646.07**
GDP (US\$ billions) **59.00**

Global Talent Competitiveness Index Score **38.33**
Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	42.23	80
1.1 Regulatory landscape	42.22	80
Government efficiency		
1.1.1 Government effectiveness.....	16.47	87
1.1.2 Political stability.....	67.97	53
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	39.38	70
Competition climate		
1.2.1 Intensity of local competition.....	66.69	49
Innovation climate		
1.2.2 Venture capital availability.....	19.72	85
1.2.3 Firm-level technology absorption.....	65.04	49
1.2.4 R&D expenditure.....	n/a	n/a
Connectivity		
1.2.5 ICT access.....	23.86	81
Ease of doing business		
1.2.6 Ease of doing business.....	21.60	81
1.3 Business landscape	45.08	74
Labour market flexibility		
1.3.1 Labour market flexibility.....	49.55	57
Ownership and governance		
1.3.2 Reliance on professional management.....	40.61	97
2 Attract	53.35	46
2.1 External openness	47.25	40
FDI		
2.1.1 FDI inflow.....	32.22	34
Brain gain		
2.1.2 Qualified labour inflow.....	42.83	48
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	66.72	41
2.2 Internal openness	59.45	57
Diversity		
2.2.1 Tolerance of minorities.....	61.09	80
2.2.2 Tolerance of immigrants.....	62.54	64
Social mobility		
2.2.3 Social mobility.....	41.13	87
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	32.49	47
3 Grow	40.73	79
3.1 Formal education	25.65	88
Education climate		
3.1.1 Pupil-teacher ratio.....	37.32	83
3.1.2 Technical/vocational enrolment.....	9.25	82
3.1.3 Tertiary enrolment.....	30.37	67
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	48.25	63
Further education and training climate		
3.2.1 Quality of management schools.....	48.64	67
3.2.2 Extent of staff training.....	47.87	58
3.3 Access to growth opportunities	48.30	65
Networks		
3.3.1 Use of virtual social networks.....	77.18	49
3.3.2 State of cluster development.....	43.08	61
Research quality		
3.3.3 Quality of scientific research institutions.....	25.98	95
Voice		
3.3.4 Voicing concern to officials.....	46.93	46
4 Retain	37.53	85
4.1 Sustainability	27.85	92
Social protection		
4.1.1 Pension system.....	27.22	63
Taxation		
4.1.2 Extent and effect of taxation.....	28.47	92
4.2 Lifestyle	47.22	73
Quality of life		
4.2.1 Environmental performance.....	44.57	60
4.2.2 Property stolen.....	55.69	80
4.2.3 Safety at night.....	41.39	96
Services		
4.2.4 Physicians density.....	n/a	n/a
5 Labour and Vocational	31.79	75
5.1 Employable skills	33.98	76
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	30.29	56
Technical professions		
5.1.2 Technicians and associate professionals.....	27.55	67
Youth employment		
5.1.3 Youth employment.....	44.11	46
5.2 Labour productivity	29.59	82
Productivity per employee		
5.2.1 Labour productivity per employee.....	20.41	53
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	38.78	89
6 Global Knowledge	24.37	68
6.1 Higher skills and competencies	19.64	75
Educated workforce		
6.1.1 Tertiary-educated workforce.....	23.46	70
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	16.85	67
6.1.3 Professionals.....	18.60	69
6.1.4 Researchers.....	n/a	n/a
6.2 Talent impact	29.09	64
Innovation		
6.2.1 Innovation output.....	21.82	67
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	36.36	48

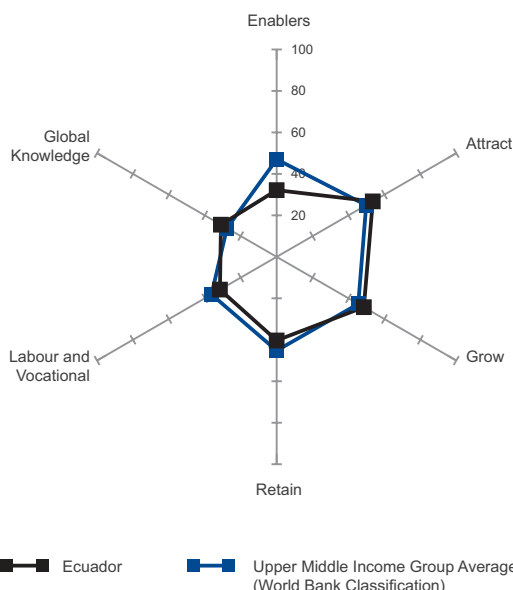
ECUADOR

RANK
(out of 103)

74

Population (millions) **15.52**
 GDP per capita (PPP\$) **10,055.89**
 GDP (US\$ billions) **80.93**

Global Talent Competitiveness Index Score **39.52**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	32.17	97
1.1 Regulatory landscape	37.67	86
Government efficiency		
1.1.1 Government effectiveness.....	16.56	86
1.1.2 Political stability.....	48.28	82
FDI climate		
1.1.3 Starting a foreign business.....	48.17	53
1.2 Market landscape	30.72	90
Competition climate		
1.2.1 Intensity of local competition.....	54.88	78
Innovation climate		
1.2.2 Venture capital availability.....	26.85	56
1.2.3 Firm-level technology absorption.....	55.47	79
1.2.4 R&D expenditure.....	5.43	66
Connectivity		
1.2.5 ICT access.....	34.76	67
Ease of doing business		
1.2.6 Ease of doing business.....	6.90	96
1.3 Business landscape	28.12	100
Labour market flexibility		
1.3.1 Labour market flexibility.....	11.01	100
Ownership and governance		
1.3.2 Reliance on professional management.....	45.24	78
2 Attract	53.50	44
2.1 External openness	31.30	89
FDI		
2.1.1 FDI inflow.....	7.74	89
Brain gain		
2.1.2 Qualified labour inflow.....	36.26	68
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	49.91	84
2.2 Internal openness	75.69	20
Diversity		
2.2.1 Tolerance of minorities.....	75.87	51
2.2.2 Tolerance of immigrants.....	70.76	48
Social mobility		
2.2.3 Social mobility.....	n/a	n/a
Gender mobility		
2.2.4 Female professionals and technical workers.....	97.11	53
2.2.5 Female parliamentarians.....	59.02	16
3 Grow	48.54	49
3.1 Formal education	56.72	25
Education climate		
3.1.1 Pupil-teacher ratio.....	87.86	31
3.1.2 Technical/vocational enrolment.....	46.06	27
3.1.3 Tertiary enrolment.....	36.25	59
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	46.41	72
Further education and training climate		
3.2.1 Quality of management schools.....	47.36	72
3.2.2 Extent of staff training.....	45.46	68
3.3 Access to Growth Opportunities	42.50	87
Networks		
3.3.1 Use of virtual social networks.....	63.70	89
3.3.2 State of cluster development.....	40.99	65
Research quality		
3.3.3 Quality of scientific research institutions.....	32.98	88
Voice		
3.3.4 Voicing concern to officials.....	32.31	75
4 Retain	40.32	75
4.1 Sustainability	30.23	87
Social protection		
4.1.1 Pension system.....	26.76	64
Taxation		
4.1.2 Extent and effect of taxation.....	33.71	81
4.2 Lifestyle	50.41	63
Quality of life		
4.2.1 Environmental performance.....	63.11	29
4.2.2 Property stolen.....	58.53	72
4.2.3 Safety at night.....	52.73	77
Services		
4.2.4 Physicians density.....	27.26	62
5 Labour and Vocational	31.58	78
5.1 Employable skills	37.27	65
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	29.14	57
Technical professions		
5.1.2 Technicians and associate professionals.....	28.06	65
Youth employment		
5.1.3 Youth employment.....	54.62	29
5.2 Labour productivity	25.88	90
Productivity per employee		
5.2.1 Labour productivity per employee.....	12.72	67
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	39.04	87
6 Global Knowledge	31.02	55
6.1 Higher skills and competencies	17.39	79
Educated workforce		
6.1.1 Tertiary-educated workforce.....	26.42	67
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	16.85	67
6.1.3 Professionals.....	25.00	62
6.1.4 Researchers.....	1.27	80
6.2 Talent impact	44.65	37
Innovation		
6.2.1 Innovation output.....	19.17	75
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	70.13	8

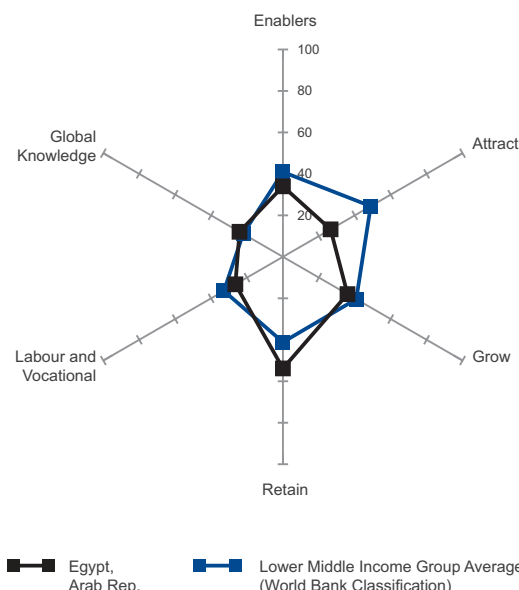
EGYPT, ARAB REP.

RANK
(out of 103)

89

Population (millions) **80.80**
 GDP per capita (PPP\$) **6,544.87**
 GDP (US\$ billions) **256.73**

Global Talent Competitiveness Index Score **33.49**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	34.01	93
1.1 Regulatory landscape	36.28	89
Government efficiency.....		
1.1.1 Government effectiveness.....	14.97	89
1.1.2 Political stability.....	34.59	93
FDI climate.....		
1.1.3 Starting a foreign business.....	59.30	41
1.2 Market landscape	34.84	79
Competition climate.....		
1.2.1 Intensity of local competition.....	50.40	90
Innovation climate.....		
1.2.2 Venture capital availability.....	33.38	33
1.2.3 Firm-level technology absorption.....	59.40	69
1.2.4 R&D expenditure.....	4.33	74
Connectivity.....		
1.2.5 ICT access.....	35.03	65
Ease of doing business.....		
1.2.6 Ease of doing business.....	26.50	76
1.3 Business landscape	30.89	95
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	23.68	86
Ownership and governance.....		
1.3.2 Reliance on professional management.....	38.11	100
2 Attract	26.53	103
2.1 External openness	23.78	101
FDI.....		
2.1.1 FDI inflow.....	0.00	103
Brain gain.....		
2.1.2 Qualified labour inflow.....	20.66	95
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	50.68	81
2.2 Internal openness	29.28	103
Diversity.....		
2.2.1 Tolerance of minorities.....	23.91	100
2.2.2 Tolerance of immigrants.....	28.28	99
Social mobility.....		
2.2.3 Social mobility.....	47.60	73
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	44.10	83
2.2.5 Female parliamentarians.....	2.52	101
3 Grow	35.94	94
3.1 Formal education	34.31	65
Education climate.....		
3.1.1 Pupil-teacher ratio.....	80.53	45
3.1.2 Technical/vocational enrolment.....	37.11	36
3.1.3 Tertiary enrolment.....	28.72	68
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	16.68	45
International students.....		
3.1.6 International students inflow.....	8.52	49

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	31.81	101
Further education and training climate.....		
3.2.1 Quality of management schools.....	29.22	102
3.2.2 Extent of staff training.....	34.40	95
3.3 Access to growth opportunities	41.71	89
Networks.....		
3.3.1 Use of virtual social networks.....	81.99	32
3.3.2 State of cluster development.....	44.52	56
Research quality.....		
3.3.3 Quality of scientific research institutions.....	31.12	90
Voice.....		
3.3.4 Voicing concern to officials.....	9.20	101
4 Retain	53.81	47
4.1 Sustainability	48.13	52
Social protection.....		
4.1.1 Pension system.....	57.19	45
Taxation.....		
4.1.2 Extent and effect of taxation.....	39.08	59
4.2 Lifestyle	59.49	46
Quality of life.....		
4.2.1 Environmental performance.....	50.83	54
4.2.2 Property stolen.....	79.38	18
4.2.3 Safety at night.....	61.93	61
Services.....		
4.2.4 Physicians density.....	45.82	36
5 Labour and Vocational	26.48	95
5.1 Employable skills	28.37	85
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions.....		
5.1.2 Technicians and associate professionals.....	40.82	50
Youth employment.....		
5.1.3 Youth employment.....	15.92	85
5.2 Labour productivity	24.58	93
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	9.91	75
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	39.25	85
6 Global Knowledge	24.17	69
6.1 Higher skills and competencies	30.19	48
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	46.07	19
6.1.3 Professionals.....	39.02	42
6.1.4 Researchers.....	5.47	62
6.2 Talent impact	18.15	86
Innovation.....		
6.2.1 Innovation output.....	14.23	84
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	22.08	65

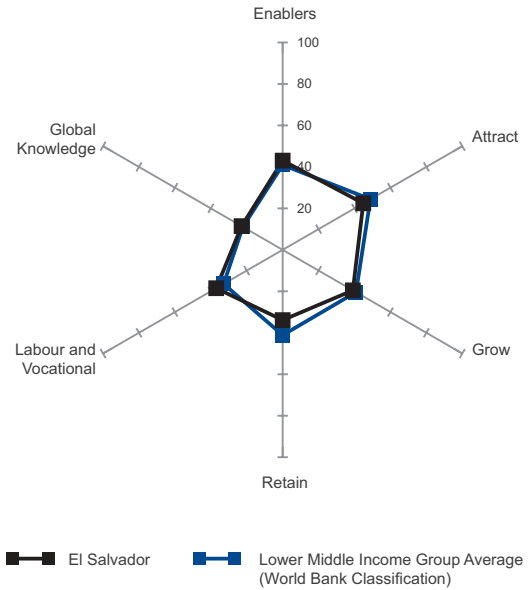
EL SALVADOR

RANK
(out of 103)

85

Population (millions) **6.31**
 GDP per capita (PPP\$) **7,437.93**
 GDP (US\$ billions) **23.82**

Global Talent Competitiveness Index Score **36.79**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	43.04.....	75
1.1 Regulatory landscape	49.34.....	65
Government efficiency		
1.1.1 Government effectiveness.....	29.71.....	64
1.1.2 Political stability.....	68.97.....	52
FDI climate		
1.1.3 Starting a foreign business.....	n/a.....	n/a
1.2 Market landscape	33.07.....	87
Competition climate		
1.2.1 Intensity of local competition.....	65.41.....	55
Innovation climate		
1.2.2 Venture capital availability.....	21.57.....	75
1.2.3 Firm-level technology absorption.....	57.90.....	73
1.2.4 R&D expenditure.....	1.27.....	89
Connectivity		
1.2.5 ICT access.....	28.69.....	76
Ease of doing business		
1.2.6 Ease of doing business.....	23.60.....	79
1.3 Business landscape	46.69.....	71
Labour market flexibility		
1.3.1 Labour market flexibility.....	50.91.....	55
Ownership and governance		
1.3.2 Reliance on professional management.....	42.48.....	87
2 Attract	44.87.....	83
2.1 External openness	33.79.....	81
FDI		
2.1.1 FDI inflow.....	14.03.....	72
Brain gain		
2.1.2 Qualified labour inflow.....	22.92.....	90
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	64.42.....	45
2.2 Internal openness	55.94.....	71
Diversity		
2.2.1 Tolerance of minorities.....	62.72.....	75
2.2.2 Tolerance of immigrants.....	62.43.....	65
Social mobility		
2.2.3 Social mobility.....	27.98.....	98
Gender mobility		
2.2.4 Female professionals and technical workers.....	97.55.....	52
2.2.5 Female parliamentarians.....	29.02.....	55
3 Grow	39.08.....	84
3.1 Formal education	25.86.....	87
Education climate		
3.1.1 Pupil-teacher ratio.....	49.76.....	73
3.1.2 Technical/vocational enrolment.....	32.82.....	46
3.1.3 Tertiary enrolment.....	20.87.....	75
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a.....	n/a
Top universities		
3.1.5 QS university ranking.....	n/a.....	n/a
International students		
3.1.6 International students inflow.....	0.00.....	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	46.42.....	71
Further education and training climate		
3.2.1 Quality of management schools.....	45.98.....	77
3.2.2 Extent of staff training.....	46.86.....	62
3.3 Access to growth opportunities	44.96.....	81
Networks		
3.3.1 Use of virtual social networks.....	77.34.....	48
3.3.2 State of cluster development.....	40.34.....	69
Research quality		
3.3.3 Quality of scientific research institutions.....	21.10.....	100
Voice		
3.3.4 Voicing concern to officials.....	41.04.....	55
4 Retain	33.88.....	93
4.1 Sustainability	26.87.....	94
Social protection		
4.1.1 Pension system.....	23.01.....	69
Taxation		
4.1.2 Extent and effect of taxation.....	30.74.....	87
4.2 Lifestyle	40.90.....	88
Quality of life		
4.2.1 Environmental performance.....	43.75.....	63
4.2.2 Property stolen.....	48.82.....	87
4.2.3 Safety at night.....	45.24.....	90
Services		
4.2.4 Physicians density.....	25.78.....	64
5 Labour and Vocational	37.00.....	60
5.1 Employable Skills	35.42.....	69
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	28.14.....	61
Technical professions		
5.1.2 Technicians and associate professionals.....	29.08.....	63
Youth employment		
5.1.3 Youth employment.....	49.04.....	36
5.2 Labour productivity	38.58.....	49
Productivity per employee		
5.2.1 Labour productivity per employee.....	n/a.....	n/a
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	38.58.....	90
6 Global Knowledge	22.87.....	73
6.1 Higher skills and competencies	8.27.....	89
Educated workforce		
6.1.1 Tertiary-educated workforce.....	15.49.....	76
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	5.62.....	85
6.1.3 Professionals.....	11.89.....	78
6.1.4 Researchers.....	0.08.....	96
6.2 Talent impact	37.48.....	50
Innovation		
6.2.1 Innovation output.....	16.51.....	81
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	58.44.....	15

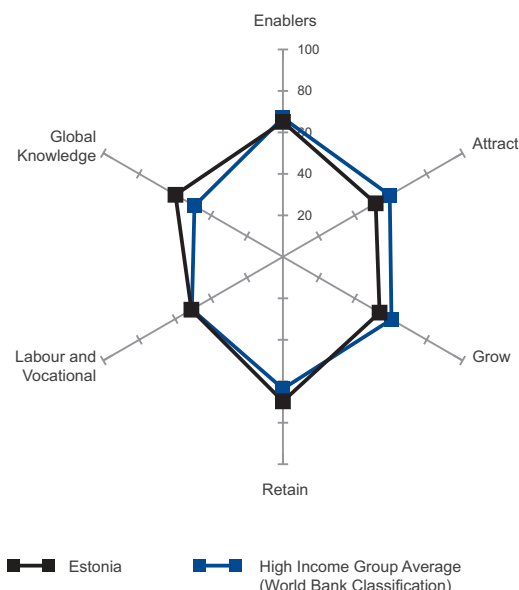
ESTONIA

RANK
(out of 103)

23

Population (millions) **1.29**
GDP per capita (PPP\$) **21,713.22**
GDP (US\$ billions) **21.86**

Global Talent Competitiveness
Index Score **58.50**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	65.09	25
1.1 Regulatory landscape	74.74	28
Government efficiency		
1.1.1 Government effectiveness.....	68.88	23
1.1.2 Political stability.....	80.60	33
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	63.79	24
Competition climate		
1.2.1 Intensity of local competition.....	75.03	22
Innovation climate		
1.2.2 Venture capital availability.....	35.98	27
1.2.3 Firm-level technology absorption.....	75.08	30
1.2.4 R&D expenditure.....	36.58	24
Connectivity		
1.2.5 ICT access.....	76.69	25
Ease of doing business		
1.2.6 Ease of doing business.....	83.40	18
1.3 Business landscape	56.73	46
Labour market flexibility		
1.3.1 Labour market flexibility.....	43.26	64
Ownership and governance		
1.3.2 Reliance on professional management.....	70.20	23
2 Attract	51.63	52
2.1 External openness	40.97	65
FDI		
2.1.1 FDI inflow.....	10.08	83
Brain gain		
2.1.2 Qualified labour inflow.....	39.31	59
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	73.50	21
2.2 Internal openness	62.29	47
Diversity		
2.2.1 Tolerance of minorities.....	60.65	81
2.2.2 Tolerance of immigrants.....	46.00	91
Social mobility		
2.2.3 Social mobility.....	74.28	21
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	30.54	51
3 Grow	53.80	35
3.1 Formal education	47.07	44
Education climate		
3.1.1 Pupil-teacher ratio.....	94.05	12
3.1.2 Technical/vocational enrolment.....	41.41	33
3.1.3 Tertiary enrolment.....	60.87	26
Performance of education system		
3.1.4 Reading, maths and science scores.....	74.91	11
Top universities		
3.1.5 QS university ranking.....	2.98	57
International students		
3.1.6 International students inflow.....	8.20	51

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	55.67	41
Further education and training climate		
3.2.1 Quality of management schools.....	58.22	42
3.2.2 Extent of staff training.....	53.13	37
3.3 Access to growth opportunities	58.65	39
Networks		
3.3.1 Use of virtual social networks.....	89.39	7
3.3.2 State of cluster development.....	41.85	63
Research quality		
3.3.3 Quality of scientific research institutions.....	65.14	24
Voice		
3.3.4 Voicing concern to officials.....	38.21	67
4 Retain	69.69	8
4.1 Sustainability	78.89	3
Social protection		
4.1.1 Pension system.....	99.00	4
Taxation		
4.1.2 Extent and effect of taxation.....	58.79	13
4.2 Lifestyle	60.48	43
Quality of life		
4.2.1 Environmental performance.....	52.91	49
4.2.2 Property stolen.....	69.43	55
4.2.3 Safety at night.....	65.56	56
Services		
4.2.4 Physicians density.....	54.00	24
5 Labour and Vocational	50.96	24
5.1 Employable skills	55.09	19
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	72.57	10
Technical professions		
5.1.2 Technicians and associate professionals.....	60.20	31
Youth employment		
5.1.3 Youth employment.....	32.48	64
5.2 Labour productivity	46.84	31
Productivity per employee		
5.2.1 Labour productivity per employee.....	27.88	41
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	65.81	6
6 Global Knowledge	59.83	9
6.1 Higher skills and competencies	58.12	14
Educated workforce		
6.1.1 Tertiary-educated workforce.....	80.87	6
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	50.56	12
6.1.3 Professionals.....	58.84	14
6.1.4 Researchers.....	42.19	22
6.2 Talent impact	61.55	9
Innovation		
6.2.1 Innovation output.....	71.16	8
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	51.95	20

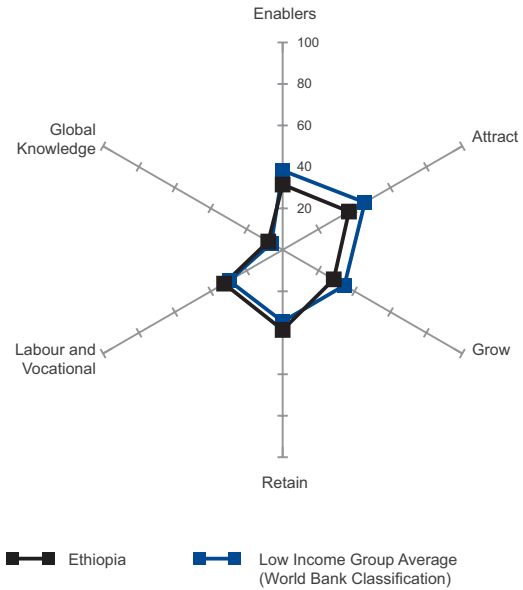
ETHIOPIA

RANK
(out of 103)

99

Population (millions) **92.26**
 GDP per capita (PPP\$) **1,190.56**
 GDP (US\$ billions) **41.91**

Global Talent Competitiveness Index Score **29.35**
 Global Talent Competitiveness Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	31.48	98
1.1 Regulatory landscape	15.65	103
Government efficiency.....		
1.1.1 Government effectiveness.....	20.87	77
1.1.2 Political stability.....	26.08	102
FDI climate.....		
1.1.3 Starting a foreign business.....	0.00	65
1.2 Market landscape	21.06	102
Competition climate.....		
1.2.1 Intensity of local competition.....	43.20	101
Innovation climate.....		
1.2.2 Venture capital availability.....	17.78	91
1.2.3 Firm-level technology absorption.....	44.62	100
1.2.4 R&D expenditure.....	5.06	69
Connectivity.....		
1.2.5 ICT access.....	0.00	97
Ease of doing business.....		
1.2.6 Ease of doing business.....	15.70	87
1.3 Business landscape	57.74	42
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	73.05	26
Ownership and governance.....		
1.3.2 Reliance on professional management.....	42.42	88
2 Attract	36.92	98
2.1 External openness	24.21	100
FDI.....		
2.1.1 FDI inflow.....	6.58	91
Brain gain.....		
2.1.2 Qualified labour inflow.....	27.87	86
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	38.17	99
2.2 Internal openness	49.63	88
Diversity.....		
2.2.1 Tolerance of minorities.....	51.74	93
2.2.2 Tolerance of immigrants.....	53.15	83
Social mobility.....		
2.2.3 Social mobility.....	53.86	54
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	41.75	85
2.2.5 Female parliamentarians.....	47.63	24
3 Grow	28.45	103
3.1 Formal education	8.47	101
Education climate.....		
3.1.1 Pupil-teacher ratio.....	4.33	88
3.1.2 Technical/vocational enrolment.....	17.28	66
3.1.3 Tertiary enrolment.....	3.80	94
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	39.05	95
Further education and training climate.....		
3.2.1 Quality of management schools.....	43.81	84
3.2.2 Extent of staff training.....	34.29	96
3.3 Access to growth opportunities	37.82	99
Networks.....		
3.3.1 Use of virtual social networks.....	39.52	102
3.3.2 State of cluster development.....	36.10	82
Research quality.....		
3.3.3 Quality of scientific research institutions.....	36.96	80
Voice.....		
3.3.4 Voicing concern to officials.....	38.68	64
4 Retain	38.63	82
4.1 Sustainability	42.03	59
Social protection.....		
4.1.1 Pension system.....	n/a	n/a
Taxation.....		
4.1.2 Extent and effect of taxation.....	42.03	46
4.2 Lifestyle	35.24	96
Quality of life.....		
4.2.1 Environmental performance.....	45.19	59
4.2.2 Property stolen.....	41.94	90
4.2.3 Safety at night.....	53.58	74
Services.....		
4.2.4 Physicians density.....	0.23	96
5 Labour and Vocational	32.60	72
5.1 Employable skills	43.33	47
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	6.14	85
Technical professions.....		
5.1.2 Technicians and associate professionals.....	29.59	62
Youth employment.....		
5.1.3 Youth employment.....	94.27	3
5.2 Labour productivity	21.86	98
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	0.00	94
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	43.73	74
6 Global Knowledge	8.02	97
6.1 Higher skills and competencies	6.06	92
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	1.14	87
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	14.04	74
6.1.3 Professionals.....	8.54	86
6.1.4 Researchers.....	0.51	87
6.2 Talent impact	9.97	94
Innovation.....		
6.2.1 Innovation output.....	4.36	99
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	15.58	70

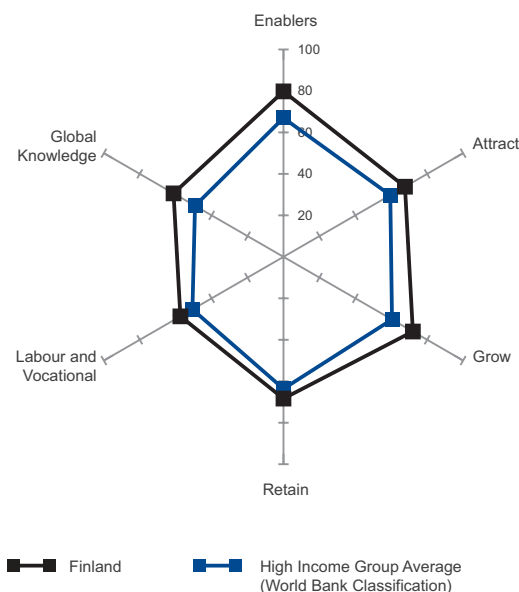
FINLAND

RANK
(out of 103)

8

Population (millions) **5.41**
GDP per capita (PPP\$) **36,395.01**
GDP (US\$ billions) **250.13**

Global Talent Competitiveness
Index Score **67.73**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	79.79	8
1.1 Regulatory landscape	100.00	1
Government efficiency.....		
1.1.1 Government effectiveness.....	100.00	1
1.1.2 Political stability.....	100.00	1
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	76.79	3
Competition climate		
1.2.1 Intensity of local competition.....	64.52	58
Innovation climate		
1.2.2 Venture capital availability.....	48.55	10
1.2.3 Firm-level technology absorption.....	84.23	6
1.2.4 R&D expenditure.....	88.11	2
Connectivity		
1.2.5 ICT access.....	84.14	16
Ease of doing business		
1.2.6 Ease of doing business.....	91.20	10
1.3 Business landscape	62.58	30
Labour market flexibility		
1.3.1 Labour market flexibility.....	37.10	72
Ownership and governance		
1.3.2 Reliance on professional management.....	88.06	2
2 Attract	67.64	15
2.1 External openness	47.51	39
FDI		
2.1.1 FDI inflow.....	1.68	99
Brain gain		
2.1.2 Qualified labour inflow.....	67.88	11
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	72.96	22
2.2 Internal openness	87.77	7
Diversity		
2.2.1 Tolerance of minorities.....	78.15	39
2.2.2 Tolerance of immigrants.....	78.23	32
Social mobility		
2.2.3 Social mobility.....	91.01	1
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	91.44	2
3 Grow	72.03	4
3.1 Formal education	68.27	7
Education climate		
3.1.1 Pupil-teacher ratio.....	90.85	21
3.1.2 Technical/vocational enrolment.....	67.00	16
3.1.3 Tertiary enrolment.....	90.50	3
Performance of education system		
3.1.4 Reading, maths and science scores.....	86.76	2
Top universities		
3.1.5 QS university ranking.....	53.15	17
International students		
3.1.6 International students inflow.....	21.36	27

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	74.54	4
Further education and training climate		
3.2.1 Quality of management schools.....	75.86	10
3.2.2 Extent of staff training.....	73.22	2
3.3 Access to growth opportunities	73.27	8
Networks		
3.3.1 Use of virtual social networks.....	89.14	8
3.3.2 State of cluster development.....	69.30	5
Research quality		
3.3.3 Quality of scientific research institutions.....	75.44	13
Voice		
3.3.4 Voicing concern to officials.....	59.20	21
4 Retain	68.36	12
4.1 Sustainability	65.33	19
Social protection		
4.1.1 Pension system.....	93.96	17
Taxation		
4.1.2 Extent and effect of taxation.....	36.71	67
4.2 Lifestyle	71.39	10
Quality of life		
4.2.1 Environmental performance.....	72.00	19
4.2.2 Property stolen.....	80.09	16
4.2.3 Safety at night.....	86.42	16
Services		
4.2.4 Physicians density.....	47.04	34
5 Labour and Vocational	57.39	18
5.1 Employable skills	61.53	13
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	54.00	27
Technical professions		
5.1.2 Technicians and associate professionals.....	80.10	11
Youth employment		
5.1.3 Youth employment.....	50.48	34
5.2 Labour productivity	53.26	16
Productivity per employee		
5.2.1 Labour productivity per employee.....	52.72	16
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	53.80	39
6 Global Knowledge	61.20	5
6.1 Higher skills and competencies	62.74	9
Educated workforce		
6.1.1 Tertiary-educated workforce.....	71.98	13
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	29.21	48
6.1.3 Professionals.....	64.33	11
6.1.4 Researchers.....	85.44	2
6.2 Talent impact	59.66	12
Innovation		
6.2.1 Innovation output.....	76.47	5
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	42.86	33

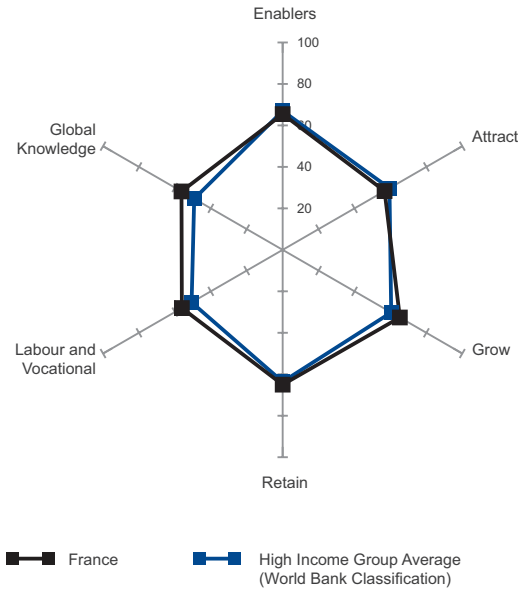
FRANCE

RANK
(out of 103)

20

Population (millions) **63.93**
 GDP per capita (PPP\$) **35,547.96**
 GDP (US\$ billions) **2,608.70**

Global Talent Competitiveness Index Score **60.82**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	65.46	24
1.1 Regulatory landscape	78.07	25
Government efficiency.....		
1.1.1 Government effectiveness.....	73.65	20
1.1.2 Political stability.....	81.12	31
FDI climate.....		
1.1.3 Starting a foreign business.....	79.44	19
1.2 Market landscape	64.51	22
Competition climate.....		
1.2.1 Intensity of local competition.....	74.57	25
Innovation climate.....		
1.2.2 Venture capital availability.....	29.46	46
1.2.3 Firm-level technology absorption.....	74.83	31
1.2.4 R&D expenditure.....	50.95	14
Connectivity.....		
1.2.5 ICT access.....	86.62	12
Ease of doing business.....		
1.2.6 Ease of doing business.....	70.60	31
1.3 Business landscape	53.80	52
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	40.77	68
Ownership and governance.....		
1.3.2 Reliance on professional management.....	66.82	27
2 Attract	56.73	36
2.1 External openness	44.69	46
FDI.....		
2.1.1 FDI inflow.....	12.40	77
Brain gain.....		
2.1.2 Qualified labour inflow.....	45.78	40
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	75.90	16
2.2 Internal openness	68.77	31
Diversity.....		
2.2.1 Tolerance of minorities.....	89.02	22
2.2.2 Tolerance of immigrants.....	82.28	26
Social mobility.....		
2.2.3 Social mobility.....	57.30	45
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	86.42	62
2.2.5 Female parliamentarians.....	28.83	56
3 Grow	65.25	16
3.1 Formal education	62.23	15
Education climate.....		
3.1.1 Pupil-teacher ratio.....	82.91	43
3.1.2 Technical/vocational enrolment.....	42.26	32
3.1.3 Tertiary enrolment.....	53.23	39
Performance of education system.....		
3.1.4 Reading, math and science scores.....	68.26	21
Top universities.....		
3.1.5 QS university ranking.....	73.50	9
International students.....		
3.1.6 International students inflow.....	53.24	12

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	65.92	19
Further education and training climate.....		
3.2.1 Quality of management schools.....	77.21	8
3.2.2 Extent of staff training.....	54.63	33
3.3 Access to growth opportunities	67.59	18
Networks.....		
3.3.1 Use of virtual social networks.....	84.54	20
3.3.2 State of cluster development.....	58.13	27
Research quality.....		
3.3.3 Quality of scientific research institutions.....	74.37	15
Voice.....		
3.3.4 Voicing concern to officials.....	53.30	34
4 Retain	65.01	20
4.1 Sustainability	60.43	29
Social protection.....		
4.1.1 Pension system.....	91.40	22
Taxation.....		
4.1.2 Extent and effect of taxation.....	29.45	89
4.2 Lifestyle	69.60	14
Quality of life.....		
4.2.1 Environmental performance.....	82.42	6
4.2.2 Property stolen.....	68.48	58
4.2.3 Safety at night.....	71.66	46
Services.....		
4.2.4 Physicians density.....	55.84	22
5 Labour and Vocational	56.12	20
5.1 Employable skills	59.69	15
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	53.14	28
Technical professions.....		
5.1.2 Technicians and associate professionals.....	96.94	3
Youth employment.....		
5.1.3 Youth employment.....	28.98	67
5.2 Labour productivity	52.55	22
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	56.11	11
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	49.00	55
6 Global Knowledge	56.33	16
6.1 Higher skills and competencies	47.86	22
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	55.58	29
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	41.57	27
6.1.3 Professionals.....	50.30	25
6.1.4 Researchers.....	43.97	19
6.2 Talent impact	64.80	6
Innovation.....		
6.2.1 Innovation output.....	54.27	25
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	75.32	6

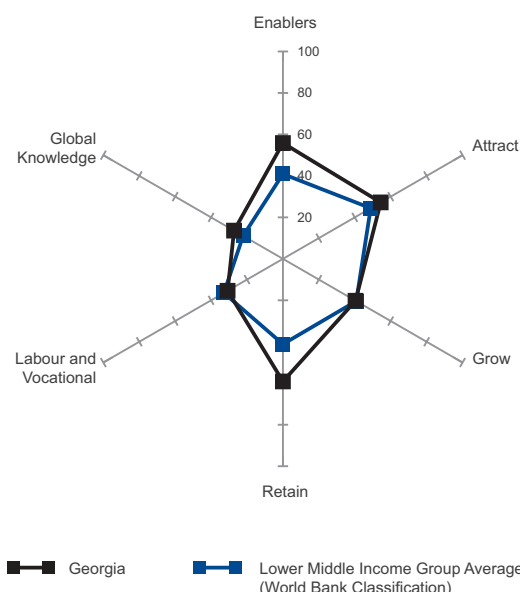
GEORGIA

RANK
(out of 103)

50

Population (millions) **4.36**
GDP per capita (PPP\$) **5,929.75**
GDP (US\$ billions) **15.93**

Global Talent Competitiveness
Index Score **44.64**
Global Talent Competitiveness
Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	55.84	40
1.1 Regulatory landscape	61.94	47
Government efficiency		
1.1.1 Government effectiveness.....	49.20	41
1.1.2 Political stability.....	47.74	83
FDI climate		
1.1.3 Starting a foreign business.....	88.87	5
1.2 Market landscape	42.78	53
Competition climate		
1.2.1 Intensity of local competition.....	47.81	93
Innovation climate		
1.2.2 Venture capital availability.....	20.56	79
1.2.3 Firm-level technology absorption.....	50.62	92
1.2.4 R&D expenditure.....	3.54	78
Connectivity		
1.2.5 ICT access.....	40.97	62
Ease of doing business		
1.2.6 Ease of doing business.....	93.20	8
1.3 Business landscape	62.80	29
Labour market flexibility		
1.3.1 Labour market flexibility.....	76.94	16
Ownership and governance		
1.3.2 Reliance on professional management.....	48.66	67
2 Attract	54.44	41
2.1 External openness	44.51	47
FDI		
2.1.1 FDI inflow.....	51.48	16
Brain gain		
2.1.2 Qualified labour inflow.....	33.16	76
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	48.88	89
2.2 Internal openness	64.37	40
Diversity		
2.2.1 Tolerance of minorities.....	85.98	26
2.2.2 Tolerance of immigrants.....	62.75	63
Social mobility		
2.2.3 Social mobility.....	n/a	n/a
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	8.74	96
3 Grow	40.41	81
3.1 Formal education	30.81	74
Education climate		
3.1.1 Pupil-teacher ratio.....	97.44	3
3.1.2 Technical/vocational enrolment.....	3.07	91
3.1.3 Tertiary enrolment.....	26.36	70
Performance of education system		
3.1.4 Reading, maths and science scores.....	20.08	62
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	7.11	54

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	43.35	81
Further education and training climate		
3.2.1 Quality of management schools.....	42.90	85
3.2.2 Extent of staff training.....	43.81	76
3.3 Access to growth opportunities	47.07	71
Networks		
3.3.1 Use of virtual social networks.....	76.84	51
3.3.2 State of cluster development.....	33.82	90
Research quality		
3.3.3 Quality of scientific research institutions.....	26.20	94
Voice		
3.3.4 Voicing concern to officials.....	51.42	39
4 Retain	59.12	38
4.1 Sustainability	39.32	70
Social protection		
4.1.1 Pension system.....	29.73	60
Taxation		
4.1.2 Extent and effect of taxation.....	48.91	26
4.2 Lifestyle	78.93	3
Quality of life		
4.2.1 Environmental performance.....	54.63	43
4.2.2 Property stolen.....	83.89	9
4.2.3 Safety at night.....	100.00	1
Services		
4.2.4 Physicians density.....	77.19	3
5 Labour and Vocational	30.80	82
5.1 Employable skills	30.50	81
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	50.14	31
Technical professions		
5.1.2 Technicians and associate professionals.....	24.49	71
Youth employment		
5.1.3 Youth employment.....	16.88	83
5.2 Labour productivity	31.10	75
Productivity per employee		
5.2.1 Labour productivity per employee.....	10.77	72
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	51.43	45
6 Global Knowledge	27.22	61
6.1 Higher skills and competencies	33.57	42
Educated workforce		
6.1.1 Tertiary-educated workforce.....	58.77	24
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	20.22	64
6.1.3 Professionals.....	38.41	45
6.1.4 Researchers.....	16.89	39
6.2 Talent impact	20.87	81
Innovation		
6.2.1 Innovation output.....	20.87	71
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

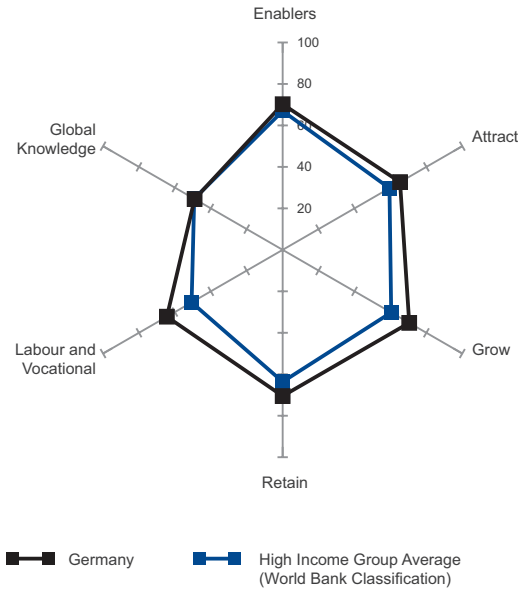
GERMANY

RANK
(out of 103)

16

Population (millions) **82.76**
 GDP per capita (PPP\$) **39,028.39**
 GDP (US\$ billions) **3,400.58**

Global Talent Competitiveness Index Score **65.00**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	70.23	20
1.1 Regulatory landscape	83.01	15
Government efficiency.....		
1.1.1 Government effectiveness.....	78.71	16
1.1.2 Political stability.....	87.31	26
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	73.69	9
Competition climate.....		
1.2.1 Intensity of local competition.....	79.77	7
Innovation climate.....		
1.2.2 Venture capital availability.....	35.98	28
1.2.3 Firm-level technology absorption.....	81.27	15
1.2.4 R&D expenditure.....	63.88	9
Connectivity.....		
1.2.5 ICT access.....	96.83	4
Ease of doing business.....		
1.2.6 Ease of doing business.....	84.40	17
1.3 Business landscape	53.99	50
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	32.01	81
Ownership and governance.....		
1.3.2 Reliance on professional management.....	75.98	14
2 Attract	65.35	19
2.1 External openness	46.72	43
FDI.....		
2.1.1 FDI inflow.....	9.88	84
Brain gain.....		
2.1.2 Qualified labour inflow.....	61.23	19
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	69.04	32
2.2 Internal openness	83.98	9
Diversity.....		
2.2.1 Tolerance of minorities.....	95.22	9
2.2.2 Tolerance of immigrants.....	89.54	16
Social mobility.....		
2.2.3 Social mobility.....	75.59	18
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	98.90	51
2.2.5 Female parliamentarians.....	60.66	15
3 Grow	70.45	9
3.1 Formal education	68.27	6
Education climate.....		
3.1.1 Pupil-teacher ratio.....	82.27	44
3.1.2 Technical/vocational enrolment.....	42.93	31
3.1.3 Tertiary enrolment.....	n/a	n/a
Performance of education system.....		
3.1.4 Reading, math and science scores.....	73.53	12
Top universities.....		
3.1.5 QS university ranking.....	74.35	7
International students.....		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	66.46	17
Further education and training climate.....		
3.2.1 Quality of management schools.....	65.75	28
3.2.2 Extent of staff training.....	67.16	13
3.3 Access to growth opportunities	76.63	5
Networks.....		
3.3.1 Use of virtual social networks.....	79.49	40
3.3.2 State of cluster development.....	68.98	7
Research quality.....		
3.3.3 Quality of scientific research institutions.....	76.90	10
Voice.....		
3.3.4 Voicing concern to officials.....	81.13	4
4 Retain	70.50	6
4.1 Sustainability	66.08	16
Social protection.....		
4.1.1 Pension system.....	90.95	23
Taxation.....		
4.1.2 Extent and effect of taxation.....	41.21	51
4.2 Lifestyle	74.92	7
Quality of life.....		
4.2.1 Environmental performance.....	77.65	11
4.2.2 Property stolen.....	76.54	27
4.2.3 Safety at night.....	87.17	14
Services.....		
4.2.4 Physicians density.....	58.34	19
5 Labour and Vocational	64.46	3
5.1 Employable skills	76.06	3
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	72.29	11
Technical professions.....		
5.1.2 Technicians and associate professionals.....	97.45	2
Youth employment.....		
5.1.3 Youth employment.....	58.44	25
5.2 Labour productivity	52.86	20
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	51.20	19
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	54.53	35
6 Global Knowledge	49.02	25
6.1 Higher skills and competencies	47.15	23
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	55.13	30
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	27.53	52
6.1.3 Professionals.....	52.13	20
6.1.4 Researchers.....	53.81	11
6.2 Talent impact.....	50.89	28
Innovation.....		
6.2.1 Innovation output.....	71.92	7
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	29.87	59

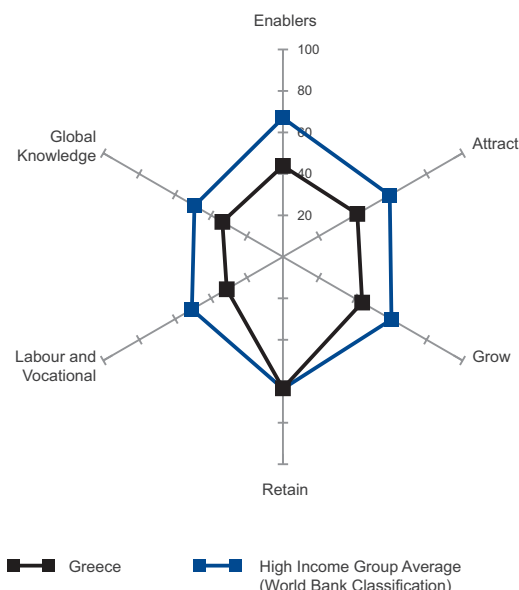
GREECE

RANK
(out of 103)

56

Population (millions) **11.12**
 GDP per capita (PPP\$) **24,505.04**
 GDP (US\$ billions) **249.20**

Global Talent Competitiveness Index Score **42.96**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	43.84	72
1.1 Regulatory landscape	59.45	49
Government efficiency.....		
1.1.1 Government effectiveness.....	47.20	43
1.1.2 Political stability.....	64.53	57
FDI climate.....		
1.1.3 Starting a foreign business.....	66.62	31
1.2 Market landscape	42.07	57
Competition climate.....		
1.2.1 Intensity of local competition.....	57.08	73
Innovation climate.....		
1.2.2 Venture capital availability.....	13.77	99
1.2.3 Firm-level technology absorption.....	57.25	75
1.2.4 R&D expenditure.....	13.26	48
Connectivity.....		
1.2.5 ICT access.....	67.86	35
Ease of doing business.....		
1.2.6 Ease of doing business.....	43.20	59
1.3 Business landscape	30.01	96
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	13.74	98
Ownership and governance.....		
1.3.2 Reliance on professional management.....	46.29	77
2 Attract	41.40	92
2.1 External openness	28.61	95
FDI.....		
2.1.1 FDI inflow.....	6.04	93
Brain gain.....		
2.1.2 Qualified labour inflow.....	23.64	89
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	56.16	66
2.2 Internal openness	54.19	76
Diversity.....		
2.2.1 Tolerance of minorities.....	47.17	95
2.2.2 Tolerance of immigrants.....	49.73	89
Social mobility.....		
2.2.3 Social mobility.....	45.74	76
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	99.87	49
2.2.5 Female parliamentarians.....	28.46	57
3 Grow	44.11	63
3.1 Formal education	51.76	35
Education climate.....		
3.1.1 Pupil-teacher ratio.....	96.54	5
3.1.2 Technical/vocational enrolment.....	32.94	45
3.1.3 Tertiary enrolment.....	86.16	5
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	58.78	35
Top universities.....		
3.1.5 QS university ranking.....	16.87	44
International students.....		
3.1.6 International students inflow.....	19.23	30

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	41.85	84
Further education and training climate.....		
3.2.1 Quality of management schools.....	44.60	81
3.2.2 Extent of staff training.....	39.09	87
3.3 Access to growth opportunities	38.72	95
Networks.....		
3.3.1 Use of virtual social networks.....	70.69	74
3.3.2 State of cluster development.....	30.99	94
Research quality.....		
3.3.3 Quality of scientific research institutions.....	38.82	77
Voice.....		
3.3.4 Voicing concern to officials.....	14.39	98
4 Retain	63.40	25
4.1 Sustainability	56.00	42
Social protection.....		
4.1.1 Pension system.....	89.99	25
Taxation.....		
4.1.2 Extent and effect of taxation.....	22.00	98
4.2 Lifestyle	70.80	12
Quality of life.....		
4.2.1 Environmental performance.....	61.94	31
4.2.2 Property stolen.....	64.69	62
4.2.3 Safety at night.....	56.58	67
Services.....		
4.2.4 Physicians density.....	100.00	1
5 Labour and Vocational	31.27	80
5.1 Employable skills	25.34	93
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	38.00	48
Technical professions.....		
5.1.2 Technicians and associate professionals.....	34.18	59
Youth employment.....		
5.1.3 Youth employment.....	3.82	99
5.2 Labour productivity	37.21	54
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	41.55	27
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	32.87	97
6 Global Knowledge	33.72	51
6.1 Higher skills and competencies	38.45	35
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	45.56	38
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	23.60	57
6.1.3 Professionals.....	53.35	18
6.1.4 Researchers.....	31.31	26
6.2 Talent impact	28.98	65
Innovation.....		
6.2.1 Innovation output.....	20.30	72
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	37.66	45

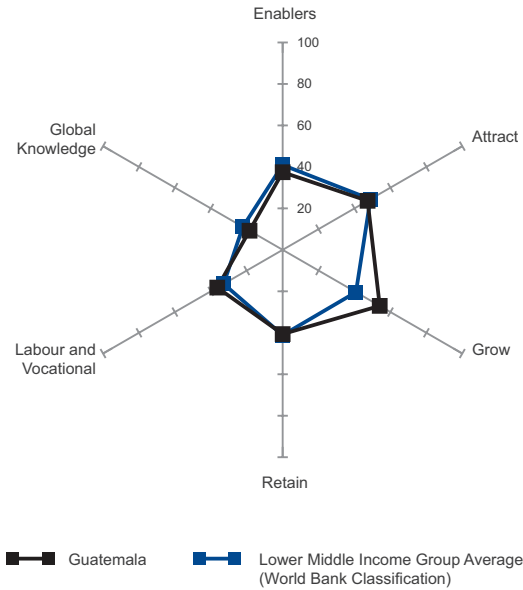
GUATEMALA

RANK
(out of 103)

75

Population (millions) **15.14**
 GDP per capita (PPP\$) **5,208.96**
 GDP (US\$ billions) **49.88**

Global Talent Competitiveness Index Score **39.04**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	37.44	91
1.1 Regulatory landscape	37.39	88
Government efficiency.....		
1.1.1 Government effectiveness.....	12.02	93
1.1.2 Political stability.....	48.34	81
FDI climate.....		
1.1.3 Starting a foreign business.....	51.83	48
1.2 Market landscape	40.07	68
Competition climate.....		
1.2.1 Intensity of local competition.....	68.52	41
Innovation climate.....		
1.2.2 Venture capital availability.....	27.78	53
1.2.3 Firm-level technology absorption.....	69.87	40
1.2.4 R&D expenditure.....	0.77	92
Connectivity.....		
1.2.5 ICT access.....	n/a	n/a
Ease of doing business.....		
1.2.6 Ease of doing business.....	33.40	69
1.3 Business landscape	34.85	92
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	17.71	92
Ownership and governance.....		
1.3.2 Reliance on professional management.....	51.99	57
2 Attract	47.29	74
2.1 External openness	42.56	56
FDI.....		
2.1.1 FDI inflow.....	16.91	62
Brain gain.....		
2.1.2 Qualified labour inflow.....	45.76	41
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	65.01	44
2.2 Internal openness	52.02	85
Diversity.....		
2.2.1 Tolerance of minorities.....	76.30	49
2.2.2 Tolerance of immigrants.....	52.40	85
Social mobility.....		
2.2.3 Social mobility.....	60.40	36
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	n/a	n/a
2.2.5 Female parliamentarians.....	18.98	74
3 Grow	54.04	34
3.1 Formal education	50.52	38
Education climate.....		
3.1.1 Pupil-teacher ratio.....	79.21	51
3.1.2 Technical/vocational enrolment.....	58.28	22
3.1.3 Tertiary enrolment.....	14.07	82
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	57.68	35
Further education and training climate.....		
3.2.1 Quality of management schools.....	60.12	39
3.2.2 Extent of staff training.....	55.23	32
3.3 Access to growth opportunities	53.91	50
Networks.....		
3.3.1 Use of virtual social networks.....	72.46	68
3.3.2 State of cluster development.....	51.11	38
Research quality.....		
3.3.3 Quality of scientific research institutions.....	35.71	86
Voice.....		
3.3.4 Voicing concern to officials.....	56.37	28
4 Retain	40.62	73
4.1 Sustainability	32.11	82
Social protection.....		
4.1.1 Pension system.....	20.22	73
Taxation.....		
4.1.2 Extent and effect of taxation.....	43.99	39
4.2 Lifestyle	49.14	67
Quality of life.....		
4.2.1 Environmental performance.....	43.29	64
4.2.2 Property stolen.....	59.00	70
4.2.3 Safety at night.....	45.13	91
Services.....		
4.2.4 Physicians density.....	n/a	n/a
5 Labour and Vocational	36.40	62
5.1 Employable skills	41.23	52
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	10.00	84
Technical professions.....		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment.....		
5.1.3 Youth employment.....	72.45	12
5.2 Labour productivity	31.58	72
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	12.44	68
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	50.72	50
6 Global Knowledge	18.45	86
6.1 Higher skills and competencies	4.00	96
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	7.74	81
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	n/a	n/a
6.1.3 Professionals.....	n/a	n/a
6.1.4 Researchers.....	0.26	93
6.2 Talent impact	32.90	58
Innovation.....		
6.2.1 Innovation output.....	13.85	86
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	51.95	20

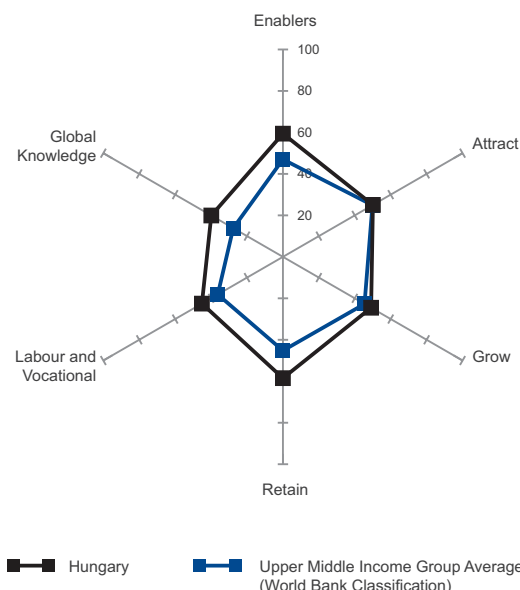
HUNGARY

RANK
(out of 103)

40

Population (millions) **9.97**
GDP per capita (PPP\$) **19,637.59**
GDP (US\$ billions) **126.87**

Global Talent Competitiveness
Index Score **50.34**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	59.41	31
1.1 Regulatory landscape	69.24	35
Government efficiency		
1.1.1 Government effectiveness.....	53.98	35
1.1.2 Political stability.....	84.49	28
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	50.53	38
Competition climate		
1.2.1 Intensity of local competition.....	71.23	34
Innovation climate		
1.2.2 Venture capital availability.....	18.31	89
1.2.3 Firm-level technology absorption.....	63.99	54
1.2.4 R&D expenditure.....	26.00	31
Connectivity		
1.2.5 ICT access.....	66.76	37
Ease of doing business		
1.2.6 Ease of doing business.....	56.90	45
1.3 Business landscape	58.45	40
Labour market flexibility		
1.3.1 Labour market flexibility.....	68.06	35
Ownership and governance		
1.3.2 Reliance on professional management.....	48.84	65
2 Attract	50.08	61
2.1 External openness	41.60	62
FDI		
2.1.1 FDI inflow.....	26.32	41
Brain gain		
2.1.2 Qualified labour inflow.....	21.91	93
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	76.57	14
2.2 Internal openness	58.57	61
Diversity		
2.2.1 Tolerance of minorities.....	70.87	59
2.2.2 Tolerance of immigrants.....	71.82	44
Social mobility		
2.2.3 Social mobility.....	38.20	91
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	11.94	87
3 Grow	49.09	48
3.1 Formal education	47.10	43
Education climate		
3.1.1 Pupil-teacher ratio.....	89.97	26
3.1.2 Technical/vocational enrolment.....	33.35	44
3.1.3 Tertiary enrolment.....	57.22	30
Performance of education system		
3.1.4 Reading, maths and science scores.....	67.78	23
Top universities		
3.1.5 QS university ranking.....	15.81	46
International students		
3.1.6 International students inflow.....	18.45	32

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	46.10	74
Further education and training climate		
3.2.1 Quality of management schools.....	51.34	63
3.2.2 Extent of staff training.....	54.08	84
3.3 Access to growth opportunities	54	49
Networks		
3.3.1 Use of virtual social networks.....	72.67	67
3.3.2 State of cluster development.....	36.37	81
Research quality		
3.3.3 Quality of scientific research institutions.....	68.84	19
Voice		
3.3.4 Voicing concern to officials.....	38.44	65
4 Retain	58.50	40
4.1 Sustainability	60.75	28
Social protection		
4.1.1 Pension system.....	96.39	11
Taxation		
4.1.2 Extent and effect of taxation.....	25.10	94
4.2 Lifestyle	56.25	49
Quality of life		
4.2.1 Environmental performance.....	55.27	41
4.2.2 Property stolen.....	57.35	74
4.2.3 Safety at night.....	63.32	59
Services		
4.2.4 Physicians density.....	49.08	29
5 Labour and Vocational	45.11	34
5.1 Employable skills	51.60	26
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	78.29	8
Technical professions		
5.1.2 Technicians and associate professionals.....	66.33	26
Youth employment		
5.1.3 Youth employment.....	10.19	93
5.2 Labour productivity	38.61	48
Productivity per employee		
5.2.1 Labour productivity per employee.....	29.39	39
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	47.83	58
6 Global Knowledge	39.88	38
6.1 Higher skills and competencies	38.76	34
Educated workforce		
6.1.1 Tertiary-educated workforce.....	45.56	38
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	32.02	41
6.1.3 Professionals.....	47.56	28
6.1.4 Researchers.....	29.90	27
6.2 Talent impact	41.00	45
Innovation		
6.2.1 Innovation output.....	49.53	28
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	32.47	53

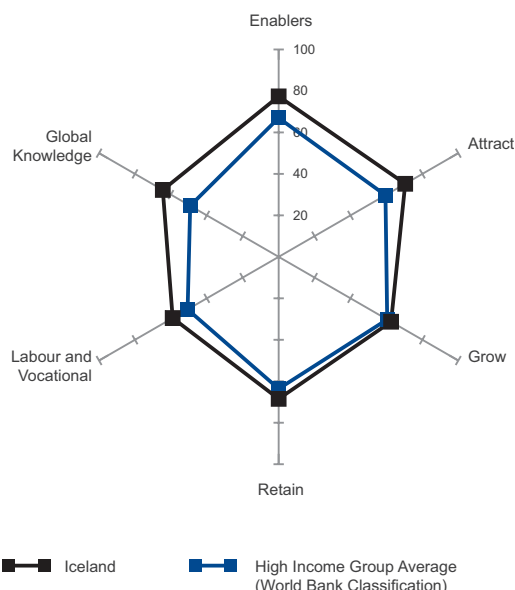
ICELAND

RANK
(out of 103)

10

Population (millions) **0.33**
 GDP per capita (PPP\$) **39,223.96**
 GDP (US\$ billions) **13.65**

Global Talent Competitiveness Index Score **67.07**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	77.39	12
1.1 Regulatory landscape	87.91	11
Government efficiency.....		
1.1.1 Government effectiveness.....	79.70	14
1.1.2 Political stability.....	96.12	7
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	70.48	16
Competition climate.....		
1.2.1 Intensity of local competition.....	60.63	68
Innovation climate.....		
1.2.2 Venture capital availability.....	27.47	54
1.2.3 Firm-level technology absorption.....	87.71	2
1.2.4 R&D expenditure.....	59.88	11
Connectivity.....		
1.2.5 ICT access.....	98.90	3
Ease of doing business.....		
1.2.6 Ease of doing business.....	88.30	13
1.3 Business landscape	73.77	14
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	75.46	19
Ownership and governance.....		
1.3.2 Reliance on professional management.....	72.09	21
2 Attract	70.45	8
2.1 External openness	49.61	31
FDI.....		
2.1.1 FDI inflow.....	54.59	13
Brain gain.....		
2.1.2 Qualified labour inflow.....	59.84	21
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	34.41	102
2.2 Internal openness	91.28	2
Diversity.....		
2.2.1 Tolerance of minorities.....	95.54	8
2.2.2 Tolerance of immigrants.....	94.34	8
Social mobility.....		
2.2.3 Social mobility.....	85.08	6
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	81.45	6
3 Grow	62.59	20
3.1 Formal education	53.26	30
Education climate.....		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	45.30	29
3.1.3 Tertiary enrolment.....	75.26	9
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	69.84	15
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	22.65	25

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	66.66	16
Further education and training climate.....		
3.2.1 Quality of management schools.....	70.82	17
3.2.2 Extent of staff training.....	62.50	20
3.3 Access to growth opportunities	67.84	17
Networks.....		
3.3.1 Use of virtual social networks.....	93.56	1
3.3.2 State of cluster development.....	51.67	35
Research quality.....		
3.3.3 Quality of scientific research institutions.....	66.92	22
Voice.....		
3.3.4 Voicing concern to officials.....	59.20	21
4 Retain	68.50	11
4.1 Sustainability	61.77	24
Social protection.....		
4.1.1 Pension system.....	90.81	24
Taxation.....		
4.1.2 Extent and effect of taxation.....	32.72	84
4.2 Lifestyle	75.23	6
Quality of life.....		
4.2.1 Environmental performance.....	76.21	13
4.2.2 Property stolen.....	77.49	24
4.2.3 Safety at night.....	86.74	15
Services.....		
4.2.4 Physicians density.....	60.48	14
5 Labour and Vocational	59.01	12
5.1 Employable skills	64.83	10
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	40.14	46
Technical professions.....		
5.1.2 Technicians and associate professionals.....	78.06	13
Youth employment.....		
5.1.3 Youth employment.....	76.27	9
5.2 Labour productivity	53.20	17
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	55.50	13
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	50.90	48
6 Global Knowledge	64.50	3
6.1 Higher skills and competencies	70.66	1
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	62.87	22
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	50.56	12
6.1.3 Professionals.....	69.21	5
6.1.4 Researchers.....	100.00	1
6.2 Talent impact	58.34	14
Innovation.....		
6.2.1 Innovation output.....	66.03	12
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	50.65	22

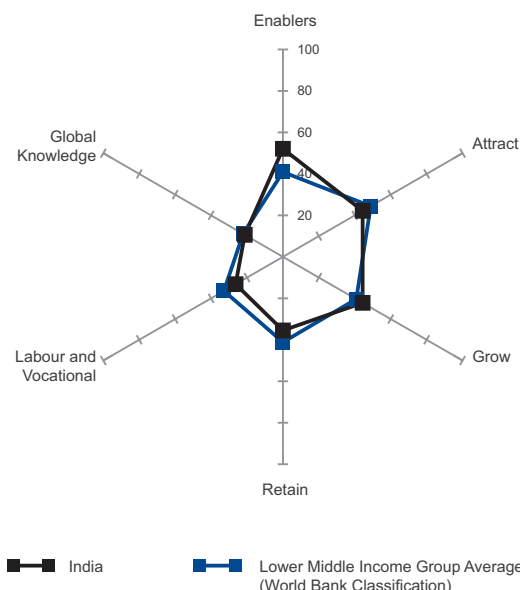
INDIA

RANK
(out of 103)

83

Population (millions) **1,238.70**
GDP per capita (PPP\$) **3,829.70**
GDP (US\$ billions) **1,824.83**

Global Talent Competitiveness
Index Score **37.32**
Global Talent Competitiveness
Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	52.10	54
1.1 Regulatory landscape	48.83	68
Government efficiency.....		
1.1.1 Government effectiveness.....	32.07	60
1.1.2 Political stability.....	36.68	91
FDI climate.....		
1.1.3 Starting a foreign business.....	77.75	20
1.2 Market landscape	37.29	75
Competition climate.....		
1.2.1 Intensity of local competition.....	72.95	30
Innovation climate.....		
1.2.2 Venture capital availability.....	39.96	21
1.2.3 Firm-level technology absorption.....	70.64	35
1.2.4 R&D expenditure.....	16.81	40
Connectivity.....		
1.2.5 ICT access.....	11.59	89
Ease of doing business.....		
1.2.6 Ease of doing business.....	11.80	91
1.3 Business landscape	70.19	18
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	80.71	10
Ownership and governance.....		
1.3.2 Reliance on professional management.....	59.67	36
2 Attract	44.38	84
2.1 External openness	42.96	54
FDI.....		
2.1.1 FDI inflow.....	13.52	74
Brain gain.....		
2.1.2 Qualified labour inflow.....	57.75	24
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	57.61	59
2.2 Internal openness	45.80	93
Diversity.....		
2.2.1 Tolerance of minorities.....	87.93	23
2.2.2 Tolerance of immigrants.....	44.29	92
Social mobility.....		
2.2.3 Social mobility.....	60.65	35
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	20.84	90
2.2.5 Female parliamentarians.....	15.29	80
3 Grow	44.37	62
3.1 Formal education	18.24	93
Education climate.....		
3.1.1 Pupil-teacher ratio.....	46.97	77
3.1.2 Technical/vocational enrolment.....	1.72	95
3.1.3 Tertiary enrolment.....	14.11	81
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	4.41	66
Top universities.....		
3.1.5 QS university ranking.....	42.23	26
International students.....		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	58.64	32
Further education and training climate.....		
3.2.1 Quality of management schools.....	65.43	29
3.2.2 Extent of staff training.....	51.85	43
3.3 Access to growth opportunities	56.22	42
Networks.....		
3.3.1 Use of virtual social networks.....	69.00	79
3.3.2 State of cluster development.....	58.35	26
Research quality.....		
3.3.3 Quality of scientific research institutions.....	57.42	36
Voice.....		
3.3.4 Voicing concern to officials.....	40.09	58
4 Retain	35.49	89
4.1 Sustainability	28.36	90
Social protection.....		
4.1.1 Pension system.....	9.63	78
Taxation.....		
4.1.2 Extent and effect of taxation.....	47.09	32
4.2 Lifestyle	42.61	82
Quality of life.....		
4.2.1 Environmental performance.....	7.52	96
4.2.2 Property stolen.....	77.01	26
4.2.3 Safety at night.....	75.51	34
Services.....		
4.2.4 Physicians density.....	10.41	80
5 Labour and Vocational	26.36	96
5.1 Employable skills	22.52	99
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions.....		
5.1.2 Technicians and associate professionals.....	9.69	86
Youth employment.....		
5.1.3 Youth employment.....	35.35	58
5.2 Labour productivity	30.20	77
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	6.09	81
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	54.30	37
6 Global Knowledge	21.23	77
6.1 Higher skills and competencies	14.28	83
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	31.46	43
6.1.3 Professionals.....	10.98	81
6.1.4 Researchers.....	0.39	89
6.2 Talent impact	28.19	67
Innovation.....		
6.2.1 Innovation output.....	40.80	39
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	15.58	70

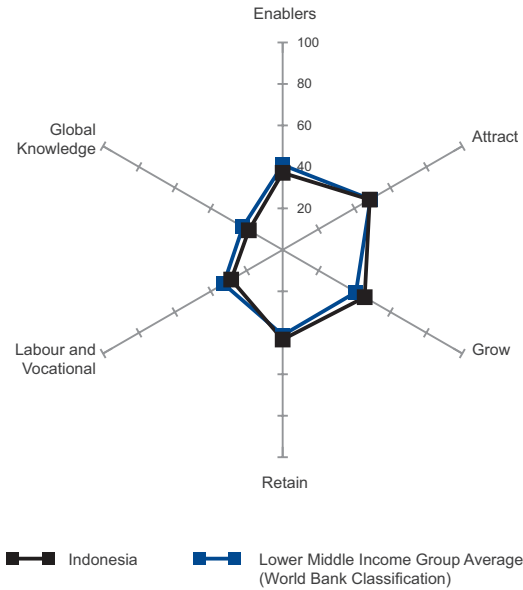
INDONESIA

RANK
(out of 103)

84

Population (millions) **247.27**
 GDP per capita (PPP\$) **4,977.09**
 GDP (US\$ billions) **878.20**

Global Talent Competitiveness Index Score **37.00**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	37.14	92
1.1 Regulatory landscape	38.71	84
Government efficiency		
1.1.1 Government effectiveness.....	25.73	72
1.1.2 Political stability.....	46.02	84
FDI climate		
1.1.3 Starting a foreign business.....	44.37	56
1.2 Market landscape	34.26	82
Competition climate		
1.2.1 Intensity of local competition.....	56.99	74
Innovation climate		
1.2.2 Venture capital availability.....	42.73	17
1.2.3 Firm-level technology absorption.....	65.80	48
1.2.4 R&D expenditure.....	1.41	88
Connectivity		
1.2.5 ICT access.....	23.86	81
Ease of doing business		
1.2.6 Ease of doing business.....	14.80	88
1.3 Business landscape	38.46	87
Labour market flexibility		
1.3.1 Labour market flexibility.....	19.39	90
Ownership and governance		
1.3.2 Reliance on professional management.....	57.53	40
2 Attract	48.46	70
2.1 External openness	42.74	55
FDI		
2.1.1 FDI inflow.....	18.02	59
Brain gain		
2.1.2 Qualified labour inflow.....	49.93	34
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	60.26	53
2.2 Internal openness	54.18	77
Diversity		
2.2.1 Tolerance of minorities.....	71.96	58
2.2.2 Tolerance of immigrants.....	40.88	96
Social mobility		
2.2.3 Social mobility.....	52.01	58
Gender mobility		
2.2.4 Female professionals and technical workers.....	78.53	70
2.2.5 Female parliamentarians.....	27.53	58
3 Grow	45.66	58
3.1 Formal education	31.61	72
Education climate		
3.1.1 Pupil-teacher ratio.....	84.34	41
3.1.2 Technical/vocational enrolment.....	38.00	35
3.1.3 Tertiary enrolment.....	19.40	77
Performance of education system		
3.1.4 Reading, maths and science scores.....	23.93	60
Top universities		
3.1.5 QS university ranking.....	23.97	35
International students		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	54.20	44
Further education and training climate		
3.2.1 Quality of management schools.....	53.07	58
3.2.2 Extent of staff training.....	55.33	31
3.3 Access to growth opportunities	51.19	56
Networks		
3.3.1 Use of virtual social networks.....	78.54	44
3.3.2 State of cluster development.....	54.20	29
Research quality		
3.3.3 Quality of scientific research institutions.....	47.95	51
Voice		
3.3.4 Voicing concern to officials.....	24.06	89
4 Retain	43.26	70
4.1 Sustainability	30.68	84
Social protection		
4.1.1 Pension system.....	10.40	77
Taxation		
4.1.2 Extent and effect of taxation.....	50.96	20
4.2 Lifestyle	55.83	51
Quality of life		
4.2.1 Environmental performance.....	44.23	62
4.2.2 Property stolen.....	80.33	15
4.2.3 Safety at night.....	94.22	5
Services		
4.2.4 Physicians density.....	4.55	88
5 Labour and Vocational	28.66	89
5.1 Employable skills	26.01	90
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	28.71	59
Technical professions		
5.1.2 Technicians and associate professionals.....	4.08	89
Youth employment		
5.1.3 Youth employment.....	45.22	44
5.2 Labour productivity	31.32	73
Productivity per employee		
5.2.1 Labour productivity per employee.....	6.65	80
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	55.98	29
6 Global Knowledge	18.84	83
6.1 Higher skills and competencies	9.65	88
Educated workforce		
6.1.1 Tertiary-educated workforce.....	17.08	75
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	9.55	82
6.1.3 Professionals.....	10.98	81
6.1.4 Researchers.....	1.00	81
6.2 Talent impact	28.03	69
Innovation		
6.2.1 Innovation output.....	18.41	79
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	37.66	45

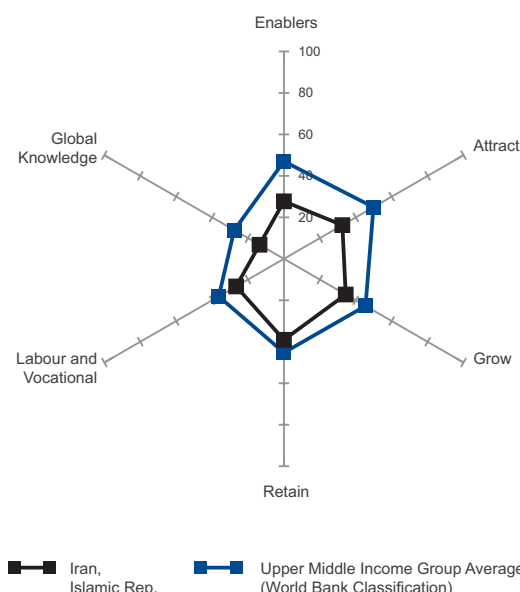
IRAN, ISLAMIC REP.

RANK
(out of 103)

101

Population (millions) **76.37**
GDP per capita (PPP\$) **13,127.14**
GDP (US\$ billions) **548.90**

Global Talent Competitiveness
Index Score **28.98**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	27.74	101
1.1 Regulatory landscape	24.79	99
Government efficiency		
1.1.1 Government effectiveness.....	19.13	81
1.1.2 Political stability.....	30.46	99
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	30.51	92
Competition climate		
1.2.1 Intensity of local competition.....	54.26	81
Innovation climate		
1.2.2 Venture capital availability.....	14.98	96
1.2.3 Firm-level technology absorption.....	51.37	90
1.2.4 R&D expenditure.....	17.51	39
Connectivity		
1.2.5 ICT access.....	39.03	64
Ease of doing business		
1.2.6 Ease of doing business.....	5.90	97
1.3 Business landscape	27.93	101
Labour market flexibility		
1.3.1 Labour market flexibility.....	14.06	97
Ownership and governance		
1.3.2 Reliance on professional management.....	41.79	92
2 Attract	32.52	101
2.1 External openness	20.00	102
FDI		
2.1.1 FDI inflow.....	8.05	88
Brain gain		
2.1.2 Qualified labour inflow.....	31.30	79
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	20.65	103
2.2 Internal openness	45.04	95
Diversity		
2.2.1 Tolerance of minorities.....	68.91	63
2.2.2 Tolerance of immigrants.....	58.80	78
Social mobility		
2.2.3 Social mobility.....	51.50	62
Gender mobility		
2.2.4 Female professionals and technical workers.....	42.41	84
2.2.5 Female parliamentarians.....	3.56	100
3 Grow	34.40	96
3.1 Formal education	18.95	91
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	23.39	60
3.1.3 Tertiary enrolment.....	45.06	46
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	7.37	54
International students		
3.1.6 International students inflow.....	0.00	72

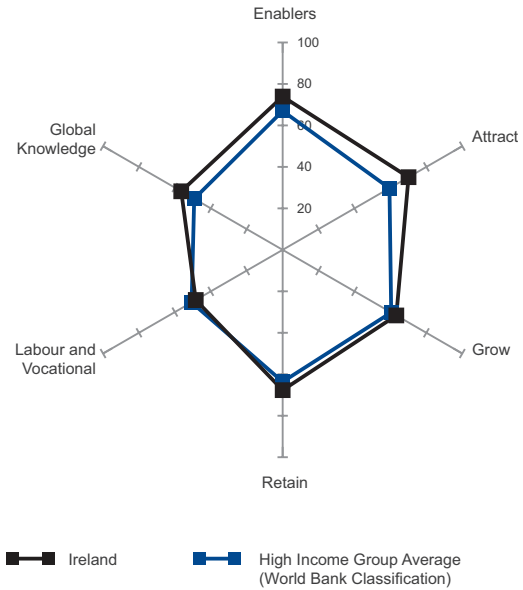
VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	40.67	91
Further education and training climate		
3.2.1 Quality of management schools.....	47.53	71
3.2.2 Extent of staff training.....	33.80	98
3.3 Access to growth opportunities	43.58	84
Networks		
3.3.1 Use of virtual social networks.....	35.13	103
3.3.2 State of cluster development.....	40.46	68
Research quality		
3.3.3 Quality of scientific research institutions.....	54.13	37
Voice		
3.3.4 Voicing concern to officials.....	44.58	51
4 Retain	39.04	81
4.1 Sustainability	41.53	61
Social protection		
4.1.1 Pension system.....	n/a	n/a
Taxation		
4.1.2 Extent and effect of taxation.....	41.53	48
4.2 Lifestyle	36.54	92
Quality of life		
4.2.1 Environmental performance.....	22.38	90
4.2.2 Property stolen.....	49.05	86
4.2.3 Safety at night.....	60.43	63
Services		
4.2.4 Physicians density.....	14.32	77
5 Labour and Vocational	26.61	94
5.1 Employable skills	23.31	96
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	34.00	51
Technical professions		
5.1.2 Technicians and associate professionals.....	18.88	77
Youth employment		
5.1.3 Youth employment.....	17.04	80
5.2 Labour productivity	29.92	80
Productivity per employee		
5.2.1 Labour productivity per employee.....	23.89	46
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	35.95	93
6 Global Knowledge	13.59	90
6.1 Higher skills and competencies	22.43	64
Educated workforce		
6.1.1 Tertiary-educated workforce.....	42.14	43
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	13.48	75
6.1.3 Professionals.....	23.17	64
6.1.4 Researchers.....	10.92	50
6.2 Talent impact	4.74	100
Innovation		
6.2.1 Innovation output.....	9.49	94
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	0.00	77

IRELAND

RANK
(out of 103)

18

Population (millions)	4.58
GDP per capita (PPP\$)	41,920.73
GDP (US\$ billions)	210.42
Global Talent Competitiveness Index Score	63.30
Global Talent Competitiveness Index Score (Income Group Average)	58.40



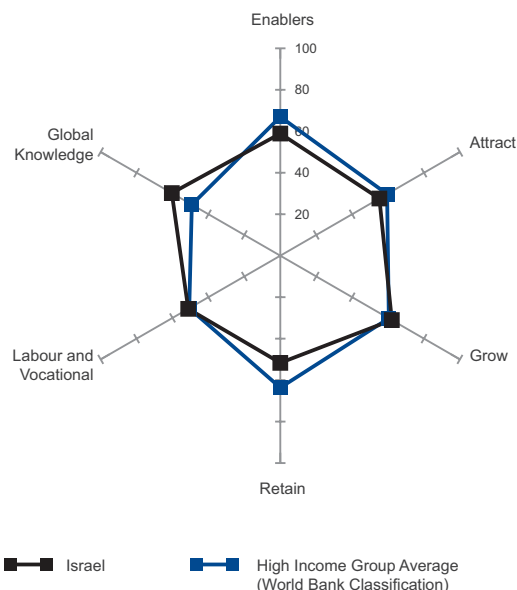
VARIABLE	SCORE	RANK/103
1 Enablers	73.92	17
1.1 Regulatory landscape	78.26	24
Government efficiency		
1.1.1 Government effectiveness.....	75.35	18
1.1.2 Political stability.....	90.57	17
FDI climate		
1.1.3 Starting a foreign business.....	68.87	29
1.2 Market landscape	63.23	25
Competition climate		
1.2.1 Intensity of local competition.....	70.42	36
Innovation climate		
1.2.2 Venture capital availability.....	22.93	70
1.2.3 Firm-level technology absorption.....	75.52	29
1.2.4 R&D expenditure.....	40.45	19
Connectivity		
1.2.5 ICT access.....	82.76	19
Ease of doing business		
1.2.6 Ease of doing business.....	87.30	14
1.3 Business landscape	80.28	8
Labour market flexibility		
1.3.1 Labour market flexibility.....	79.43	12
Ownership and governance		
1.3.2 Reliance on professional management.....	81.14	12
2 Attract	70.07	10
2.1 External openness	62.18	9
FDI		
2.1.1 FDI inflow.....	46.00	18
Brain gain		
2.1.2 Qualified labour inflow.....	60.04	20
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	80.51	6
2.2 Internal openness	77.96	15
Diversity		
2.2.1 Tolerance of minorities.....	96.63	6
2.2.2 Tolerance of immigrants.....	94.45	7
Social mobility		
2.2.3 Social mobility.....	76.69	17
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	22.00	69
3 Grow	63.28	18
3.1 Formal education	51.08	37
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	33.73	42
3.1.3 Tertiary enrolment.....	62.78	21
Performance of education system		
3.1.4 Reading, maths and science scores.....	68.28	20
Top universities		
3.1.5 QS university ranking.....	58.64	15
International students		
3.1.6 International students inflow.....	31.97	19

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	67.03	15
Further education and training climate		
3.2.1 Quality of management schools.....	68.96	21
3.2.2 Extent of staff training.....	65.11	16
3.3 Access to growth opportunities	71.71	12
Networks		
3.3.1 Use of virtual social networks.....	83.13	27
3.3.2 State of cluster development.....	59.43	21
Research quality		
3.3.3 Quality of scientific research institutions.....	74.73	14
Voice		
3.3.4 Voicing concern to officials.....	69.58	14
4 Retain	67.66	14
4.1 Sustainability	69.99	8
Social protection		
4.1.1 Pension system.....	93.07	18
Taxation		
4.1.2 Extent and effect of taxation.....	46.91	34
4.2 Lifestyle	65.33	23
Quality of life		
4.2.1 Environmental performance.....	58.86	34
4.2.2 Property stolen.....	74.41	35
4.2.3 Safety at night.....	76.68	30
Services		
4.2.4 Physicians density.....	51.39	27
5 Labour and Vocational	48.38	29
5.1 Employable skills	34.98	71
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	30.71	55
Technical professions		
5.1.2 Technicians and associate professionals.....	47.96	45
Youth employment		
5.1.3 Youth employment.....	26.27	72
5.2 Labour productivity	61.78	6
Productivity per employee		
5.2.1 Labour productivity per employee.....	67.00	5
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	56.57	27
6 Global Knowledge	56.46	15
6.1 Higher skills and competencies	55.90	17
Educated workforce		
6.1.1 Tertiary-educated workforce.....	73.35	12
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	42.13	23
6.1.3 Professionals.....	65.55	10
6.1.4 Researchers.....	42.56	20
6.2 Talent impact	57.03	18
Innovation		
6.2.1 Innovation output.....	64.71	14
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	49.35	23

ISRAEL

RANK
(out of 103)

24

Population (millions) **7.64**
GDP per capita (PPP\$) **32,312.42**
GDP (US\$ billions) **240.89**Global Talent Competitiveness
Index Score **56.58**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**

VARIABLE	SCORE	RANK/103
1 Enablers	58.90	34
1.1 Regulatory landscape	51.58	58
Government efficiency.....		
1.1.1 Government effectiveness.....	68.84	24
1.1.2 Political stability.....	34.32	94
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	75.67	5
Competition climate.....		
1.2.1 Intensity of local competition.....	65.23	56
Innovation climate.....		
1.2.2 Venture capital availability.....	57.52	2
1.2.3 Firm-level technology absorption.....	85.98	5
1.2.4 R&D expenditure.....	100.00	1
Connectivity.....		
1.2.5 ICT access.....	78.62	23
Ease of doing business.....		
1.2.6 Ease of doing business.....	66.70	35
1.3 Business landscape	49.45	59
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	29.07	84
Ownership and governance.....		
1.3.2 Reliance on professional management.....	69.83	25
2 Attract	55.16	39
2.1 External openness	53.14	20
FDI.....		
2.1.1 FDI inflow.....	36.06	26
Brain gain.....		
2.1.2 Qualified labour inflow.....	52.01	31
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	71.35	29
2.2 Internal openness	57.18	66
Diversity.....		
2.2.1 Tolerance of minorities.....	54.46	90
2.2.2 Tolerance of immigrants.....	41.09	95
Social mobility.....		
2.2.3 Social mobility.....	59.43	42
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	30.93	50
3 Grow	62.09	21
3.1 Formal education	58.37	21
Education climate.....		
3.1.1 Pupil-teacher ratio.....	91.20	20
3.1.2 Technical/vocational enrolment.....	39.61	34
3.1.3 Tertiary enrolment.....	59.06	29
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	53.05	38
Top universities.....		
3.1.5 QS university ranking.....	48.95	20
International students.....		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	61.04	28
Further education and training climate.....		
3.2.1 Quality of management schools.....	61.48	36
3.2.2 Extent of staff training.....	60.59	23
3.3 Access to growth opportunities	66.86	20
Networks.....		
3.3.1 Use of virtual social networks.....	82.89	29
3.3.2 State of cluster development.....	47.79	48
Research quality.....		
3.3.3 Quality of scientific research institutions.....	89.12	1
Voice.....		
3.3.4 Voicing concern to officials.....	47.64	44
4 Retain	51.68	55
4.1 Sustainability	41.23	62
Social protection.....		
4.1.1 Pension system.....	n/a	n/a
Taxation.....		
4.1.2 Extent and effect of taxation.....	41.23	50
4.2 Lifestyle	62.14	34
Quality of life.....		
4.2.1 Environmental performance.....	49.60	55
4.2.2 Property stolen.....	75.12	33
4.2.3 Safety at night.....	64.71	58
Services.....		
4.2.4 Physicians density.....	59.13	17
5 Labour and Vocational	51.26	23
5.1 Employable skills	51.90	24
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	48.57	36
Technical professions.....		
5.1.2 Technicians and associate professionals.....	84.18	9
Youth employment.....		
5.1.3 Youth employment.....	22.93	73
5.2 Labour productivity	50.63	26
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	46.99	23
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	54.26	38
6 Global Knowledge	60.39	8
6.1 Higher skills and competencies	63.19	8
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	98.18	2
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	43.82	21
6.1.3 Professionals.....	47.56	28
6.1.4 Researchers.....	n/a	n/a
6.2 Talent impact	57.60	16
Innovation.....		
6.2.1 Innovation output.....	65.84	13
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	49.35	23

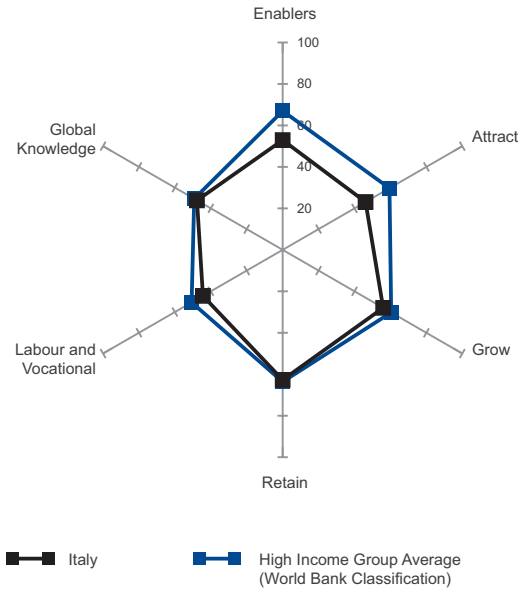
ITALY

RANK
(out of 103)

36

Population (millions) **60.83**
 GDP per capita (PPP\$) **30,136.38**
 GDP (US\$ billions) **2,014.08**

Global Talent Competitiveness Index Score **51.64**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	52.93	49
1.1 Regulatory landscape	63.38	43
Government efficiency.....		
1.1.1 Government effectiveness.....	46.26	44
1.1.2 Political stability.....	80.49	34
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	47.70	44
Competition climate.....		
1.2.1 Intensity of local competition.....	64.97	57
Innovation climate.....		
1.2.2 Venture capital availability.....	17.09	92
1.2.3 Firm-level technology absorption.....	55.38	82
1.2.4 R&D expenditure.....	28.24	29
Connectivity.....		
1.2.5 ICT access.....	75.45	27
Ease of doing business.....		
1.2.6 Ease of doing business.....	45.10	57
1.3 Business landscape	47.70	66
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	52.67	50
Ownership and governance.....		
1.3.2 Reliance on professional management.....	42.72	84
2 Attract	46.14	79
2.1 External openness	30.05	93
FDI.....		
2.1.1 FDI inflow.....	11.33	82
Brain gain.....		
2.1.2 Qualified labour inflow.....	29.33	84
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	49.49	86
2.2 Internal openness	62.24	49
Diversity.....		
2.2.1 Tolerance of minorities.....	77.17	46
2.2.2 Tolerance of immigrants.....	71.40	47
Social mobility.....		
2.2.3 Social mobility.....	45.51	77
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	83.03	68
2.2.5 Female parliamentarians.....	34.08	43
3 Grow	55.95	33
3.1 Formal education	59.06	20
Education climate.....		
3.1.1 Pupil-teacher ratio.....	90.24	24
3.1.2 Technical/vocational enrolment.....	78.04	7
3.1.3 Tertiary enrolment.....	61.59	25
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	63.91	30
Top universities.....		
3.1.5 QS university ranking.....	44.33	22
International students.....		
3.1.6 International students inflow.....	16.23	37

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	50.05	57
Further education and training climate.....		
3.2.1 Quality of management schools.....	63.81	31
3.2.2 Extent of staff training.....	36.30	91
3.3 Access to growth opportunities	58.74	38
Networks.....		
3.3.1 Use of virtual social networks.....	76.09	52
3.3.2 State of cluster development.....	71.70	1
Research quality.....		
3.3.3 Quality of scientific research institutions.....	53.18	39
Voice.....		
3.3.4 Voicing concern to officials.....	33.96	73
4 Retain	62.72	28
4.1 Sustainability	57.52	38
Social protection.....		
4.1.1 Pension system.....	94.33	16
Taxation.....		
4.1.2 Extent and effect of taxation.....	20.72	101
4.2 Lifestyle	67.91	18
Quality of life.....		
4.2.1 Environmental performance.....	82.19	8
4.2.2 Property stolen.....	74.17	36
4.2.3 Safety at night.....	58.82	64
Services.....		
4.2.4 Physicians density.....	56.47	21
5 Labour and Vocational	44.39	36
5.1 Employable skills	46.27	37
Vocationally trained workforce.....		
5.1.1 Secondary educated workforce.....	46.43	38
Technical professions.....		
5.1.2 Technicians and associate professionals.....	82.65	10
Youth employment.....		
5.1.3 Youth employment.....	9.71	95
5.2 Labour productivity	42.51	40
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	51.13	20
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	33.90	96
6 Global Knowledge	47.70	29
6.1 Higher skills and competencies	30.66	47
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	27.56	65
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	21.91	62
6.1.3 Professionals.....	39.63	41
6.1.4 Researchers.....	33.55	24
6.2 Talent impact	64.74	7
Innovation.....		
6.2.1 Innovation output.....	41.18	38
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	88.31	3

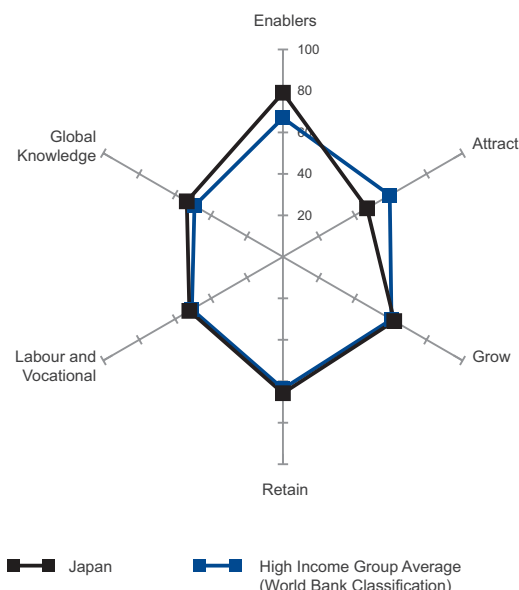
JAPAN

RANK
(out of 103)

21

Population (millions) **127.16**
 GDP per capita (PPP\$) **36,265.75**
 GDP (US\$ billions) **5,963.97**

Global Talent Competitiveness Index Score **59.89**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	79.14	11
1.1 Regulatory landscape	82.76	16
Government efficiency.....		
1.1.1 Government effectiveness.....	73.09	21
1.1.2 Political stability.....	89.98	19
FDI climate.....		
1.1.3 Starting a foreign business.....	85.21	8
1.2 Market landscape	74.09	8
Competition climate.....		
1.2.1 Intensity of local competition.....	84.13	2
Innovation climate.....		
1.2.2 Venture capital availability.....	32.66	35
1.2.3 Firm-level technology absorption.....	86.07	4
1.2.4 R&D expenditure.....	76.19	5
Connectivity.....		
1.2.5 ICT access.....	85.10	15
Ease of doing business.....		
1.2.6 Ease of doing business.....	80.40	21
1.3 Business landscape	80.57	6
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	86.20	6
Ownership and governance.....		
1.3.2 Reliance on professional management.....	74.94	16
2 Attract	46.82	76
2.1 External openness	36.64	73
FDI.....		
2.1.1 FDI inflow.....	1.31	100
Brain gain.....		
2.1.2 Qualified labour inflow.....	51.66	33
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	56.93	64
2.2 Internal openness	57.01	67
Diversity.....		
2.2.1 Tolerance of minorities.....	65.98	70
2.2.2 Tolerance of immigrants.....	69.69	52
Social mobility.....		
2.2.3 Social mobility.....	77.38	16
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	n/a	n/a
2.2.5 Female parliamentarians.....	14.98	81
3 Grow	61.96	22
3.1 Formal education	57.68	23
Education climate.....		
3.1.1 Pupil-teacher ratio.....	85.17	36
3.1.2 Technical/vocational enrolment.....	24.88	54
3.1.3 Tertiary enrolment.....	56.30	33
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	81.18	5
Top universities.....		
3.1.5 QS university ranking.....	81.55	6
International students.....		
3.1.6 International students inflow.....	16.97	34

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	61.50	26
Further education and training climate.....		
3.2.1 Quality of management schools.....	51.73	62
3.2.2 Extent of staff training.....	71.26	5
3.3 Access to growth opportunities	66.71	21
Networks.....		
3.3.1 Use of virtual social networks.....	73.28	65
3.3.2 State of cluster development.....	69.73	4
Research quality.....		
3.3.3 Quality of scientific research institutions.....	76.66	11
Voice.....		
3.3.4 Voicing concern to officials.....	47.17	45
4 Retain	65.76	18
4.1 Sustainability	66.89	15
Social protection.....		
4.1.1 Pension system.....	99.98	3
Taxation.....		
4.1.2 Extent and effect of taxation.....	33.81	80
4.2 Lifestyle	64.62	30
Quality of life.....		
4.2.1 Environmental performance.....	69.53	23
4.2.2 Property stolen.....	78.91	19
4.2.3 Safety at night.....	75.40	35
Services.....		
4.2.4 Physicians density.....	34.65	52
5 Labour and Vocational	52.10	22
5.1 Employable skills	49.77	30
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	56.71	24
Technical professions.....		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment.....		
5.1.3 Youth employment.....	42.83	49
5.2 Labour productivity	54.43	12
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	49.15	22
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	59.71	17
6 Global Knowledge	53.53	19
6.1 Higher skills and competencies	60.13	13
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	68.11	17
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	n/a	n/a
6.1.3 Professionals.....	n/a	n/a
6.1.4 Researchers.....	52.16	13
6.2 Talent impact	46.94	33
Innovation.....		
6.2.1 Innovation output.....	49.72	27
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	44.16	31

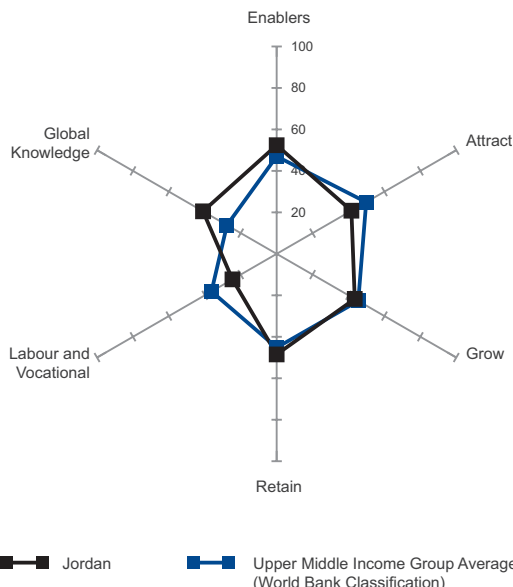
JORDAN

RANK
(out of 103)

62

Population (millions) **7.04**
 GDP per capita (PPP\$) **6,042.29**
 GDP (US\$ billions) **31.21**

Global Talent Competitiveness Index Score **41.93**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	52.39	52
1.1 Regulatory landscape	45.14	73
Government efficiency		
1.1.1 Government effectiveness	34.41	56
1.1.2 Political stability	55.87	68
FDI climate		
1.1.3 Starting a foreign business	n/a	n/a
1.2 Market landscape	43.42	49
Competition climate		
1.2.1 Intensity of local competition	73.25	28
Innovation climate		
1.2.2 Venture capital availability	31.83	41
1.2.3 Firm-level technology absorption	76.15	24
1.2.4 R&D expenditure	9.43	57
Connectivity		
1.2.5 ICT access	41.38	60
Ease of doing business		
1.2.6 Ease of doing business	28.50	74
1.3 Business landscape	68.61	19
Labour market flexibility		
1.3.1 Labour market flexibility	88.09	5
Ownership and governance		
1.3.2 Reliance on professional management	49.12	64
2 Attract	41.62	89
2.1 External openness	47.10	41
FDI		
2.1.1 FDI inflow	37.17	24
Brain gain		
2.1.2 Qualified labour inflow	44.39	42
Foreign companies		
2.1.3 Prevalence of foreign ownership	59.73	56
2.2 Internal openness	36.14	99
Diversity		
2.2.1 Tolerance of minorities	31.85	98
2.2.2 Tolerance of immigrants	41.73	93
Social mobility		
2.2.3 Social mobility	55.99	49
Gender mobility		
2.2.4 Female professionals and technical workers	n/a	n/a
2.2.5 Female parliamentarians	14.98	81
3 Grow	43.47	68
3.1 Formal education	31.89	71
Education climate		
3.1.1 Pupil-teacher ratio	68.14	65
3.1.2 Technical/vocational enrolment	7.09	86
3.1.3 Tertiary enrolment	34.21	64
Performance of education system		
3.1.4 Reading, maths and science scores	30.74	53
Top universities		
3.1.5 QS university ranking	5.46	55
International students		
3.1.6 International students inflow	45.67	14

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	50.89	56
Further education and training climate		
3.2.1 Quality of management schools	55.74	48
3.2.2 Extent of staff training	46.04	66
3.3 Access to growth opportunities	47.63	69
Networks		
3.3.1 Use of virtual social networks	82.05	31
3.3.2 State of cluster development	50.86	40
Research quality		
3.3.3 Quality of scientific research institutions	41.81	68
Voice		
3.3.4 Voicing concern to officials	15.80	96
4 Retain	48.51	59
4.1 Sustainability	39.44	69
Social protection		
4.1.1 Pension system	39.48	51
Taxation		
4.1.2 Extent and effect of taxation	39.39	57
4.2 Lifestyle	57.58	48
Quality of life		
4.2.1 Environmental performance	21.07	93
4.2.2 Property stolen	81.04	13
4.2.3 Safety at night	88.56	9
Services		
4.2.4 Physicians density	39.65	47
5 Labour and Vocational	24.61	100
5.1 Employable skills	16.69	102
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	20.00	75
Technical professions		
5.1.2 Technicians and associate professionals	n/a	n/a
Youth employment		
5.1.3 Youth employment	13.38	88
5.2 Labour productivity	32.54	67
Productivity per employee		
5.2.1 Labour productivity per employee	14.53	62
Pay and productivity		
5.2.2 Relationship of pay to productivity	50.54	51
6 Global Knowledge	41.01	36
6.1 Higher skills and competencies	42.11	30
Educated workforce		
6.1.1 Tertiary-educated workforce	36.90	53
Knowledge workers		
6.1.2 Legislators, senior officials and managers	n/a	n/a
6.1.3 Professionals	n/a	n/a
6.1.4 Researchers	47.32	16
6.2 Talent impact	39.91	47
Innovation		
6.2.1 Innovation output	35.67	45
Entrepreneurship		
6.2.2 New product entrepreneurial activity	44.16	31

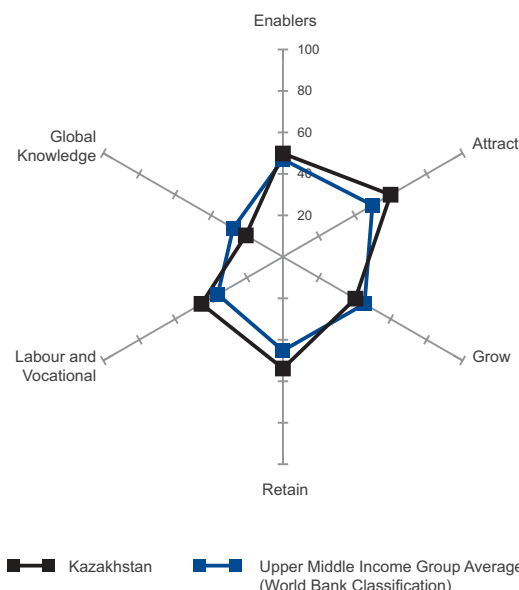
KAZAKHSTAN

RANK
(out of 103)

46

Population (millions) **16.29**
GDP per capita (PPP\$) **13,892.83**
GDP (US\$ billions) **196.42**

Global Talent Competitiveness
Index Score **44.99**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	49.84	57
1.1 Regulatory landscape	49.98	63
Government efficiency.....		
1.1.1 Government effectiveness.....	25.06	73
1.1.2 Political stability.....	61.93	62
FDI climate.....		
1.1.3 Starting a foreign business.....	62.96	34
1.2 Market landscape	42.32	56
Competition climate.....		
1.2.1 Intensity of local competition.....	52.09	85
Innovation climate.....		
1.2.2 Venture capital availability.....	20.49	80
1.2.3 Firm-level technology absorption.....	58.00	72
1.2.4 R&D expenditure.....	4.74	71
Connectivity.....		
1.2.5 ICT access.....	59.72	44
Ease of doing business.....		
1.2.6 Ease of doing business.....	58.90	43
1.3 Business landscape	57.21	45
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	64.81	37
Ownership and governance.....		
1.3.2 Reliance on professional management.....	49.62	62
2 Attract	59.93	29
2.1 External openness	49.02	33
FDI.....		
2.1.1 FDI inflow.....	54.92	12
Brain gain.....		
2.1.2 Qualified labour inflow.....	39.97	55
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	52.16	75
2.2 Internal openness	70.84	28
Diversity.....		
2.2.1 Tolerance of minorities.....	90.22	19
2.2.2 Tolerance of immigrants.....	83.56	25
Social mobility.....		
2.2.3 Social mobility.....	53.61	55
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	26.79	59
3 Grow	40.32	82
3.1 Formal education	34.47	64
Education climate.....		
3.1.1 Pupil-teacher ratio.....	94.50	11
3.1.2 Technical/vocational enrolment.....	14.15	68
3.1.3 Tertiary enrolment.....	39.62	52
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	29.23	57
Top universities.....		
3.1.5 QS university ranking.....	22.97	38
International students.....		
3.1.6 International students inflow.....	6.34	58

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	46.83	70
Further education and training climate.....		
3.2.1 Quality of management schools.....	44.85	80
3.2.2 Extent of staff training.....	48.81	54
3.3 Access to growth opportunities	39.66	92
Networks.....		
3.3.1 Use of virtual social networks.....	62.89	91
3.3.2 State of cluster development.....	34.88	85
Research quality.....		
3.3.3 Quality of scientific research institutions.....	33.73	87
Voice.....		
3.3.4 Voicing concern to officials.....	27.12	85
4 Retain	53.85	45
4.1 Sustainability	56.85	40
Social protection.....		
4.1.1 Pension system.....	65.04	37
Taxation.....		
4.1.2 Extent and effect of taxation.....	48.65	27
4.2 Lifestyle	50.85	61
Quality of life.....		
4.2.1 Environmental performance.....	0.00	99
4.2.2 Property stolen.....	71.09	46
4.2.3 Safety at night.....	65.88	55
Services.....		
4.2.4 Physicians density.....	66.42	6
5 Labour and Vocational	45.34	33
5.1 Employable skills	49.98	29
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	56.43	25
Technical professions.....		
5.1.2 Technicians and associate professionals.....	40.82	50
Youth employment.....		
5.1.3 Youth employment.....	52.71	30
5.2 Labour Productivity	40.69	44
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	17.50	56
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	63.88	8
6 Global Knowledge	20.68	80
6.1 Higher skills and competencies	34.45	41
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	58.09	26
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	35.96	33
6.1.3 Professionals.....	38.41	45
6.1.4 Researchers.....	5.35	63
6.2 Talent impact	6.91	98
Innovation.....		
6.2.1 Innovation output.....	12.52	90
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	1.30	76

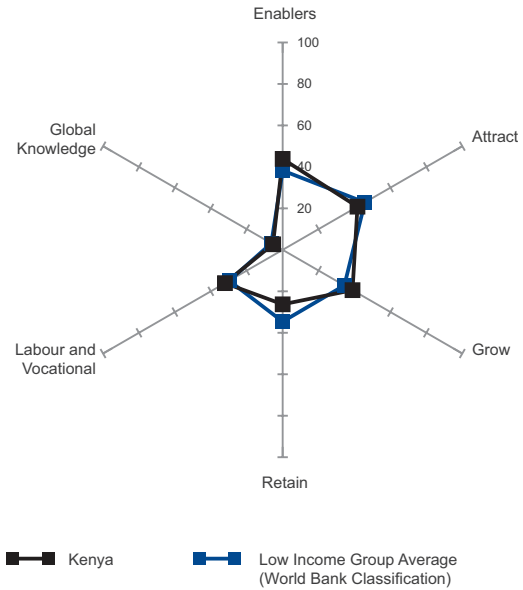
KENYA

RANK
(out of 103)

95

Population (millions) **43.32**
 GDP per capita (PPP\$) **1,802.38**
 GDP (US\$ billions) **41.12**

Global Talent Competitiveness Index Score **31.36**
 Global Talent Competitiveness Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	43.83	73
1.1 Regulatory landscape	34.24	91
Government efficiency		
1.1.1 Government effectiveness.....	16.80	85
1.1.2 Political stability.....	34.08	96
FDI climate		
1.1.3 Starting a foreign business.....	51.83	48
1.2 Market landscape	34.02	83
Competition climate		
1.2.1 Intensity of local competition.....	65.53	54
Innovation climate		
1.2.2 Venture capital availability.....	36.36	26
1.2.3 Firm-level technology absorption.....	64.85	50
1.2.4 R&D expenditure.....	9.02	60
Connectivity		
1.2.5 ICT access.....	9.66	92
Ease of doing business		
1.2.6 Ease of doing business.....	18.70	84
1.3 Business landscape	63.24	28
Labour market flexibility		
1.3.1 Labour market flexibility.....	71.85	27
Ownership and governance		
1.3.2 Reliance on professional management.....	54.64	46
2 Attract	41.65	88
2.1 External openness	35.09	78
FDI		
2.1.1 FDI inflow.....	8.80	87
Brain gain		
2.1.2 Qualified labour inflow.....	40.42	51
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	56.05	67
2.2 Internal openness	48.20	89
Diversity		
2.2.1 Tolerance of minorities.....	67.50	65
2.2.2 Tolerance of immigrants.....	68.73	53
Social mobility		
2.2.3 Social mobility.....	43.15	83
Gender mobility		
2.2.4 Female professionals and technical workers.....	n/a	n/a
2.2.5 Female parliamentarians.....	13.44	86
3 Grow	38.89	87
3.1 Formal education	11.59	99
Education climate		
3.1.1 Pupil-teacher ratio.....	34.61	85
3.1.2 Technical/vocational enrolment.....	0.00	96
3.1.3 Tertiary enrolment.....	0.17	97
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	52.35	53
Further education and training climate		
3.2.1 Quality of management schools.....	55.67	49
3.2.2 Extent of staff training.....	49.04	52
3.3 Access to growth opportunities	52.72	51
Networks		
3.3.1 Use of virtual social networks.....	70.52	76
3.3.2 State of cluster development.....	45.98	52
Research quality		
3.3.3 Quality of scientific research institutions.....	50.50	46
Voice		
3.3.4 Voicing concern to officials.....	43.87	52
4 Retain	26.27	100
4.1 Sustainability	22.71	98
Social protection		
4.1.1 Pension system.....	6.68	83
Taxation		
4.1.2 Extent and effect of taxation.....	38.73	61
4.2 Lifestyle	29.84	99
Quality of life		
4.2.1 Environmental performance.....	37.35	70
4.2.2 Property stolen.....	26.30	99
4.2.3 Safety at night.....	53.58	74
Services		
4.2.4 Physicians density.....	2.13	91
5 Labour and Vocational	32.12	74
5.1 Employable skills	38.16	61
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	42.57	43
Technical professions		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment		
5.1.3 Youth employment.....	33.76	61
5.2 Labour productivity	26.07	89
Productivity per employee		
5.2.1 Labour productivity per employee.....	1.41	89
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	50.72	49
6 Global Knowledge	5.38	100
6.1 Higher skills and competencies	0.32	103
Educated workforce		
6.1.1 Tertiary-educated workforce.....	0.00	89
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	n/a	n/a
6.1.3 Professionals.....	n/a	n/a
6.1.4 Researchers.....	0.65	84
6.2 Talent impact	10.44	93
Innovation		
6.2.1 Innovation output.....	10.44	93
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

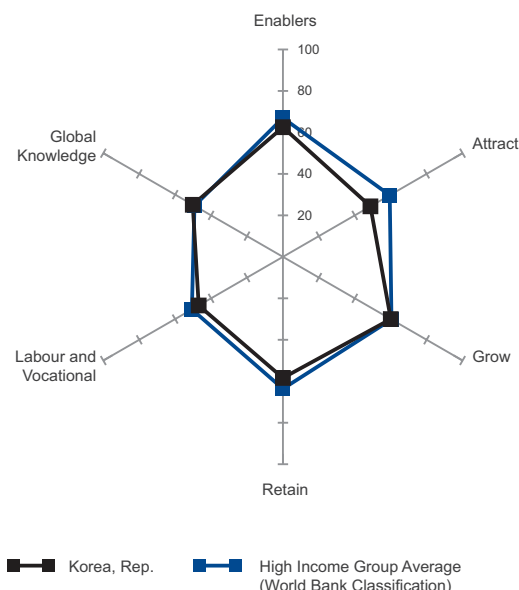
KOREA, REP.

RANK
(out of 103)

28

Population (millions) **48.94**
 GDP per capita (PPP\$) **32,272.12**
 GDP (US\$ billions) **1155.87**

Global Talent Competitiveness Index Score **54.46**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	62.51	28
1.1 Regulatory landscape	70.66	32
Government efficiency.....		
1.1.1 Government effectiveness.....	69.71	22
1.1.2 Political stability.....	71.83	45
FDI climate.....		
1.1.3 Starting a foreign business.....	70.42	27
1.2 Market landscape	75.52	6
Competition climate.....		
1.2.1 Intensity of local competition.....	79.09	9
Innovation climate.....		
1.2.2 Venture capital availability.....	19.81	84
1.2.3 Firm-level technology absorption.....	83.28	10
1.2.4 R&D expenditure.....	84.88	3
Connectivity.....		
1.2.5 ICT access.....	91.86	10
Ease of doing business.....		
1.2.6 Ease of doing business.....	94.20	7
1.3 Business landscape	41.35	83
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	17.93	91
Ownership and governance.....		
1.3.2 Reliance on professional management.....	64.77	32
2 Attract	48.71	66
2.1 External openness	41.61	61
FDI.....		
2.1.1 FDI inflow.....	4.62	96
Brain gain.....		
2.1.2 Qualified labour inflow.....	63.55	15
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	56.67	65
2.2 Internal openness	55.81	73
Diversity.....		
2.2.1 Tolerance of minorities.....	76.85	47
2.2.2 Tolerance of immigrants.....	67.98	55
Social mobility.....		
2.2.3 Social mobility.....	48.23	70
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	64.68	74
2.2.5 Female parliamentarians.....	21.32	70
3 Grow	60.04	24
3.1 Formal education	60.16	17
Education climate.....		
3.1.1 Pupil-teacher ratio.....	68.94	63
3.1.2 Technical/vocational enrolment.....	24.93	53
3.1.3 Tertiary enrolment.....	100.00	1
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	85.84	4
Top universities.....		
3.1.5 QS university ranking.....	72.92	10
International students.....		
3.1.6 International students inflow.....	8.33	50

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	57.60	36
Further education and training climate.....		
3.2.1 Quality of management schools.....	60.86	38
3.2.2 Extent of staff training.....	54.34	34
3.3 Access to growth opportunities	62.36	29
Networks.....		
3.3.1 Use of virtual social networks.....	82.94	28
3.3.2 State of cluster development.....	60.09	19
Research quality.....		
3.3.3 Quality of scientific research institutions.....	65.60	23
Voice.....		
3.3.4 Voicing concern to officials.....	40.80	56
4 Retain	58.40	41
4.1 Sustainability	59.17	34
Social protection.....		
4.1.1 Pension system.....	83.74	28
Taxation.....		
4.1.2 Extent and effect of taxation.....	34.59	75
4.2 Lifestyle	57.64	47
Quality of life.....		
4.2.1 Environmental performance.....	55.45	39
4.2.2 Property stolen.....	81.52	12
4.2.3 Safety at night.....	60.86	62
Services.....		
4.2.4 Physicians density.....	32.73	55
5 Labour and Vocational	46.89	31
5.1 Employable skills	40.69	54
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	53.14	28
Technical professions.....		
5.1.2 Technicians and associate professionals.....	49.49	44
Youth employment.....		
5.1.3 Youth employment.....	19.43	78
5.2 Labour productivity	53.10	18
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	42.01	26
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	64.20	7
6 Global Knowledge	50.20	22
6.1 Higher skills and competencies	45.22	26
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	80.41	7
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	12.92	76
6.1.3 Professionals.....	28.05	54
6.1.4 Researchers.....	59.49	10
6.2 Talent impact	55.18	20
Innovation.....		
6.2.1 Innovation output.....	57.12	24
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	53.25	17

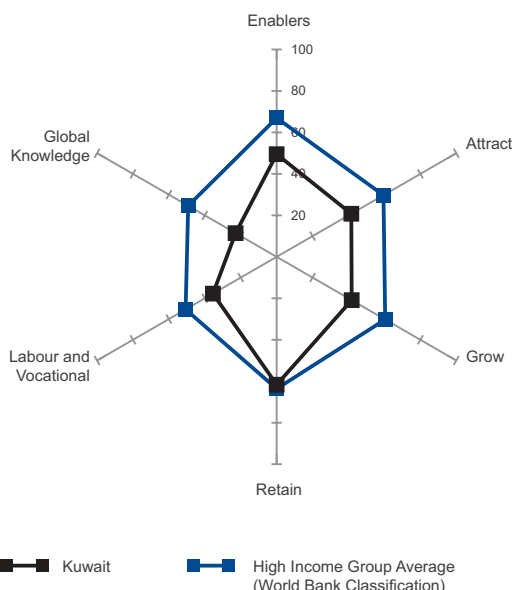
KUWAIT

RANK
(out of 103)

60

Population (millions) **3.25**
 GDP per capita (PPP\$) **39,888.76**
 GDP (US\$ billions) **173.42**

Global Talent Competitiveness Index Score **42.14**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	49.51	58
1.1 Regulatory landscape	52.96	56
Government efficiency		
1.1.1 Government effectiveness	31.63	61
1.1.2 Political stability	74.29	42
FDI climate		
1.1.3 Starting a foreign business	n/a	n/a
1.2 Market landscape	41.65	58
Competition climate		
1.2.1 Intensity of local competition	61.59	66
Innovation climate		
1.2.2 Venture capital availability	32.90	34
1.2.3 Firm-level technology absorption	70.51	36
1.2.4 R&D expenditure	2.07	85
Connectivity		
1.2.5 ICT access	n/a	n/a
Ease of doing business		
1.2.6 Ease of doing business	41.20	61
1.3 Business landscape	53.90	51
Labour market flexibility		
1.3.1 Labour market flexibility	60.93	40
Ownership and governance		
1.3.2 Reliance on professional management	46.87	74
2 Attract	41.56	90
2.1 External openness	28.57	96
FDI		
2.1.1 FDI inflow	3.20	97
Brain gain		
2.1.2 Qualified labour inflow	47.08	37
Foreign companies		
2.1.3 Prevalence of foreign ownership	35.43	101
2.2 Internal openness	54.54	75
Diversity		
2.2.1 Tolerance of minorities	80.22	35
2.2.2 Tolerance of immigrants	79.30	30
Social mobility		
2.2.3 Social mobility	58.56	43
Gender mobility		
2.2.4 Female professionals and technical workers	44.32	82
2.2.5 Female parliamentarians	10.32	95
3 Grow	41.77	72
3.1 Formal Education	28.72	80
Education climate		
3.1.1 Pupil-teacher ratio	96.73	4
3.1.2 Technical/vocational enrolment	0.00	96
3.1.3 Tertiary enrolment	18.14	78
Performance of education system		
3.1.4 Reading, maths and science scores	n/a	n/a
Top universities		
3.1.5 QS university ranking	0.00	61
International students		
3.1.6 International students inflow	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong earning	45.13	75
Further education and training climate		
3.2.1 Quality of management schools	45.37	79
3.2.2 Extent of staff training	44.90	70
3.3 Access to growth opportunities	51.47	53
Networks		
3.3.1 Use of virtual social networks	78.03	46
3.3.2 State of cluster development	36.96	79
Research quality		
3.3.3 Quality of scientific research institutions	35.93	83
Voice		
3.3.4 Voicing concern to officials	54.95	30
4 Retain	61.66	30
4.1 Sustainability	74.44	4
Social protection		
4.1.1 Pension system	n/a	n/a
Taxation		
4.1.2 Extent and effect of taxation	74.44	3
4.2 Lifestyle	48.88	68
Quality of life		
4.2.1 Environmental performance	5.94	97
4.2.2 Property stolen	65.40	61
4.2.3 Safety at night	95.19	4
Services		
4.2.4 Physicians density	28.98	60
5 Labour and Vocational	35.48	66
5.1 Employable skills	28.17	86
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	18.86	77
Technical professions		
5.1.2 Technicians and associate professionals	35.71	56
Youth employment		
5.1.3 Youth employment	29.94	66
5.2 Labour productivity	42.79	38
Productivity per employee		
5.2.1 Labour productivity per employee	38.99	33
Pay and productivity		
5.2.2 Relationship of pay to productivity	46.58	65
6 Global Knowledge	22.85	74
6.1 Higher skills and competencies	14.21	84
Educated workforce		
6.1.1 Tertiary-educated workforce	18.91	74
Knowledge workers		
6.1.2 Legislators, senior officials and managers	11.24	79
6.1.3 Professionals	25.30	61
6.1.4 Researchers	1.39	78
6.2 Talent impact	31.50	59
Innovation		
6.2.1 Innovation output	31.50	52
Entrepreneurship		
6.2.2 New product entrepreneurial activity	n/a	n/a

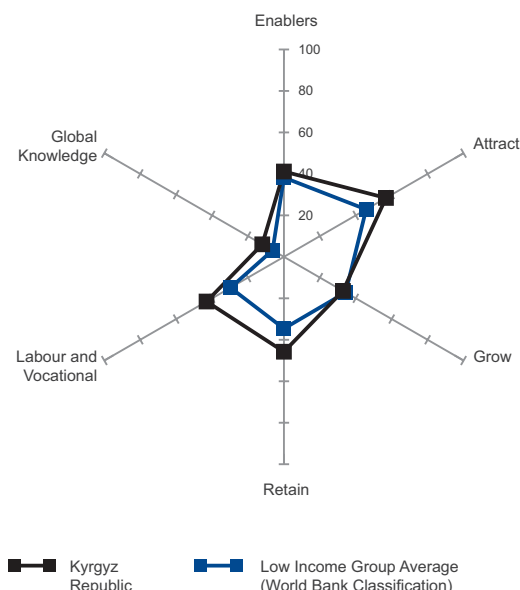
KYRGYZ REPUBLIC

RANK
(out of 103)

78

Population (millions) **5.45**
GDP per capita (PPP\$) **2,376.49**
GDP (US\$ billions) **6.47**

Global Talent Competitiveness
Index Score **38.62**
Global Talent Competitiveness
Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	41.15.....	81
1.1 Regulatory landscape	42.99.....	79
Government efficiency		
1.1.1 Government effectiveness.....	14.44.....	91
1.1.2 Political stability.....	40.44.....	89
FDI climate		
1.1.3 Starting a foreign business.....	74.08.....	22
1.2 Market landscape	32.19.....	88
Competition climate		
1.2.1 Intensity of local competition.....	50.22.....	91
Innovation climate		
1.2.2 Venture capital availability.....	13.98.....	98
1.2.3 Firm-level technology absorption.....	45.53.....	98
1.2.4 R&D expenditure.....	3.14.....	79
Connectivity		
1.2.5 ICT access.....	n/a.....	n/a
Ease of doing business		
1.2.6 Ease of doing business.....	48.10.....	54
1.3 Business landscape	48.26.....	63
Labour market flexibility		
1.3.1 Labour market flexibility.....	55.46.....	46
Ownership and governance		
1.3.2 Reliance on professional management.....	41.05.....	96
2 Attract	56.81.....	35
2.1 External openness	49.93.....	30
FDI		
2.1.1 FDI inflow.....	91.35.....	7
Brain gain		
2.1.2 Qualified labour inflow.....	15.84.....	100
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	42.60.....	94
2.2 Internal openness	63.69.....	44
Diversity		
2.2.1 Tolerance of minorities.....	77.50.....	44
2.2.2 Tolerance of immigrants.....	59.34.....	75
Social mobility		
2.2.3 Social mobility.....	44.02.....	79
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00.....	1
2.2.5 Female parliamentarians.....	37.58.....	34
3 Grow	32.86.....	99
3.1 Formal education	32.76.....	68
Education climate		
3.1.1 Pupil-teacher ratio.....	75.73.....	59
3.1.2 Technical/vocational enrolment.....	18.72.....	63
3.1.3 Tertiary enrolment.....	37.77.....	57
Performance of education system		
3.1.4 Reading, maths and science scores.....	0.00.....	67
Top universities		
3.1.5 QS university ranking.....	n/a.....	n/a
International students		
3.1.6 International students inflow.....	31.62.....	21

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	31.19.....	102
Further education and training climate		
3.2.1 Quality of management schools.....	27.93.....	103
3.2.2 Extent of staff training.....	34.44.....	94
3.3 Access to growth opportunities	34.62.....	101
Networks		
3.3.1 Use of virtual social networks.....	65.70.....	83
3.3.2 State of cluster development.....	22.16.....	102
Research quality		
3.3.3 Quality of scientific research institutions.....	18.55.....	101
Voice		
3.3.4 Voicing concern to officials.....	32.08.....	76
4 Retain	45.75.....	64
4.1 Sustainability	39.98.....	67
Social protection		
4.1.1 Pension system.....	41.58.....	50
Taxation		
4.1.2 Extent and effect of taxation.....	38.37.....	63
4.2 Lifestyle	51.53.....	59
Quality of life		
4.2.1 Environmental performance.....	30.61.....	81
4.2.2 Property stolen.....	71.33.....	44
4.2.3 Safety at night.....	66.95.....	51
Services		
4.2.4 Physicians density.....	37.23.....	49
5 Labour and Vocational	43.09.....	39
5.1 Employable skills	53.97.....	21
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	86.71.....	3
Technical professions		
5.1.2 Technicians and associate professionals.....	28.06.....	65
Youth employment		
5.1.3 Youth employment.....	47.13.....	40
5.2 Labour productivity	32.21.....	70
Productivity per employee		
5.2.1 Labour productivity per employee.....	3.08.....	85
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	61.33.....	14
6 Global Knowledge	12.07.....	92
6.1 Higher skills and competencies	21.30.....	67
Educated workforce		
6.1.1 Tertiary-educated workforce.....	40.77.....	46
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	12.92.....	76
6.1.3 Professionals.....	28.05.....	54
6.1.4 Researchers.....	3.47.....	71
6.2 Talent impact	2.85.....	102
Innovation		
6.2.1 Innovation output.....	2.85.....	101
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a.....	n/a

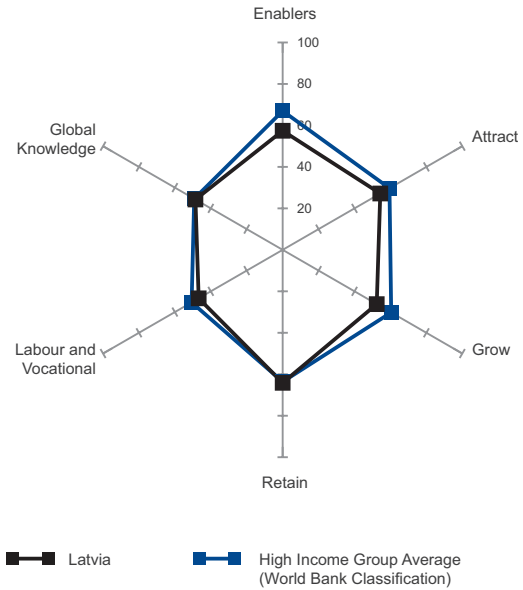
LATVIA

RANK
(out of 103)

30

Population (millions) **2.06**
 GDP per capita (PPP\$) **18,254.66**
 GDP (US\$ billions) **28.38**

Global Talent Competitiveness Index Score **53.93**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	57.42	38
1.1 Regulatory landscape	63.33	44
Government efficiency		
1.1.1 Government effectiveness.....	53.36	36
1.1.2 Political stability.....	73.31	44
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	51.67	35
Competition climate		
1.2.1 Intensity of local competition.....	64.33	59
Innovation climate		
1.2.2 Venture capital availability.....	32.42	36
1.2.3 Firm-level technology absorption.....	58.50	71
1.2.4 R&D expenditure.....	13.31	47
Connectivity		
1.2.5 ICT access.....	61.93	43
Ease of doing business		
1.2.6 Ease of doing business.....	79.50	22
1.3 Business landscape	57.27	44
Labour market flexibility		
1.3.1 Labour market flexibility.....	58.92	42
Ownership and governance		
1.3.2 Reliance on professional management.....	55.61	44
2 Attract	54.34	42
2.1 External openness	47.73	37
FDI		
2.1.1 FDI inflow.....	42.33	20
Brain gain		
2.1.2 Qualified labour inflow.....	35.51	70
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	65.34	43
2.2 Internal openness	60.96	56
Diversity		
2.2.1 Tolerance of minorities.....	66.63	69
2.2.2 Tolerance of immigrants.....	40.55	97
Social mobility		
2.2.3 Social mobility.....	60.66	34
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	36.95	35
3 Grow	52.37	38
3.1 Formal education	54.81	27
Education climate		
3.1.1 Pupil-teacher ratio.....	95.27	7
3.1.2 Technical/vocational enrolment.....	51.93	25
3.1.3 Tertiary enrolment.....	53.92	36
Performance of education system		
3.1.4 Reading, maths and science scores.....	64.18	29
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	8.76	47

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	52.83	50
Further education and training climate		
3.2.1 Quality of management schools.....	53.80	56
3.2.2 Extent of staff training.....	51.86	42
3.3 Access to growth opportunities	49.46	60
Networks		
3.3.1 Use of virtual social networks.....	74.37	58
3.3.2 State of cluster development.....	37.14	78
Research quality		
3.3.3 Quality of scientific research institutions.....	46.25	53
Voice		
3.3.4 Voicing concern to officials.....	40.09	58
4 Retain	64.13	21
4.1 Sustainability	65.36	18
Social protection		
4.1.1 Pension system.....	96.10	12
Taxation		
4.1.2 Extent and effect of taxation.....	34.62	74
4.2 Lifestyle	62.89	32
Quality of life		
4.2.1 Environmental performance.....	85.55	2
4.2.2 Property stolen.....	62.56	64
4.2.3 Safety at night.....	55.08	71
Services		
4.2.4 Physicians density.....	48.38	33
5 Labour and Vocational	46.76	32
5.1 Employable skills	51.83	25
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	72.00	12
Technical professions		
5.1.2 Technicians and associate professionals.....	55.61	35
Youth employment		
5.1.3 Youth employment.....	27.87	70
5.2 Labour productivity	41.69	41
Productivity per employee		
5.2.1 Labour productivity per employee.....	25.16	43
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	58.21	22
6 Global Knowledge	48.57	27
6.1 Higher skills and competencies	47.03	24
Educated workforce		
6.1.1 Tertiary-educated workforce.....	59.00	23
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	56.18	9
6.1.3 Professionals.....	50.00	26
6.1.4 Researchers.....	22.96	35
6.2 Talent impact	50.10	29
Innovation		
6.2.1 Innovation output.....	50.85	26
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	49.35	23

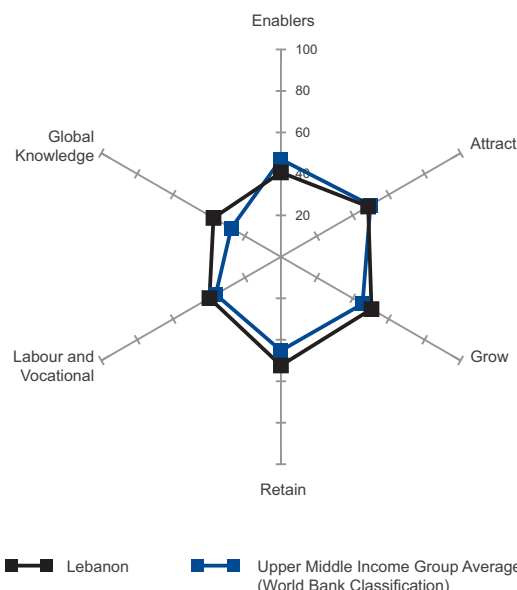
LEBANON

RANK
(out of 103)

48

Population (millions) **4.65**
 GDP per capita (PPP\$) **15,756.94**
 GDP (US\$ billions) **41.35**

Global Talent Competitiveness Index Score **44.90**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	40.71.....	84
1.1 Regulatory landscape	25.69.....	98
Government efficiency.....		
1.1.1 Government effectiveness.....	23.17.....	75
1.1.2 Political stability.....	28.22.....	101
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a.....	n/a
1.2 Market landscape	47.84.....	43
Competition climate.....		
1.2.1 Intensity of local competition.....	72.91.....	31
Innovation climate.....		
1.2.2 Venture capital availability.....	28.68.....	52
1.2.3 Firm-level technology absorption.....	62.61.....	57
1.2.4 R&D expenditure.....	n/a.....	n/a
Connectivity.....		
1.2.5 ICT access.....	52.41.....	52
Ease of doing business.....		
1.2.6 Ease of doing business.....	22.60.....	80
1.3 Business landscape	48.59.....	62
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	n/a.....	n/a
Ownership and governance.....		
1.3.2 Reliance on professional management.....	48.59.....	68
2 Attract	48.55.....	68
2.1 External openness	43.94.....	50
FDI.....		
2.1.1 FDI inflow.....	58.75.....	10
Brain gain.....		
2.1.2 Qualified labour inflow.....	25.09.....	87
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	47.97.....	90
2.2 Internal openness	53.17.....	79
Diversity.....		
2.2.1 Tolerance of minorities.....	46.74.....	96
2.2.2 Tolerance of immigrants.....	66.60.....	59
Social mobility.....		
2.2.3 Social mobility.....	56.30.....	47
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	92.27.....	55
2.2.5 Female parliamentarians.....	3.96.....	99
3 Grow	50.41.....	44
3.1 Formal education	54.25.....	28
Education climate.....		
3.1.1 Pupil-teacher ratio.....	92.50.....	16
3.1.2 Technical/vocational enrolment.....	36.25.....	39
3.1.3 Tertiary enrolment.....	54.20.....	35
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a.....	n/a
Top universities.....		
3.1.5 QS university ranking.....	17.97.....	43
International students.....		
3.1.6 International students inflow.....	70.36.....	10

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	58.44.....	33
Further education and training climate.....		
3.2.1 Quality of management schools.....	73.18.....	13
3.2.2 Extent of staff training.....	43.70.....	77
3.3 Access to growth opportunities	38.55.....	96
Networks.....		
3.3.1 Use of virtual social networks.....	75.94.....	53
3.3.2 State of cluster development.....	35.09.....	84
Research quality.....		
3.3.3 Quality of scientific research institutions.....	25.25.....	97
Voice.....		
3.3.4 Voicing concern to officials.....	17.92.....	94
4 Retain	52.39.....	52
4.1 Sustainability	44.57.....	55
Social protection.....		
4.1.1 Pension system.....	35.38.....	55
Taxation.....		
4.1.2 Extent and effect of taxation.....	53.76.....	15
4.2 Lifestyle	60.20.....	45
Quality of life.....		
4.2.1 Environmental performance.....	32.94.....	76
4.2.2 Property stolen.....	76.30.....	28
4.2.3 Safety at night.....	74.22.....	38
Services.....		
4.2.4 Physicians density.....	57.35.....	20
5 Labour and Vocational	39.81.....	49
5.1 Employable skills	28.54.....	84
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	24.71.....	66
Technical professions.....		
5.1.2 Technicians and associate professionals.....	43.88.....	47
Youth employment.....		
5.1.3 Youth employment.....	17.04.....	80
5.2 Labour productivity	51.07.....	25
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	n/a.....	n/a
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	51.07.....	46
6 Global Knowledge	37.55.....	41
6.1 Higher skills and competencies	44.17.....	28
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	34.85.....	56
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	66.85.....	6
6.1.3 Professionals.....	30.79.....	51
6.1.4 Researchers.....	n/a.....	n/a
6.2 Talent impact	30.92.....	60
Innovation.....		
6.2.1 Innovation output.....	28.08.....	57
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	33.77.....	52

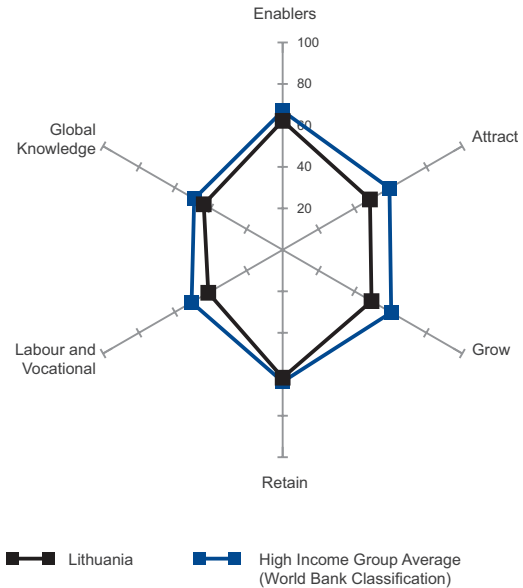
LITHUANIA

RANK
(out of 103)

39

Population (millions) **3.02**
 GDP per capita (PPP\$) **21,615.34**
 GDP (US\$ billions) **42.16**

Global Talent Competitiveness Index Score **51.21**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	62.21.....	29
1.1 Regulatory landscape	67.38.....	38
Government efficiency.....		
1.1.1 Government effectiveness.....	53.27.....	37
1.1.2 Political stability.....	81.49.....	30
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a.....	n/a
1.2 Market landscape	53.66.....	32
Competition climate.....		
1.2.1 Intensity of local competition.....	68.34.....	42
Innovation climate.....		
1.2.2 Venture capital availability.....	23.06.....	68
1.2.3 Firm-level technology absorption.....	66.89.....	46
1.2.4 R&D expenditure.....	17.74.....	38
Connectivity.....		
1.2.5 ICT access.....	68.41.....	34
Ease of doing business.....		
1.2.6 Ease of doing business.....	77.50.....	24
1.3 Business landscape	65.60.....	23
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	74.12.....	25
Ownership and governance.....		
1.3.2 Reliance on professional management.....	57.08.....	42
2 Attract	48.59.....	67
2.1 External openness	35.86.....	77
FDI.....		
2.1.1 FDI inflow.....	22.55.....	46
Brain gain.....		
2.1.2 Qualified labour inflow.....	28.04.....	85
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	57.00.....	63
2.2 Internal openness	61.31.....	55
Diversity.....		
2.2.1 Tolerance of minorities.....	64.13.....	73
2.2.2 Tolerance of immigrants.....	53.68.....	81
Social mobility.....		
2.2.3 Social mobility.....	59.55.....	40
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00.....	1
2.2.5 Female parliamentarians.....	29.21.....	54
3 Grow	49.47.....	47
3.1 Formal education	44.54.....	47
Education climate.....		
3.1.1 Pupil-teacher ratio.....	94.61.....	10
3.1.2 Technical/vocational enrolment.....	24.15.....	59
3.1.3 Tertiary enrolment.....	66.12.....	19
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	61.09.....	33
Top universities.....		
3.1.5 QS university ranking.....	13.89.....	48
International students.....		
3.1.6 International students inflow.....	7.38.....	53

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	52.55.....	52
Further education and training climate.....		
3.2.1 Quality of management schools.....	55.48.....	50
3.2.2 Extent of staff training.....	49.62.....	49
3.3 Access to growth opportunities	51.31.....	54
Networks.....		
3.3.1 Use of virtual social networks.....	84.10.....	23
3.3.2 State of cluster development.....	33.82.....	89
Research quality.....		
3.3.3 Quality of scientific research institutions.....	60.89.....	30
Voice.....		
3.3.4 Voicing concern to officials.....	26.42.....	86
4 Retain	61.66.....	31
4.1 Sustainability	58.44.....	36
Social protection.....		
4.1.1 Pension system.....	86.71.....	26
Taxation.....		
4.1.2 Extent and effect of taxation.....	30.18.....	88
4.2 Lifestyle	64.87.....	28
Quality of life.....		
4.2.1 Environmental performance.....	74.42.....	17
4.2.2 Property stolen.....	81.04.....	13
4.2.3 Safety at night.....	45.45.....	89
Services.....		
4.2.4 Physicians density.....	58.55.....	18
5 Labour and Vocational	41.41.....	42
5.1 Employable skills	38.68.....	58
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	45.43.....	39
Technical professions.....		
5.1.2 Technicians and associate professionals.....	53.57.....	36
Youth employment.....		
5.1.3 Youth employment.....	17.04.....	80
5.2 Labour productivity	44.14.....	35
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	29.06.....	40
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	59.22.....	19
6 Global Knowledge	43.94.....	32
6.1 Higher skills and competencies	54.01.....	18
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	66.74.....	19
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	51.12.....	11
6.1.3 Professionals.....	66.77.....	8
6.1.4 Researchers.....	31.42.....	25
6.2 Talent impact	33.86.....	56
Innovation.....		
6.2.1 Innovation output.....	41.75.....	36
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	25.97.....	61

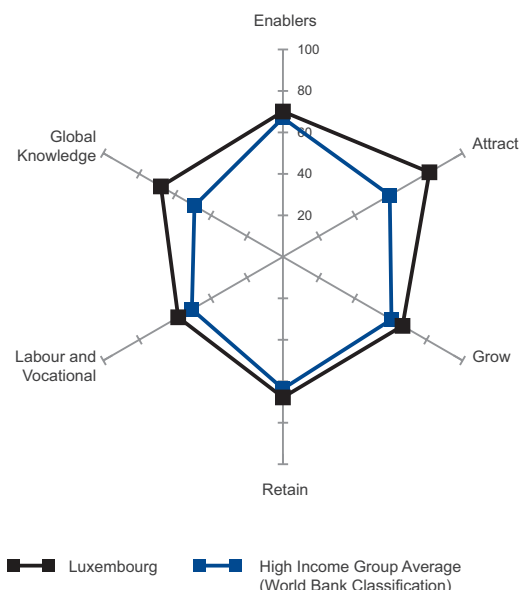
LUXEMBOURG

RANK
(out of 103)

5

Population (millions) **0.52**
GDP per capita (PPP\$) **79,785.04**
GDP (US\$ billions) **56.74**

Global Talent Competitiveness
Index Score **68.70**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	70.08	21
1.1 Regulatory landscape	91.73	7
Government efficiency		
1.1.1 Government effectiveness.....	84.72	11
1.1.2 Political stability.....	98.75	4
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	64.02	23
Competition climate		
1.2.1 Intensity of local competition.....	66.53	51
Innovation climate		
1.2.2 Venture capital availability.....	48.73	9
1.2.3 Firm-level technology absorption.....	77.33	21
1.2.4 R&D expenditure.....	36.81	23
Connectivity		
1.2.5 ICT access.....	99.72	2
Ease of doing business		
1.2.6 Ease of doing business.....	55.00	47
1.3 Business landscape	54.49	49
Labour market flexibility		
1.3.1 Labour market flexibility.....	35.66	76
Ownership and governance		
1.3.2 Reliance on professional management.....	73.31	20
2 Attract	81.55	2
2.1 External openness	85.41	2
FDI		
2.1.1 FDI inflow.....	100.00	1
Brain gain		
2.1.2 Qualified labour inflow.....	65.34	14
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	90.88	1
2.2 Internal openness	77.69	17
Diversity		
2.2.1 Tolerance of minorities.....	91.96	14
2.2.2 Tolerance of immigrants.....	89.65	15
Social mobility		
2.2.3 Social mobility.....	80.56	14
Gender mobility		
2.2.4 Female professionals and technical workers.....	85.06	65
2.2.5 Female parliamentarians.....	41.24	27
3 Grow	66.57	14
3.1 Formal education	65.54	12
Education climate		
3.1.1 Pupil-teacher ratio.....	94.80	9
3.1.2 Technical/vocational enrolment.....	63.91	17
3.1.3 Tertiary enrolment.....	6.72	89
Performance of education system		
3.1.4 Reading, maths and science scores.....	62.24	32
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	100.00	1

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	63.34	25
Further education and training climate		
3.2.1 Quality of management schools.....	55.09	52
3.2.2 Extent of staff training.....	71.59	4
3.3 Access to growth opportunities	70.83	13
Networks		
3.3.1 Use of virtual social networks.....	85.17	19
3.3.2 State of cluster development.....	58.94	22
Research quality		
3.3.3 Quality of scientific research institutions.....	62.81	29
Voice		
3.3.4 Voicing concern to officials.....	76.42	8
4 Retain	67.79	13
4.1 Sustainability	63.03	21
Social protection		
4.1.1 Pension system.....	n/a	n/a
Taxation		
4.1.2 Extent and effect of taxation.....	63.03	8
4.2 Lifestyle	72.55	8
Quality of life		
4.2.1 Environmental performance.....	82.88	4
4.2.2 Property stolen.....	77.73	22
4.2.3 Safety at night.....	84.81	21
Services		
4.2.4 Physicians density.....	44.78	37
5 Labour and Vocational	58.30	15
5.1 Employable skills	53.96	22
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	60.29	22
Technical professions		
5.1.2 Technicians and associate professionals.....	87.76	7
Youth employment		
5.1.3 Youth employment.....	13.85	87
5.2 Labour productivity	62.63	4
Productivity per employee		
5.2.1 Labour productivity per employee.....	73.81	2
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	51.45	44
6 Global Knowledge	67.91	2
6.1 Higher skills and competencies	66.37	4
Educated workforce		
6.1.1 Tertiary-educated workforce.....	75.63	10
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	23.60	57
6.1.3 Professionals.....	100.00	1
6.1.4 Researchers.....	66.25	7
6.2 Talent impact	69.45	4
Innovation		
6.2.1 Innovation output.....	69.45	10
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

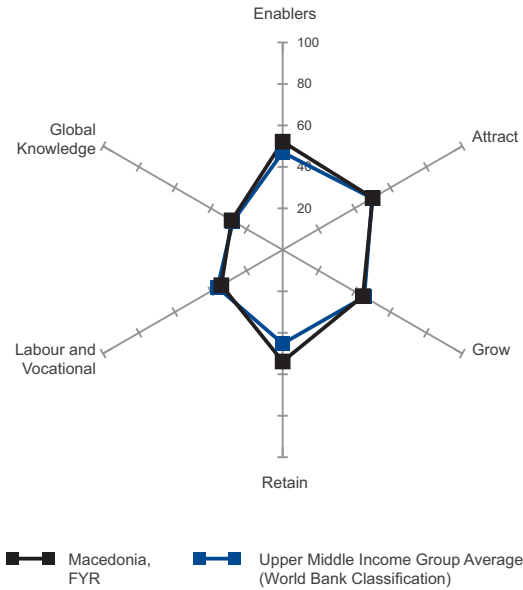
MACEDONIA, FYR

RANK
(out of 103)

52

Population (millions) **2.11**
 GDP per capita (PPP\$) **10,579.03**
 GDP (US\$ billions) **9.68**

Global Talent Competitiveness Index Score **43.89**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	52.16	53
1.1 Regulatory landscape	54.16	54
Government efficiency.....	29.69	65
Political stability.....	55.03	70
FDI climate		
1.1.3 Starting a foreign business.....	77.75	20
1.2 Market landscape	43.78	48
Competition climate		
1.2.1 Intensity of local competition.....	50.90	88
Innovation climate		
1.2.2 Venture capital availability.....	22.48	73
1.2.3 Firm-level technology absorption.....	46.85	97
1.2.4 R&D expenditure.....	4.65	72
Connectivity		
1.2.5 ICT access.....	56.41	48
Ease of doing business		
1.2.6 Ease of doing business.....	81.40	20
1.3 Business landscape	58.55	39
Labour market flexibility		
1.3.1 Labour market flexibility.....	77.78	15
Ownership and governance		
1.3.2 Reliance on professional management.....	39.31	99
2 Attract	50.10	60
2.1 External openness	32.69	85
FDI		
2.1.1 FDI inflow.....	32.17	35
Brain gain		
2.1.2 Qualified labour inflow.....	18.44	96
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	47.47	91
2.2 Internal openness	67.50	32
Diversity		
2.2.1 Tolerance of minorities.....	67.83	64
2.2.2 Tolerance of immigrants.....	70.44	49
Social mobility		
2.2.3 Social mobility.....	43.90	80
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	55.32	19
3 Grow	44.66	60
3.1 Formal education	48.05	41
Education climate		
3.1.1 Pupil-teacher ratio.....	85.09	37
3.1.2 Technical/vocational enrolment.....	61.98	20
3.1.3 Tertiary enrolment.....	35.02	62
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	10.09	46

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	39.70	94
Further education and training climate		
3.2.1 Quality of management schools.....	44.36	83
3.2.2 Extent of staff training.....	35.05	93
3.3 Access to growth opportunities	46.24	77
Networks		
3.3.1 Use of virtual social networks.....	80.65	36
3.3.2 State of cluster development.....	39.28	73
Research quality		
3.3.3 Quality of scientific research institutions.....	36.94	81
Voice		
3.3.4 Voicing concern to officials.....	28.07	84
4 Retain	53.84	46
4.1 Sustainability	53.27	43
Social protection		
4.1.1 Pension system.....	54.21	46
Taxation		
4.1.2 Extent and effect of taxation.....	52.32	17
4.2 Lifestyle	54.42	53
Quality of life		
4.2.1 Environmental performance.....	32.05	78
4.2.2 Property stolen.....	72.51	40
4.2.3 Safety at night.....	70.59	47
Services		
4.2.4 Physicians density.....	42.52	43
5 Labour and Vocational	34.15	68
5.1 Employable skills	33.93	77
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	50.57	30
Technical professions		
5.1.2 Technicians and associate professionals.....	46.43	46
Youth employment		
5.1.3 Youth employment.....	4.78	98
5.2 Labour productivity	34.38	65
Productivity per employee		
5.2.1 Labour productivity per employee.....	21.86	50
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	46.90	62
6 Global Knowledge	28.42	59
6.1 Higher skills and competencies	26.60	56
Educated workforce		
6.1.1 Tertiary-educated workforce.....	27.79	64
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	32.58	39
6.1.3 Professionals.....	38.72	44
6.1.4 Researchers.....	7.32	53
6.2 Talent impact	30.25	63
Innovation		
6.2.1 Innovation output.....	25.43	63
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	35.06	49

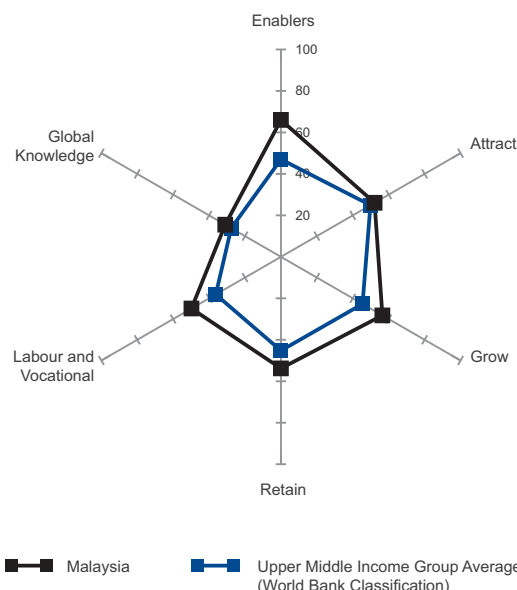
MALAYSIA

RANK
(out of 103)

37

Population (millions) **29.27**
 GDP per capita (PPP\$) **16,922.37**
 GDP (US\$ billions) **303.53**

Global Talent Competitiveness Index Score **51.54**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	66.02	23
1.1 Regulatory landscape	62.73	46
Government efficiency		
1.1.1 Government effectiveness	62.76	29
1.1.2 Political stability	69.93	48
FDI climate		
1.1.3 Starting a foreign business	55.49	46
1.2 Market landscape	60.24	26
Competition climate		
1.2.1 Intensity of local competition	72.71	32
Innovation climate		
1.2.2 Venture capital availability	50.56	8
1.2.3 Firm-level technology absorption	75.92	25
1.2.4 R&D expenditure	14.00	44
Connectivity		
1.2.5 ICT access	58.07	46
Ease of doing business		
1.2.6 Ease of doing business	90.20	11
1.3 Business landscape	75.10	13
Labour market flexibility		
1.3.1 Labour market flexibility	78.21	14
Ownership and governance		
1.3.2 Reliance on professional management	71.99	22
2 Attract	52.13	50
2.1 External openness	54.26	16
FDI		
2.1.1 FDI inflow	33.22	33
Brain gain		
2.1.2 Qualified labour inflow	62.20	18
Foreign companies		
2.1.3 Prevalence of foreign ownership	67.35	40
2.2 Internal openness	50.01	87
Diversity		
2.2.1 Tolerance of minorities	80.33	34
2.2.2 Tolerance of immigrants	19.64	101
Social mobility		
2.2.3 Social mobility	67.97	24
Gender mobility		
2.2.4 Female professionals and technical workers	67.76	72
2.2.5 Female parliamentarians	14.36	84
3 Grow	56.48	31
3.1 Formal education	39.44	56
Education climate		
3.1.1 Pupil-teacher ratio	79.94	47
3.1.2 Technical/vocational enrolment	13.10	71
3.1.3 Tertiary enrolment	38.71	56
Performance of education system		
3.1.4 Reading, maths and science scores	35.14	50
Top universities		
3.1.5 QS university ranking	41.67	28
International students		
3.1.6 International students inflow	28.05	22

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	68.46	12
Further education and training climate		
3.2.1 Quality of management schools	66.99	24
3.2.2 Extent of staff training	69.93	7
3.3 Access to growth opportunities	61.55	32
Networks		
3.3.1 Use of virtual social networks	83.79	25
3.3.2 State of cluster development	66.40	11
Research quality		
3.3.3 Quality of scientific research institutions	64.39	27
Voice		
3.3.4 Voicing concern to officials	31.60	77
4 Retain	53.79	48
4.1 Sustainability	56.57	41
Social protection		
4.1.1 Pension system	50.72	47
Taxation		
4.1.2 Extent and effect of taxation	62.42	10
4.2 Lifestyle	51.02	60
Quality of life		
4.2.1 Environmental performance	67.59	25
4.2.2 Property stolen	69.67	54
4.2.3 Safety at night	51.66	81
Services		
4.2.4 Physicians density	15.15	74
5 Labour and Vocational	49.82	26
5.1 Employable skills	51.95	23
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	49.00	34
Technical professions		
5.1.2 Technicians and associate professionals	69.90	20
Youth employment		
5.1.3 Youth employment	36.94	54
5.2 Labour productivity	47.70	30
Productivity per employee		
5.2.1 Labour productivity per employee	23.11	48
Pay and productivity		
5.2.2 Relationship of pay to productivity	72.29	2
6 Global Knowledge	31.01	56
6.1 Higher skills and competencies	25.76	57
Educated workforce		
6.1.1 Tertiary-educated workforce	37.36	51
Knowledge workers		
6.1.2 Legislators, senior officials and managers	42.13	23
6.1.3 Professionals	18.60	69
6.1.4 Researchers	4.94	65
6.2 Talent impact	36.27	51
Innovation		
6.2.1 Innovation output	41.37	37
Entrepreneurship		
6.2.2 New product entrepreneurial activity	31.17	57

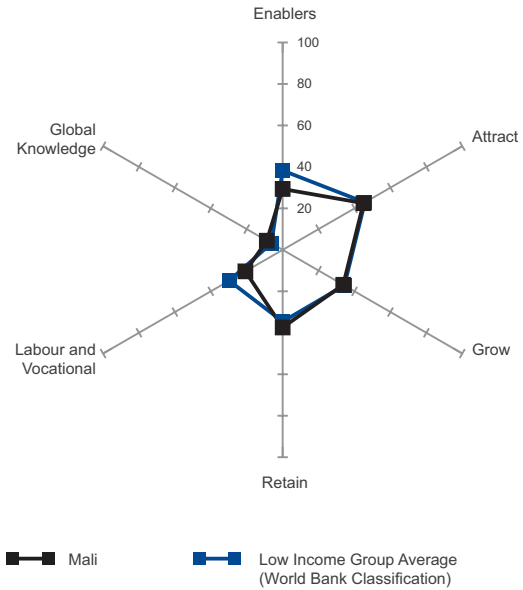
MALI

RANK
(out of 103)

100

Population (millions) **14.85**
 GDP per capita (PPP\$) **1,100.24**
 GDP (US\$ billions) **10.32**

Global Talent Competitiveness Index Score **29.18**
 Global Talent Competitiveness Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	29.34	100
1.1 Regulatory landscape	29.02	95
Government efficiency.....		
1.1.1 Government effectiveness.....	8.21	99
1.1.2 Political stability.....	48.72	79
FDI climate.....		
1.1.3 Starting a foreign business.....	30.14	62
1.2 Market landscape	25.36	99
Competition climate.....		
1.2.1 Intensity of local competition.....	53.22	84
Innovation climate.....		
1.2.2 Venture capital availability.....	22.16	74
1.2.3 Firm-level technology absorption.....	59.01	70
1.2.4 R&D expenditure.....	5.19	68
Connectivity.....		
1.2.5 ICT access.....	7.59	93
Ease of doing business.....		
1.2.6 Ease of doing business.....	5.00	98
1.3 Business landscape	33.65	93
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	29.49	83
Ownership and governance.....		
1.3.2 Reliance on professional management.....	37.81	102
2 Attract	45.00	81
2.1 External openness	32.71	84
FDI.....		
2.1.1 FDI inflow.....	14.22	70
Brain gain.....		
2.1.2 Qualified labour inflow.....	33.80	75
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	50.11	83
2.2 Internal openness	57.30	64
Diversity.....		
2.2.1 Tolerance of minorities.....	93.15	12
2.2.2 Tolerance of immigrants.....	83.88	24
Social mobility.....		
2.2.3 Social mobility.....	38.10	92
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	n/a	n/a
2.2.5 Female parliamentarians.....	14.05	85
3 Grow	33.72	97
3.1 Formal education	19.42	90
Education climate.....		
3.1.1 Pupil-teacher ratio.....	48.70	75
3.1.2 Technical/vocational enrolment.....	24.29	58
3.1.3 Tertiary enrolment.....	2.25	96
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	2.42	70

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	36.61	99
Further education and training climate.....		
3.2.1 Quality of management schools.....	38.95	94
3.2.2 Extent of staff training.....	34.27	97
3.3 Access to growth opportunities	45.11	80
Networks.....		
3.3.1 Use of virtual social networks.....	55.83	96
3.3.2 State of cluster development.....	34.22	87
Research quality.....		
3.3.3 Quality of scientific research institutions.....	43.71	60
Voice.....		
3.3.4 Voicing concern to officials.....	46.70	47
4 Retain	37.44	87
4.1 Sustainability	20.96	100
Social protection.....		
4.1.1 Pension system.....	7.13	82
Taxation.....		
4.1.2 Extent and effect of taxation.....	34.79	73
4.2 Lifestyle	53.92	55
Quality of life.....		
4.2.1 Environmental performance.....	n/a	n/a
4.2.2 Property stolen.....	75.12	33
4.2.3 Safety at night.....	85.99	19
Services.....		
4.2.4 Physicians density.....	0.67	95
5 Labour and Vocational	20.75	102
5.1 Employable skills	21.54	100
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	4.86	87
Technical professions.....		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment.....		
5.1.3 Youth employment.....	38.22	53
5.2 Labour productivity	19.97	101
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	1.05	90
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	38.88	88
6 Global Knowledge	8.82	94
6.1 Higher skills and competencies	2.46	100
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	4.33	83
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	n/a	n/a
6.1.3 Professionals.....	n/a	n/a
6.1.4 Researchers.....	0.59	85
6.2 Talent impact	15.18	90
Innovation.....		
6.2.1 Innovation output.....	15.18	83
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

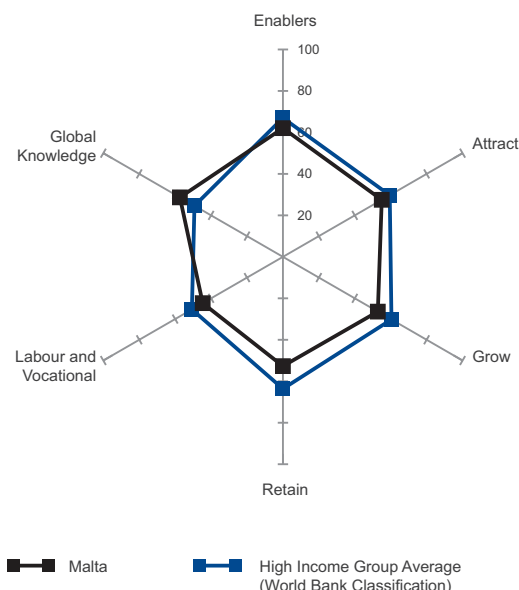
MALTA

RANK
(out of 103)

29

Population (millions) **0.43**
GDP per capita (PPP\$) **27,022.36**
GDP (US\$ billions) **8.69**

Global Talent Competitiveness
Index Score **54.10**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	62.06	30
1.1 Regulatory landscape	79.10	20
Government efficiency.....		
1.1.1 Government effectiveness.....	67.68	26
1.1.2 Political stability.....	90.52	18
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	53.44	33
Competition climate.....		
1.2.1 Intensity of local competition.....	79.39	8
Innovation climate.....		
1.2.2 Venture capital availability.....	35.13	29
1.2.3 Firm-level technology absorption.....	75.55	28
1.2.4 R&D expenditure.....	13.81	46
Connectivity.....		
1.2.5 ICT access.....	86.34	13
Ease of doing business.....		
1.2.6 Ease of doing business.....	30.40	72
1.3 Business landscape	53.64	53
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	57.94	43
Ownership and governance.....		
1.3.2 Reliance on professional management.....	49.34	63
2 Attract	55.01	40
2.1 External openness	53.04	23
FDI.....		
2.1.1 FDI inflow.....	45.94	19
Brain gain.....		
2.1.2 Qualified labour inflow.....	52.15	30
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	61.01	50
2.2 Internal openness	56.99	68
Diversity.....		
2.2.1 Tolerance of minorities.....	76.41	48
2.2.2 Tolerance of immigrants.....	76.84	35
Social mobility.....		
2.2.3 Social mobility.....	62.26	29
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	57.64	76
2.2.5 Female parliamentarians.....	11.79	88
3 Grow	52.82	36
3.1 Formal education	41.61	52
Education climate.....		
3.1.1 Pupil-teacher ratio.....	92.79	15
3.1.2 Technical/vocational enrolment.....	31.75	51
3.1.3 Tertiary enrolment.....	31.69	65
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	51.81	39
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	59.34	30
Further education and training climate.....		
3.2.1 Quality of management schools.....	66.56	26
3.2.2 Extent of staff training.....	52.12	40
3.3 Access to growth opportunities	57.52	41
Networks.....		
3.3.1 Use of virtual social networks.....	90.45	4
3.3.2 State of cluster development.....	43.59	58
Research quality.....		
3.3.3 Quality of scientific research institutions.....	44.65	57
Voice.....		
3.3.4 Voicing concern to officials.....	51.42	39
4 Retain	52.70	51
4.1 Sustainability	44.44	56
Social protection.....		
4.1.1 Pension system.....	n/a	n/a
Taxation.....		
4.1.2 Extent and effect of taxation.....	44.44	37
4.2 Lifestyle	60.96	42
Quality of life.....		
4.2.1 Environmental performance.....	35.59	73
4.2.2 Property stolen.....	85.78	8
4.2.3 Safety at night.....	72.09	45
Services.....		
4.2.4 Physicians density.....	50.40	28
5 Labour and Vocational	44.66	35
5.1 Employable skills	42.94	48
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	10.43	83
Technical professions.....		
5.1.2 Technicians and associate professionals.....	66.33	24
Youth employment.....		
5.1.3 Youth employment.....	52.07	31
5.2 Labour productivity	46.39	34
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	40.23	29
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	52.54	42
6 Global Knowledge	57.36	13
6.1 Higher skills and competencies	36.54	38
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	30.75	60
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	48.31	14
6.1.3 Professionals.....	45.73	31
6.1.4 Researchers.....	21.37	36
6.2 Talent impact	78.18	1
Innovation.....		
6.2.1 Innovation output.....	78.18	4
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

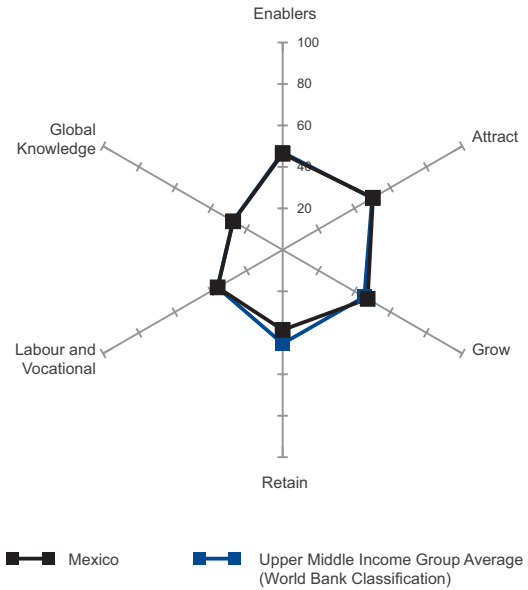
MEXICO

RANK
(out of 103)

70

Population (millions) **121.07**
 GDP per capita (PPP\$) **15,311.77**
 GDP (US\$ billions) **1,177.12**

Global Talent Competitiveness Index Score **41.04**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	46.32.....	60
1.1 Regulatory landscape	51.54.....	59
Government efficiency		
1.1.1 Government effectiveness.....	42.60.....	48
1.1.2 Political stability.....	49.05.....	77
FDI climate		
1.1.3 Starting a foreign business.....	62.96.....	34
1.2 Market landscape	42.64.....	54
Competition climate		
1.2.1 Intensity of local competition.....	62.73.....	63
Innovation climate		
1.2.2 Venture capital availability.....	27.05.....	55
1.2.3 Firm-level technology absorption.....	64.01.....	53
1.2.4 R&D expenditure.....	8.53.....	62
Connectivity		
1.2.5 ICT access.....	33.66.....	69
Ease of doing business		
1.2.6 Ease of doing business.....	59.90.....	42
1.3 Business landscape	44.77.....	75
Labour market flexibility		
1.3.1 Labour market flexibility.....	35.29.....	77
Ownership and governance		
1.3.2 Reliance on professional management.....	54.24.....	48
2 Attract	50.24.....	58
2.1 External openness	44.33.....	48
FDI		
2.1.1 FDI inflow.....	14.07.....	71
Brain gain		
2.1.2 Qualified labour inflow.....	43.96.....	43
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	74.96.....	20
2.2 Internal openness	56.15.....	69
Diversity		
2.2.1 Tolerance of minorities.....	61.96.....	79
2.2.2 Tolerance of immigrants.....	56.56.....	80
Social mobility		
2.2.3 Social mobility.....	52.35.....	57
Gender mobility		
2.2.4 Female professionals and technical workers.....	65.99.....	73
2.2.5 Female parliamentarians.....	43.92.....	25
3 Grow	47.31.....	53
3.1 Formal education	33.04.....	67
Education climate		
3.1.1 Pupil-teacher ratio.....	68.71.....	64
3.1.2 Technical/vocational enrolment.....	33.66.....	43
3.1.3 Tertiary enrolment.....	24.35.....	72
Performance of education system		
3.1.4 Reading, maths and science scores.....	37.70.....	48
Top universities		
3.1.5 QS university ranking.....	33.83.....	32
International students		
3.1.6 International students inflow.....	0.00.....	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	53.40.....	48
Further education and training climate		
3.2.1 Quality of management schools.....	57.37.....	45
3.2.2 Extent of staff training.....	49.43.....	50
3.3 Access to growth opportunities	55.49.....	44
Networks		
3.3.1 Use of virtual social networks.....	72.27.....	69
3.3.2 State of cluster development.....	54.07.....	31
Research quality		
3.3.3 Quality of scientific research institutions.....	50.58.....	45
Voice		
3.3.4 Voicing concern to officials.....	45.05.....	49
4 Retain	38.62.....	83
4.1 Sustainability	35.31.....	77
Social protection		
4.1.1 Pension system.....	27.80.....	62
Taxation		
4.1.2 Extent and effect of taxation.....	42.81.....	42
4.2 Lifestyle	41.94.....	83
Quality of life		
4.2.1 Environmental performance.....	36.96.....	71
4.2.2 Property stolen.....	53.55.....	83
4.2.3 Safety at night.....	45.56.....	88
Services		
4.2.4 Physicians density.....	31.68.....	57
5 Labour and Vocational	36.19.....	63
5.1 Employable skills	37.93.....	62
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	20.86.....	73
Technical professions		
5.1.2 Technicians and associate professionals.....	43.88.....	47
Youth employment		
5.1.3 Youth employment.....	49.04.....	36
5.2 Labour productivity	34.45.....	63
Productivity per employee		
5.2.1 Labour productivity per employee.....	23.33.....	47
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	45.57.....	68
6 Global Knowledge	27.54.....	60
6.1 Higher skills and competencies	18.88.....	76
Educated workforce		
6.1.1 Tertiary-educated workforce.....	40.09.....	47
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	11.24.....	79
6.1.3 Professionals.....	20.12.....	66
6.1.4 Researchers.....	4.05.....	70
6.2 Talent impact	36.21.....	52
Innovation		
6.2.1 Innovation output.....	19.17.....	75
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	53.25.....	17

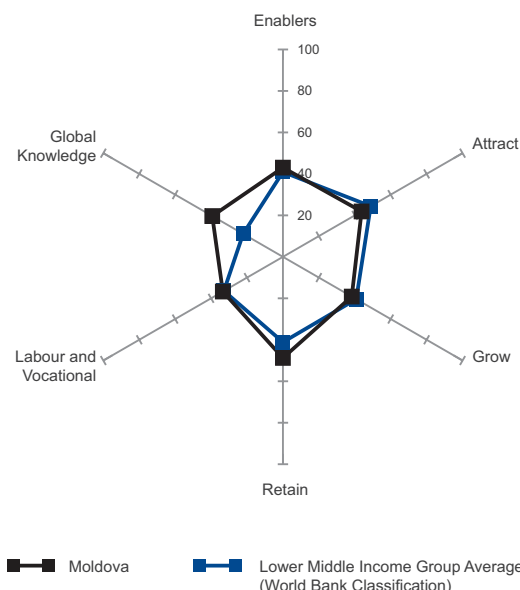
MOLDOVA

RANK
(out of 103)

68

Population (millions) **3.52**
GDP per capita (PPP\$) **3,415.03**
GDP (US\$ billions) **7.25**

Global Talent Competitiveness
Index Score **41.11**
Global Talent Competitiveness
Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	43.03	76
1.1 Regulatory landscape	49.13	66
Government efficiency.....		
1.1.1 Government effectiveness.....	15.51	88
1.1.2 Political stability.....	63.02	60
FDI climate.....		
1.1.3 Starting a foreign business.....	68.87	29
1.2 Market landscape	38.08	73
Competition climate.....		
1.2.1 Intensity of local competition.....	53.81	82
Innovation climate.....		
1.2.2 Venture capital availability.....	17.79	90
1.2.3 Firm-level technology absorption.....	49.29	95
1.2.4 R&D expenditure.....	11.51	52
Connectivity.....		
1.2.5 ICT access.....	55.86	49
Ease of doing business.....		
1.2.6 Ease of doing business.....	40.20	62
1.3 Business landscape	41.87	81
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	36.48	74
Ownership and governance.....		
1.3.2 Reliance on professional management.....	47.26	73
2 Attract	43.78	85
2.1 External openness	32.40	86
FDI.....		
2.1.1 FDI inflow.....	30.43	37
Brain gain.....		
2.1.2 Qualified labour inflow.....	17.79	98
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	48.97	88
2.2 Internal openness	55.16	74
Diversity.....		
2.2.1 Tolerance of minorities.....	52.07	92
2.2.2 Tolerance of immigrants.....	53.58	82
Social mobility.....		
2.2.3 Social mobility.....	39.63	90
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	30.54	51
3 Grow	38.31	90
3.1 Formal education	37.29	60
Education climate.....		
3.1.1 Pupil-teacher ratio.....	90.82	22
3.1.2 Technical/vocational enrolment.....	24.42	57
3.1.3 Tertiary enrolment.....	35.86	60
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	29.60	55
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	5.75	60

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	38.02	97
Further education and training climate.....		
3.2.1 Quality of management schools.....	39.17	93
3.2.2 Extent of staff training.....	36.88	90
3.3 Access to growth opportunities	39.62	93
Networks.....		
3.3.1 Use of virtual social networks.....	71.34	71
3.3.2 State of cluster development.....	22.56	101
Research quality.....		
3.3.3 Quality of scientific research institutions.....	24.00	98
Voice.....		
3.3.4 Voicing concern to officials.....	40.57	57
4 Retain	48.75	57
4.1 Sustainability	48.98	51
Social protection.....		
4.1.1 Pension system.....	58.89	44
Taxation.....		
4.1.2 Extent and effect of taxation.....	39.07	60
4.2 Lifestyle	48.53	71
Quality of life.....		
4.2.1 Environmental performance.....	28.05	87
4.2.2 Property stolen.....	66.59	60
4.2.3 Safety at night.....	56.15	68
Services.....		
4.2.4 Physicians density.....	43.33	42
5 Labour and Vocational	33.47	70
5.1 Employable skills	35.83	68
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	60.71	21
Technical professions.....		
5.1.2 Technicians and associate professionals.....	34.18	59
Youth employment.....		
5.1.3 Youth employment.....	12.58	89
5.2 Labour productivity	31.12	74
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	7.24	77
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	54.99	34
6 Global Knowledge	39.34	39
6.1 Higher skills and competencies	31.44	45
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	38.72	49
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	38.20	31
6.1.3 Professionals.....	40.55	39
6.1.4 Researchers.....	8.29	52
6.2 Talent impact	47.25	32
Innovation.....		
6.2.1 Innovation output.....	47.25	29
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

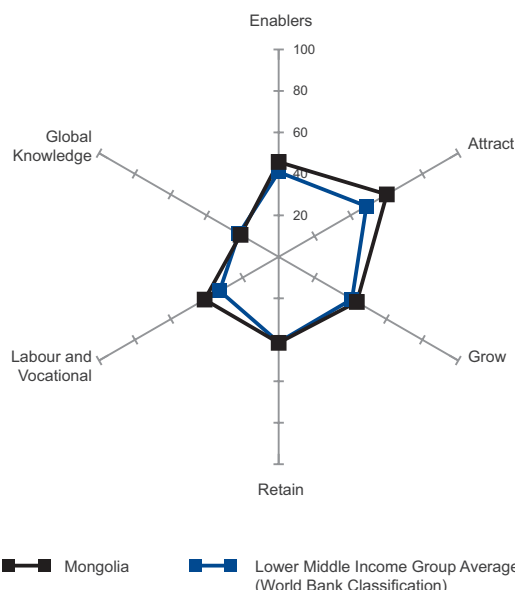
MONGOLIA

RANK
(out of 103)

58

Population (millions) **2.79**
 GDP per capita (PPP\$) **5,371.64**
 GDP (US\$ billions) **10.26**

Global Talent Competitiveness Index Score **42.23**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	45.75.....	63
1.1 Regulatory landscape	47.09.....	71
Government efficiency		
1.1.1 Government effectiveness.....	14.48.....	90
1.1.2 Political stability.....	79.69.....	36
FDI climate		
1.1.3 Starting a foreign business.....	n/a.....	n/a
1.2 Market landscape	35.22.....	77
Competition climate		
1.2.1 Intensity of local competition.....	60.09.....	70
Innovation climate		
1.2.2 Venture capital availability.....	12.12.....	103
1.2.3 Firm-level technology absorption.....	60.63.....	65
1.2.4 R&D expenditure.....	5.04.....	70
Connectivity		
1.2.5 ICT access.....	29.24.....	75
Ease of doing business		
1.2.6 Ease of doing business.....	44.20.....	58
1.3 Business landscape	54.94.....	47
Labour market flexibility		
1.3.1 Labour market flexibility.....	66.58.....	36
Ownership and governance		
1.3.2 Reliance on professional management.....	43.30.....	83
2 Attract	60.21.....	27
2.1 External openness	66.40.....	6
FDI		
2.1.1 FDI inflow.....	100.00.....	1
Brain gain		
2.1.2 Qualified labour inflow.....	30.18.....	80
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	69.03.....	33
2.2 Internal openness	54.02.....	78
Diversity		
2.2.1 Tolerance of minorities.....	56.41.....	88
2.2.2 Tolerance of immigrants.....	52.83.....	84
Social mobility		
2.2.3 Social mobility.....	55.84.....	50
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00.....	1
2.2.5 Female parliamentarians.....	5.02.....	98
3 Grow	43.52.....	67
3.1 Formal education	39.70.....	55
Education climate		
3.1.1 Pupil-teacher ratio.....	77.76.....	53
3.1.2 Technical/vocational enrolment.....	24.54.....	55
3.1.3 Tertiary enrolment.....	53.70.....	37
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a.....	n/a
Top universities		
3.1.5 QS university ranking.....	n/a.....	n/a
International students		
3.1.6 International students inflow.....	2.79.....	67

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	41.77.....	85
Further education and training climate		
3.2.1 Quality of management schools.....	33.13.....	101
3.2.2 Extent of staff training.....	50.41.....	47
3.3 Access to growth opportunities	49.09.....	61
Networks		
3.3.1 Use of virtual social networks.....	71.15.....	72
3.3.2 State of cluster development.....	32.29.....	92
Research quality		
3.3.3 Quality of scientific research institutions.....	35.84.....	85
Voice		
3.3.4 Voicing concern to officials.....	57.08.....	26
4 Retain	41.47.....	72
4.1 Sustainability	41.95.....	60
Social protection		
4.1.1 Pension system.....	34.26.....	58
Taxation		
4.1.2 Extent and effect of taxation.....	49.65.....	25
4.2 Lifestyle	40.99.....	87
Quality of life		
4.2.1 Environmental performance.....	28.41.....	86
4.2.2 Property stolen.....	38.63.....	92
4.2.3 Safety at night.....	52.19.....	79
Services		
4.2.4 Physicians density.....	44.73.....	38
5 Labour and Vocational	41.21.....	43
5.1 Employable skills	26.60.....	89
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	n/a.....	n/a
Technical professions		
5.1.2 Technicians and associate professionals.....	17.86.....	79
Youth employment		
5.1.3 Youth employment.....	35.35.....	58
5.2 Labour productivity	55.82.....	11
Productivity per employee		
5.2.1 Labour productivity per employee.....	n/a.....	n/a
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	55.82.....	30
6 Global Knowledge	21.21.....	78
6.1 Higher skills and competencies	20.98.....	70
Educated workforce		
6.1.1 Tertiary-educated workforce.....	n/a.....	n/a
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	23.60.....	57
6.1.3 Professionals.....	34.45.....	50
6.1.4 Researchers.....	4.88.....	66
6.2 Talent impact	21.44.....	79
Innovation		
6.2.1 Innovation output.....	21.44.....	69
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a.....	n/a

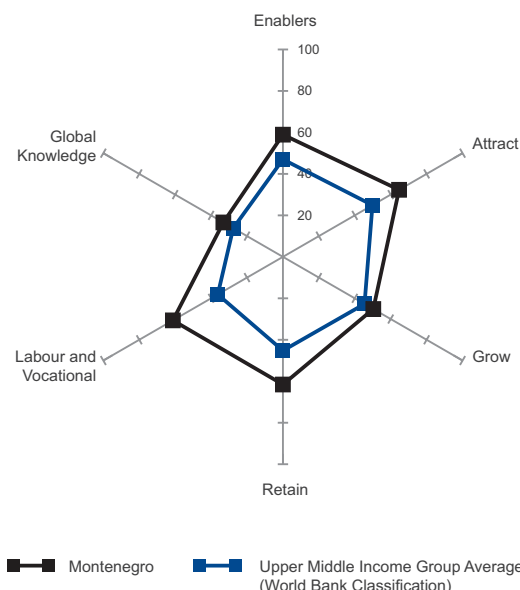
MONTENEGRO

RANK
(out of 103)

26

Population (millions) **0.62**
GDP per capita (PPP\$) **11,800.31**
GDP (US\$ billions) **4.28**

Global Talent Competitiveness
Index Score **54.98**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	58.92	33
1.1 Regulatory landscape	65.38	40
Government efficiency.....		
1.1.1 Government effectiveness.....	35.89	53
1.1.2 Political stability.....	78.84	40
FDI climate.....		
1.1.3 Starting a foreign business.....	81.41	14
1.2 Market landscape	45.86	47
Competition climate.....		
1.2.1 Intensity of local competition.....	51.52	86
Innovation climate.....		
1.2.2 Venture capital availability.....	38.24	23
1.2.3 Firm-level technology absorption.....	55.92	78
1.2.4 R&D expenditure.....	25.75	33
Connectivity.....		
1.2.5 ICT access.....	n/a	n/a
Ease of doing business.....		
1.2.6 Ease of doing business.....	57.90	44
1.3 Business landscape	65.51	24
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	80.78	9
Ownership and governance.....		
1.3.2 Reliance on professional management.....	50.24	60
2 Attract	64.66	20
2.1 External openness	64.91	7
FDI.....		
2.1.1 FDI inflow.....	92.11	6
Brain gain.....		
2.1.2 Qualified labour inflow.....	42.53	49
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	60.09	55
2.2 Internal openness	64.41	39
Diversity.....		
2.2.1 Tolerance of minorities.....	76.20	50
2.2.2 Tolerance of immigrants.....	72.68	42
Social mobility.....		
2.2.3 Social mobility.....	55.83	51
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	17.35	76
3 Grow	50.31	45
3.1 Formal education	49.14	39
Education climate.....		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	71.99	12
3.1.3 Tertiary enrolment.....	44.11	49
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	31.31	52
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	53.59	45
Further education and training climate.....		
3.2.1 Quality of management schools.....	55.11	51
3.2.2 Extent of staff training.....	52.07	41
3.3 Access to growth opportunities	48.20	66
Networks.....		
3.3.1 Use of virtual social networks.....	81.70	34
3.3.2 State of cluster development.....	31.06	93
Research quality.....		
3.3.3 Quality of scientific research institutions.....	48.66	49
Voice.....		
3.3.4 Voicing concern to officials.....	31.37	78
4 Retain	61.57	32
4.1 Sustainability	52.68	45
Social protection.....		
4.1.1 Pension system.....	n/a	n/a
Taxation.....		
4.1.2 Extent and effect of taxation.....	52.68	16
4.2 Lifestyle	70.45	13
Quality of life.....		
4.2.1 Environmental performance.....	n/a	n/a
4.2.2 Property stolen.....	91.00	5
4.2.3 Safety at night.....	86.42	16
Services.....		
4.2.4 Physicians density.....	33.95	54
5 Labour and Vocational	61.28	8
5.1 Employable skills	75.87	4
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	82.86	5
Technical professions.....		
5.1.2 Technicians and associate professionals.....	68.88	21
Youth employment.....		
5.1.3 Youth employment.....	n/a	n/a
5.2 Labour productivity	46.69	32
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	n/a	n/a
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	46.69	64
6 Global Knowledge	33.17	52
6.1 Higher skills and competencies	32.25	44
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	36.67	54
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	29.78	46
6.1.3 Professionals.....	50.61	23
6.1.4 Researchers.....	11.95	45
6.2 Talent impact	34.09	55
Innovation.....		
6.2.1 Innovation output.....	37.00	43
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	31.17	57

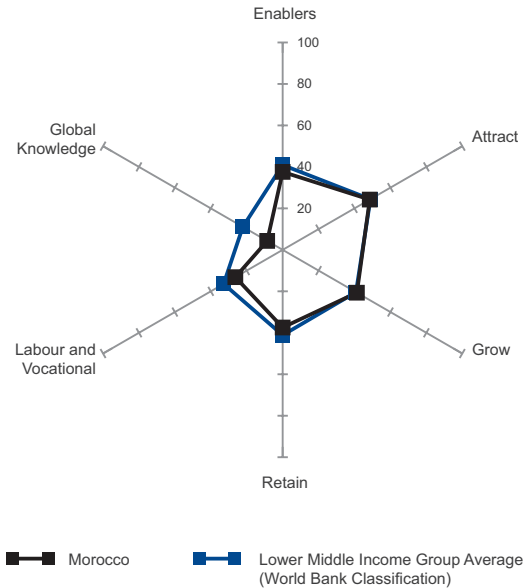
MOROCCO

RANK
(out of 103)

90

Population (millions) **32.34**
 GDP per capita (PPP\$) **5,265.18**
 GDP (US\$ billions) **97.53**

Global Talent Competitiveness Index Score **33.30**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	37.59	90
1.1 Regulatory landscape	43.08	78
Government efficiency		
1.1.1 Government effectiveness.....	26.40	70
1.1.2 Political stability.....	54.67	71
FDI climate		
1.1.3 Starting a foreign business.....	48.17	53
1.2 Market landscape	41.27	61
Competition climate		
1.2.1 Intensity of local competition.....	66.58	50
Innovation climate		
1.2.2 Venture capital availability.....	33.70	31
1.2.3 Firm-level technology absorption.....	61.60	60
1.2.4 R&D expenditure.....	14.02	43
Connectivity		
1.2.5 ICT access.....	39.31	63
Ease of doing business		
1.2.6 Ease of doing business.....	32.40	70
1.3 Business landscape	28.41	99
Labour market flexibility		
1.3.1 Labour market flexibility.....	9.50	101
Ownership and governance		
1.3.2 Reliance on professional management.....	47.33	72
2 Attract	48.48	69
2.1 External openness	43.83	51
FDI		
2.1.1 FDI inflow.....	20.09	51
Brain gain		
2.1.2 Qualified labour inflow.....	43.46	44
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	67.95	37
2.2 Internal openness	53.13	80
Diversity		
2.2.1 Tolerance of minorities.....	66.85	67
2.2.2 Tolerance of immigrants.....	73.11	39
Social mobility		
2.2.3 Social mobility.....	51.80	61
Gender mobility		
2.2.4 Female professionals and technical workers.....	48.58	79
2.2.5 Female parliamentarians.....	25.34	61
3 Grow	41.33	77
3.1 Formal education	24.18	89
Education climate		
3.1.1 Pupil-teacher ratio.....	65.73	69
3.1.2 Technical/vocational enrolment.....	12.86	72
3.1.3 Tertiary enrolment.....	9.42	85
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	8.70	48

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	53.37	49
Further education and training climate		
3.2.1 Quality of management schools.....	58.74	41
3.2.2 Extent of staff training.....	48.00	57
3.3 Access to growth opportunities	46.45	75
Networks		
3.3.1 Use of virtual social networks.....	79.53	39
3.3.2 State of cluster development.....	49.91	44
Research quality		
3.3.3 Quality of scientific research institutions.....	35.85	84
Voice		
3.3.4 Voicing concern to officials.....	20.52	92
4 Retain	37.45	86
4.1 Sustainability	33.33	81
Social protection		
4.1.1 Pension system.....	23.98	68
Taxation		
4.1.2 Extent and effect of taxation.....	42.67	43
4.2 Lifestyle	41.58	85
Quality of life		
4.2.1 Environmental performance.....	29.30	84
4.2.2 Property stolen.....	52.84	84
4.2.3 Safety at night.....	74.22	38
Services		
4.2.4 Physicians density.....	9.94	81
5 Labour and Vocational	26.34	97
5.1 Employable skills	22.59	98
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions		
5.1.2 Technicians and associate professionals.....	16.84	80
Youth employment		
5.1.3 Youth employment.....	28.34	69
5.2 Labour productivity	30.10	78
Productivity per employee		
5.2.1 Labour productivity per employee.....	6.88	79
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	53.31	41
6 Global Knowledge	8.61	95
6.1 Higher skills and competencies	4.88	94
Educated workforce		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	3.93	86
6.1.3 Professionals.....	4.88	88
6.1.4 Researchers.....	5.83	60
6.2 Talent impact	12.34	92
Innovation		
6.2.1 Innovation output.....	16.89	80
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	7.79	74

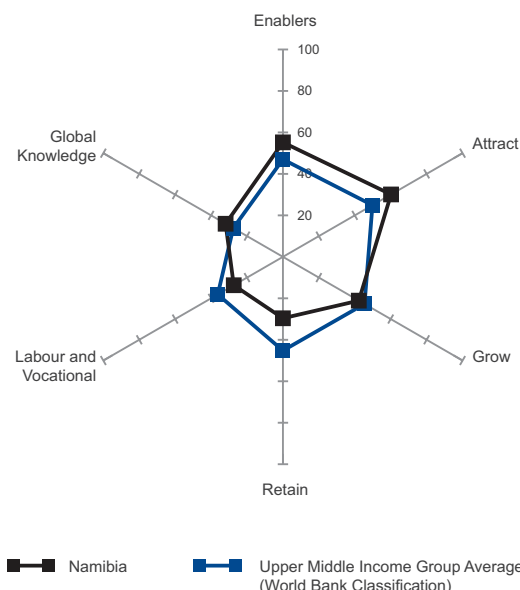
NAMIBIA

RANK
(out of 103)

69

Population (millions) **2.27**
GDP per capita (PPP\$) **7,771.70**
GDP (US\$ billions) **12.30**

Global Talent Competitiveness
Index Score **41.09**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	55.21	43
1.1 Regulatory landscape	61.35	48
Government efficiency		
1.1.1 Government effectiveness.....	34.75	55
1.1.2 Political stability.....	87.95	23
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	40.42	66
Competition climate		
1.2.1 Intensity of local competition.....	58.94	72
Innovation climate		
1.2.2 Venture capital availability.....	23.75	65
1.2.3 Firm-level technology absorption.....	63.92	55
1.2.4 R&D expenditure.....	n/a	n/a
Connectivity		
1.2.5 ICT access.....	19.17	86
Ease of doing business		
1.2.6 Ease of doing business.....	36.30	66
1.3 Business landscape	63.86	27
Labour market flexibility		
1.3.1 Labour market flexibility.....	74.92	22
Ownership and governance		
1.3.2 Reliance on professional management.....	52.81	54
2 Attract	60.18	28
2.1 External openness	53.05	22
FDI		
2.1.1 FDI inflow.....	52.92	14
Brain gain		
2.1.2 Qualified labour inflow.....	38.66	60
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	67.56	38
2.2 Internal openness	67.31	33
Diversity		
2.2.1 Tolerance of minorities.....	82.50	32
2.2.2 Tolerance of immigrants.....	61.47	69
Social mobility		
2.2.3 Social mobility.....	52.65	56
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	39.93	30
3 Grow	42.24	71
3.1 Formal education	33.62	66
Education climate		
3.1.1 Pupil-teacher ratio.....	48.97	74
3.1.2 Technical/vocational enrolment.....	n/a	n/a
3.1.3 Tertiary enrolment.....	5.13	91
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	46.76	13

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	43.35	82
Further education and training climate		
3.2.1 Quality of management schools.....	35.34	99
3.2.2 Extent of staff training.....	51.35	44
3.3 Access to growth opportunities	49.74	59
Networks		
3.3.1 Use of virtual social networks.....	65.66	84
3.3.2 State of cluster development.....	39.81	71
Research quality		
3.3.3 Quality of scientific research institutions.....	39.46	76
Voice		
3.3.4 Voicing concern to officials.....	54.01	33
4 Retain	29.62	97
4.1 Sustainability	27.16	93
Social protection		
4.1.1 Pension system.....	8.87	80
Taxation		
4.1.2 Extent and effect of taxation.....	45.44	36
4.2 Lifestyle	32.09	98
Quality of life		
4.2.1 Environmental performance.....	40.55	66
4.2.2 Property stolen.....	46.68	88
4.2.3 Safety at night.....	35.19	99
Services		
4.2.4 Physicians density.....	5.94	83
5 Labour and Vocational	27.38	92
5.1 Employable skills	13.80	103
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions		
5.1.2 Technicians and associate professionals.....	20.92	76
Youth employment		
5.1.3 Youth employment.....	6.69	97
5.2 Labour productivity	40.96	43
Productivity per employee		
5.2.1 Labour productivity per employee.....	n/a	n/a
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	40.96	82
6 Global Knowledge	31.91	53
6.1 Higher skills and competencies	21.13	69
Educated workforce		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	15.73	69
6.1.3 Professionals.....	26.52	60
6.1.4 Researchers.....	n/a	n/a
6.2 Talent impact	42.70	40
Innovation		
6.2.1 Innovation output.....	19.17	75
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	66.23	9

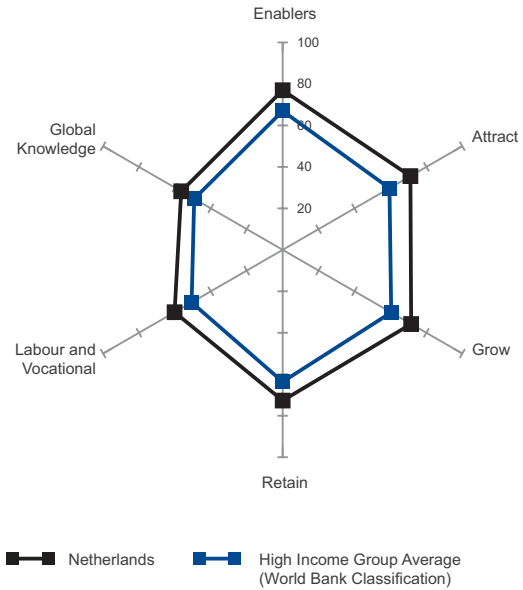
NETHERLANDS

RANK
(out of 103)

6

Population (millions) **16.71**
 GDP per capita (PPP\$) **42,193.69**
 GDP (US\$ billions) **773.12**

Global Talent Competitiveness Index Score **68.16**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	76.97	13
1.1 Regulatory landscape	90.00	9
Government efficiency.....		
1.1.1 Government effectiveness.....	86.37	8
1.1.2 Political stability.....	93.63	11
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	69.58	18
Competition climate.....		
1.2.1 Intensity of local competition.....	84.56	1
Innovation climate.....		
1.2.2 Venture capital availability.....	46.31	11
1.2.3 Firm-level technology absorption.....	79.29	19
1.2.4 R&D expenditure.....	41.31	17
Connectivity.....		
1.2.5 ICT access.....	92.41	9
Ease of doing business.....		
1.2.6 Ease of doing business.....	73.60	28
1.3 Business landscape	71.34	17
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	57.15	45
Ownership and governance.....		
1.3.2 Reliance on professional management.....	85.53	3
2 Attract	71.12	6
2.1 External openness	54.33	15
FDI.....		
2.1.1 FDI inflow.....	16.60	64
Brain gain.....		
2.1.2 Qualified labour inflow.....	71.09	9
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	75.30	18
2.2 Internal openness	87.91	6
Diversity.....		
2.2.1 Tolerance of minorities.....	91.63	15
2.2.2 Tolerance of immigrants.....	92.00	11
Social mobility.....		
2.2.3 Social mobility.....	82.21	10
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	88.82	60
2.2.5 Female parliamentarians.....	84.91	4
3 Grow	71.53	6
3.1 Formal education	68.03	9
Education climate.....		
3.1.1 Pupil-teacher ratio.....	79.93	48
3.1.2 Technical/vocational enrolment.....	100.00	1
3.1.3 Tertiary enrolment.....	62.01	24
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	76.97	9
Top universities.....		
3.1.5 QS university ranking.....	69.54	11
International students.....		
3.1.6 International students inflow.....	19.76	29

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	73.37	6
Further education and training climate.....		
3.2.1 Quality of management schools.....	77.01	9
3.2.2 Extent of staff training.....	69.72	8
3.3 Access to growth opportunities	73.19	9
Networks.....		
3.3.1 Use of virtual social networks.....	90.76	3
3.3.2 State of cluster development.....	64.99	13
Research quality.....		
3.3.3 Quality of scientific research institutions.....	78.99	8
Voice.....		
3.3.4 Voicing concern to officials.....	58.02	24
4 Retain	72.69	5
4.1 Sustainability	73.17	5
Social protection.....		
4.1.1 Pension system.....	95.02	14
Taxation.....		
4.1.2 Extent and effect of taxation.....	51.32	19
4.2 Lifestyle	72.20	9
Quality of life.....		
4.2.1 Environmental performance.....	74.77	16
4.2.2 Property stolen.....	79.62	17
4.2.3 Safety at night.....	88.13	10
Services.....		
4.2.4 Physicians density.....	46.29	35
5 Labour and Vocational	60.17	10
5.1 Employable skills	68.94	7
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	48.71	35
Technical professions.....		
5.1.2 Technicians and associate professionals.....	77.04	16
Youth employment.....		
5.1.3 Youth employment.....	81.05	6
5.2 Labour productivity	51.40	23
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	54.40	15
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	48.40	56
6 Global Knowledge	56.48	14
6.1 Higher skills and competencies	52.60	19
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	65.15	20
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	41.01	28
6.1.3 Professionals.....	67.99	7
6.1.4 Researchers.....	36.26	23
6.2 Talent impact	60.36	10
Innovation.....		
6.2.1 Innovation output.....	80.46	3
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	40.26	40

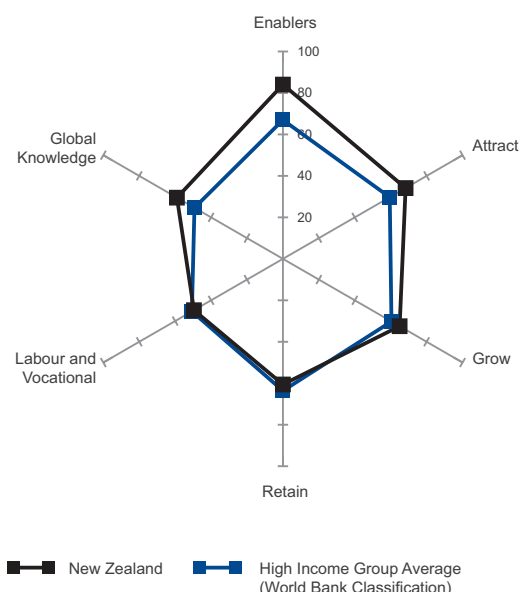
NEW ZEALAND

RANK
(out of 103)

17

Population (millions) **4.46**
GDP per capita (PPP\$) **29,730.30**
GDP (US\$ billions) **169.68**

Global Talent Competitiveness
Index Score **64.40**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	84.04	2
1.1 Regulatory landscape	94.87	3
Government efficiency		
1.1.1 Government effectiveness.....	90.54	5
1.1.2 Political stability.....	99.20	2
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	68.14	19
Competition climate		
1.2.1 Intensity of local competition.....	75.12	21
Innovation climate		
1.2.2 Venture capital availability.....	42.11	20
1.2.3 Firm-level technology absorption.....	80.94	16
1.2.4 R&D expenditure.....	29.23	28
Connectivity		
1.2.5 ICT access.....	82.34	20
Ease of doing business		
1.2.6 Ease of doing business.....	99.10	2
1.3 Business landscape	89.11	1
Labour market flexibility		
1.3.1 Labour market flexibility.....	89.95	2
Ownership and governance		
1.3.2 Reliance on professional management.....	88.28	1
2 Attract	68.28	13
2.1 External openness	47.53	38
FDI		
2.1.1 FDI inflow.....	16.84	63
Brain gain		
2.1.2 Qualified labour inflow.....	42.95	47
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	82.80	5
2.2 Internal openness	89.04	4
Diversity		
2.2.1 Tolerance of minorities.....	98.48	2
2.2.2 Tolerance of immigrants.....	100.00	1
Social mobility		
2.2.3 Social mobility.....	87.98	3
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	58.75	17
3 Grow	64.97	17
3.1 Formal education	65.16	13
Education climate		
3.1.1 Pupil-teacher ratio.....	77.74	54
3.1.2 Technical/vocational enrolment.....	32.71	47
3.1.3 Tertiary enrolment.....	79.29	6
Performance of education system		
3.1.4 Reading, maths and science scores.....	79.05	7
Top universities		
3.1.5 QS university ranking.....	56.76	16
International students		
3.1.6 International students inflow.....	65.43	11

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	67.07	14
Further education and training climate		
3.2.1 Quality of management schools.....	70.21	19
3.2.2 Extent of staff training.....	63.92	18
3.3 Access to growth opportunities	62.68	28
Networks		
3.3.1 Use of virtual social networks.....	87.40	11
3.3.2 State of cluster development.....	46.13	51
Research quality		
3.3.3 Quality of scientific research institutions.....	73.54	17
Voice		
3.3.4 Voicing concern to officials.....	43.63	53
4 Retain	60.58	35
4.1 Sustainability	59.58	33
Social protection		
4.1.1 Pension system.....	n/a	n/a
Taxation		
4.1.2 Extent and effect of taxation.....	59.58	12
4.2 Lifestyle	61.59	36
Quality of life		
4.2.1 Environmental performance.....	75.68	14
4.2.2 Property stolen.....	52.61	85
4.2.3 Safety at night.....	73.80	40
Services		
4.2.4 Physicians density.....	44.28	41
5 Labour and Vocational	49.54	28
5.1 Employable skills	49.47	32
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	29.14	57
Technical professions		
5.1.2 Technicians and associate professionals.....	57.65	34
Youth employment		
5.1.3 Youth employment.....	61.62	24
5.2 Labour productivity	49.60	28
Productivity per employee		
5.2.1 Labour productivity per employee.....	39.65	31
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	59.54	18
6 Global Knowledge	59.01	11
6.1 Higher skills and competencies	68.13	3
Educated workforce		
6.1.1 Tertiary-educated workforce.....	79.27	8
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	76.97	4
6.1.3 Professionals.....	50.61	23
6.1.4 Researchers.....	65.67	9
6.2 Talent impact	49.89	30
Innovation		
6.2.1 Innovation output.....	64.71	14
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	35.06	49

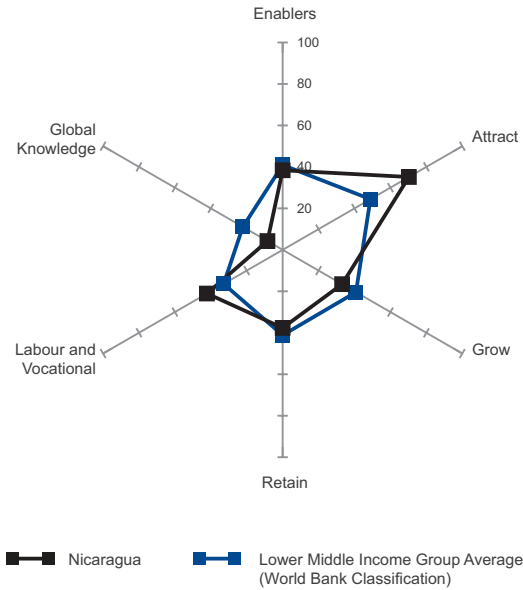
NICARAGUA

RANK
(out of 103)

80

Population (millions) **6.01**
 GDP per capita (PPP\$) **4,458.43**
 GDP (US\$ billions) **10.51**

Global Talent Competitiveness Index Score **38.33**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	38.37	87
1.1 Regulatory landscape	38.27	85
Government efficiency		
1.1.1 Government effectiveness.....	6.20	102
1.1.2 Political stability.....	56.79	67
FDI climate		
1.1.3 Starting a foreign business.....	51.83	48
1.2 Market landscape	27.45	97
Competition climate		
1.2.1 Intensity of local competition.....	47.61	95
Innovation climate		
1.2.2 Venture capital availability.....	28.77	50
1.2.3 Firm-level technology absorption.....	50.79	91
1.2.4 R&D expenditure.....	0.54	95
Connectivity		
1.2.5 ICT access.....	16.41	87
Ease of doing business		
1.2.6 Ease of doing business.....	20.60	82
1.3 Business landscape	49.40	60
Labour market flexibility		
1.3.1 Labour market flexibility.....	57.34	44
Ownership and governance		
1.3.2 Reliance on professional management.....	41.45	95
2 Attract	70.27	9
2.1 External openness	62.84	8
FDI		
2.1.1 FDI inflow.....	100.00	1
Brain gain		
2.1.2 Qualified labour inflow.....	34.13	74
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	54.38	73
2.2 Internal openness	77.69	16
Diversity		
2.2.1 Tolerance of minorities.....	82.93	31
2.2.2 Tolerance of immigrants.....	80.79	28
Social mobility		
2.2.3 Social mobility.....	41.58	86
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	83.17	5
3 Grow	33.10	98
3.1 Formal education	16.22	97
Education climate		
3.1.1 Pupil-teacher ratio.....	31.33	86
3.1.2 Technical/vocational enrolment.....	3.12	90
3.1.3 Tertiary enrolment.....	14.22	80
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	45.13	76
Further education and training climate		
3.2.1 Quality of management schools.....	46.15	76
3.2.2 Extent of staff training.....	44.11	72
3.3 Access to growth opportunities	37.93	97
Networks		
3.3.1 Use of virtual social networks.....	56.81	95
3.3.2 State of cluster development.....	36.40	80
Research quality		
3.3.3 Quality of scientific research institutions.....	27.61	93
Voice		
3.3.4 Voicing concern to officials.....	30.90	79
4 Retain	37.65	84
4.1 Sustainability	30.49	86
Social protection		
4.1.1 Pension system.....	21.80	71
Taxation		
4.1.2 Extent and effect of taxation.....	39.19	58
4.2 Lifestyle	44.80	79
Quality of life		
4.2.1 Environmental performance.....	60.09	33
4.2.2 Property stolen.....	58.06	73
4.2.3 Safety at night.....	55.19	70
Services		
4.2.4 Physicians density.....	5.88	84
5 Labour and Vocational	42.14	41
5.1 Employable skills	44.56	41
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions		
5.1.2 Technicians and associate professionals.....	39.29	54
Youth employment		
5.1.3 Youth employment.....	49.84	35
5.2 Labour productivity	39.71	47
Productivity per employee		
5.2.1 Labour productivity per employee.....	n/a	n/a
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	39.71	84
6 Global Knowledge	8.48	96
6.1 Higher skills and competencies	8.22	90
Educated workforce		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	14.61	72
6.1.3 Professionals.....	10.06	83
6.1.4 Researchers.....	0.00	97
6.2 Talent impact	8.73	96
Innovation		
6.2.1 Innovation output.....	8.73	95
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

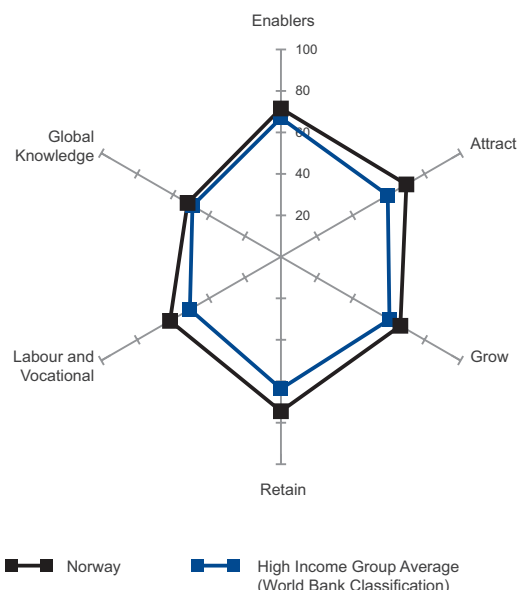
NORWAY

RANK
(out of 103)

12

Population (millions) **4.99**
 GDP per capita (PPP\$) **55,008.77**
 GDP (US\$ billions) **501.10**

Global Talent Competitiveness Index Score **66.01**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	71.54	19
1.1 Regulatory landscape	92.37	6
Government efficiency		
1.1.1 Government effectiveness.....	85.55	9
1.1.2 Political stability.....	99.19	3
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	72.99	11
Competition climate		
1.2.1 Intensity of local competition.....	73.14	29
Innovation climate		
1.2.2 Venture capital availability.....	55.57	5
1.2.3 Firm-level technology absorption.....	83.30	9
1.2.4 R&D expenditure.....	38.22	22
Connectivity		
1.2.5 ICT access.....	91.59	11
Ease of doing business		
1.2.6 Ease of doing business.....	96.10	5
1.3 Business landscape	49.27	61
Labour market flexibility		
1.3.1 Labour market flexibility.....	13.36	99
Ownership and governance		
1.3.2 Reliance on professional management.....	85.18	4
2 Attract	69.85	11
2.1 External openness	50.69	27
FDI		
2.1.1 FDI inflow.....	7.06	90
Brain gain		
2.1.2 Qualified labour inflow.....	72.79	8
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	72.22	23
2.2 Internal openness	89.00	5
Diversity		
2.2.1 Tolerance of minorities.....	93.70	11
2.2.2 Tolerance of immigrants.....	94.77	6
Social mobility		
2.2.3 Social mobility.....	84.63	7
Gender mobility		
2.2.4 Female professionals and technical workers.....	90.82	58
2.2.5 Female parliamentarians.....	81.11	7
3 Grow	66.49	15
3.1 Formal education	57.60	24
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	63.61	18
3.1.3 Tertiary enrolment.....	71.03	15
Performance of education system		
3.1.4 Reading, maths and science scores.....	69.64	16
Top universities		
3.1.5 QS university ranking.....	51.50	19
International students		
3.1.6 International students inflow.....	32.21	18

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	68.77	11
Further education and training climate		
3.2.1 Quality of management schools.....	68.23	22
3.2.2 Extent of staff training.....	69.32	9
3.3 Access to growth opportunities	73.11	11
Networks		
3.3.1 Use of virtual social networks.....	89.74	6
3.3.2 State of cluster development.....	63.84	15
Research quality		
3.3.3 Quality of scientific research institutions.....	64.57	26
Voice		
3.3.4 Voicing concern to officials.....	74.29	10
4 Retain	74.45	4
4.1 Sustainability	70.37	7
Social protection		
4.1.1 Pension system.....	97.67	6
Taxation		
4.1.2 Extent and effect of taxation.....	43.08	41
4.2 Lifestyle	78.52	4
Quality of life		
4.2.1 Environmental performance.....	84.53	3
4.2.2 Property stolen.....	71.80	43
4.2.3 Safety at night.....	90.37	7
Services		
4.2.4 Physicians density.....	67.40	5
5 Labour and Vocational	61.76	6
5.1 Employable skills	65.69	9
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	55.14	26
Technical professions		
5.1.2 Technicians and associate professionals.....	78.06	13
Youth employment		
5.1.3 Youth employment.....	63.85	21
5.2 Labour productivity	57.83	8
Productivity per employee		
5.2.1 Labour productivity per employee.....	68.83	4
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	46.83	63
6 Global Knowledge	51.97	21
6.1 Higher skills and competencies	61.60	10
Educated workforce		
6.1.1 Tertiary-educated workforce.....	66.97	18
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	36.52	32
6.1.3 Professionals.....	66.77	8
6.1.4 Researchers.....	76.14	4
6.2 Talent impact	42.35	42
Innovation		
6.2.1 Innovation output.....	62.62	17
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	22.08	65

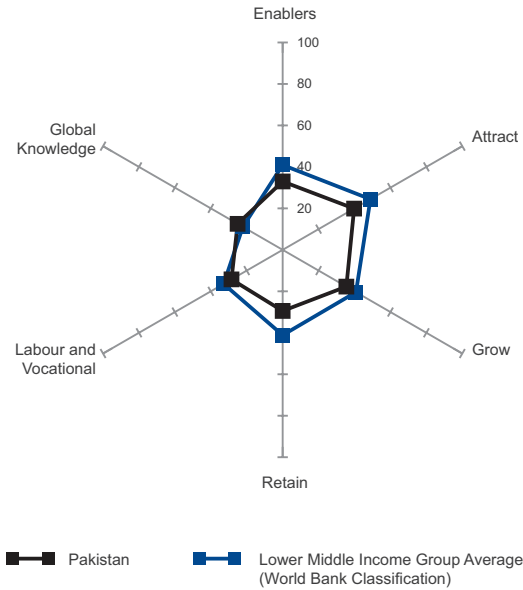
PAKISTAN

RANK
(out of 103)

94

Population (millions) **180.08**
 GDP per capita (PPP\$) **2,880.67**
 GDP (US\$ billions) **231.88**

Global Talent Competitiveness Index Score **31.88**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	32.97	96
1.1 Regulatory landscape	23.31	100
Government efficiency		
1.1.1 Government effectiveness.....	8.53	97
1.1.2 Political stability.....	0.00	103
FDI climate		
1.1.3 Starting a foreign business.....	61.41	39
1.2 Market landscape	33.14	86
Competition climate		
1.2.1 Intensity of local competition.....	60.36	69
Innovation climate		
1.2.2 Venture capital availability.....	29.99	45
1.2.3 Firm-level technology absorption.....	59.58	68
1.2.4 R&D expenditure.....	10.12	56
Connectivity		
1.2.5 ICT access.....	11.31	90
Ease of doing business		
1.2.6 Ease of doing business.....	27.50	75
1.3 Business landscape	42.46	80
Labour market flexibility		
1.3.1 Labour market flexibility.....	38.11	71
Ownership and governance		
1.3.2 Reliance on professional management.....	46.82	75
2 Attract	39.78	96
2.1 External openness	32.31	87
FDI		
2.1.1 FDI inflow.....	6.22	92
Brain gain		
2.1.2 Qualified labour inflow.....	41.74	50
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	48.98	87
2.2 Internal openness	47.25	91
Diversity		
2.2.1 Tolerance of minorities.....	79.02	37
2.2.2 Tolerance of immigrants.....	51.97	87
Social mobility		
2.2.3 Social mobility.....	51.84	59
Gender mobility		
2.2.4 Female professionals and technical workers.....	17.48	91
2.2.5 Female parliamentarians.....	35.92	38
3 Grow	35.45	95
3.1 Formal education	4.74	103
Education climate		
3.1.1 Pupil-teacher ratio.....	0.00	89
3.1.2 Technical/vocational enrolment.....	8.28	84
3.1.3 Tertiary enrolment.....	4.49	92
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	10.91	50
International students		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	46.87	69
Further education and training climate		
3.2.1 Quality of management schools.....	52.99	59
3.2.2 Extent of staff training.....	40.76	86
3.3 Access to growth opportunities	54.75	45
Networks		
3.3.1 Use of virtual social networks.....	63.33	90
3.3.2 State of cluster development.....	47.18	50
Research quality		
3.3.3 Quality of scientific research institutions.....	41.76	69
Voice		
3.3.4 Voicing concern to officials.....	66.75	16
4 Retain	29.47	98
4.1 Sustainability	22.09	99
Social protection		
4.1.1 Pension system.....	2.83	88
Taxation		
4.1.2 Extent and effect of taxation.....	41.36	49
4.2 Lifestyle	36.84	91
Quality of life		
4.2.1 Environmental performance.....	15.13	94
4.2.2 Property stolen.....	69.43	55
4.2.3 Safety at night.....	49.73	83
Services		
4.2.4 Physicians density.....	13.07	78
5 Labour and Vocational	28.49	90
5.1 Employable skills	30.56	80
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	23.43	67
Technical professions		
5.1.2 Technicians and associate professionals.....	21.43	75
Youth employment		
5.1.3 Youth employment.....	46.82	42
5.2 Labour productivity	26.42	88
Productivity per employee		
5.2.1 Labour productivity per employee.....	5.19	83
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	47.66	60
6 Global Knowledge	25.09	67
6.1 Higher skills and competencies	23.70	61
Educated workforce		
6.1.1 Tertiary-educated workforce.....	15.26	77
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	71.35	5
6.1.3 Professionals.....	3.96	90
6.1.4 Researchers.....	4.24	69
6.2 Talent impact	26.47	73
Innovation		
6.2.1 Innovation output.....	11.39	91
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	41.56	35

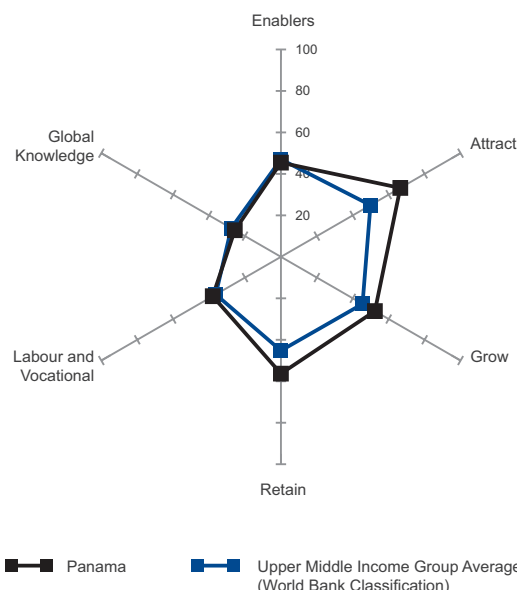
PANAMA

RANK
(out of 103)

44

Population (millions) **3.81**
 GDP per capita (PPP\$) **15,616.75**
 GDP (US\$ billions) **36.25**

Global Talent Competitiveness Index Score **47.36**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	45.43	67
1.1 Regulatory landscape	49.60	64
Government efficiency.....		
1.1.1 Government effectiveness.....	35.88	54
1.1.2 Political stability.....	63.33	59
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	49.00	39
Competition climate.....		
1.2.1 Intensity of local competition.....	66.91	48
Innovation climate.....		
1.2.2 Venture capital availability.....	44.83	13
1.2.3 Firm-level technology absorption.....	76.76	22
1.2.4 R&D expenditure.....	3.93	76
Connectivity.....		
1.2.5 ICT access.....	48.55	56
Ease of doing business.....		
1.2.6 Ease of doing business.....	53.00	49
1.3 Business landscape	37.70	90
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	32.88	80
Ownership and governance.....		
1.3.2 Reliance on professional management.....	42.53	86
2 Attract	66.45	17
2.1 External openness	68.97	4
FDI.....		
2.1.1 FDI inflow.....	68.41	8
Brain gain.....		
2.1.2 Qualified labour inflow.....	58.14	23
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	80.37	8
2.2 Internal openness	63.93	42
Diversity.....		
2.2.1 Tolerance of minorities.....	77.93	40
2.2.2 Tolerance of immigrants.....	67.88	56
Social mobility.....		
2.2.3 Social mobility.....	62.37	27
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	11.49	90
3 Grow	52.31	39
3.1 Formal education	42.76	51
Education climate.....		
3.1.1 Pupil-teacher ratio.....	77.21	55
3.1.2 Technical/vocational enrolment.....	34.22	40
3.1.3 Tertiary enrolment.....	42.20	50
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	17.42	64
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	52.70	51
Further education and training climate.....		
3.2.1 Quality of management schools.....	51.29	64
3.2.2 Extent of staff training.....	54.10	35
3.3 Access to Growth Opportunities	61.46	33
Networks.....		
3.3.1 Use of virtual social networks.....	84.31	21
3.3.2 State of cluster development.....	45.98	53
Research quality.....		
3.3.3 Quality of scientific research institutions.....	49.53	48
Voice.....		
3.3.4 Voicing concern to officials.....	66.04	18
4 Retain	56.32	42
4.1 Sustainability	50.18	49
Social protection.....		
4.1.1 Pension system.....	n/a	n/a
Taxation.....		
4.1.2 Extent and effect of taxation.....	50.18	23
4.2 Lifestyle	62.45	33
Quality of life.....		
4.2.1 Environmental performance.....	57.14	36
4.2.2 Property stolen.....	78.44	20
4.2.3 Safety at night.....	51.76	80
Services.....		
4.2.4 Physicians density.....	n/a	n/a
5 Labour and Vocational	37.96	56
5.1 Employable skills	38.53	59
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	28.43	60
Technical professions.....		
5.1.2 Technicians and associate professionals.....	35.71	56
Youth employment.....		
5.1.3 Youth employment.....	51.43	33
5.2 Labour productivity	37.40	53
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	n/a	n/a
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	37.40	92
6 Global Knowledge	25.68	63
6.1 Higher skills and competencies	28.20	52
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	48.52	34
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	32.58	39
6.1.3 Professionals.....	29.27	53
6.1.4 Researchers.....	2.41	74
6.2 Talent impact	23.16	75
Innovation.....		
6.2.1 Innovation output.....	13.85	86
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	32.47	53

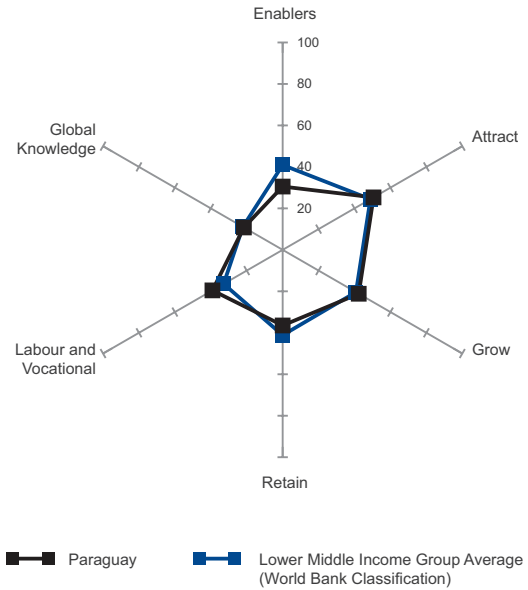
PARAGUAY

RANK
(out of 103)

86

Population (millions) **6.70**
 GDP per capita (PPP\$) **6,136.46**
 GDP (US\$ billions) **26.00**

Global Talent Competitiveness Index Score **36.77**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	30.52.....	99
1.1 Regulatory landscape	28.29.....	97
Government efficiency		
1.1.1 Government effectiveness.....	8.12.....	100
1.1.2 Political stability.....	48.46.....	80
FDI climate		
1.1.3 Starting a foreign business.....	n/a.....	n/a
1.2 Market landscape	33.60.....	84
Competition climate		
1.2.1 Intensity of local competition.....	63.41.....	61
Innovation climate		
1.2.2 Venture capital availability.....	26.00.....	58
1.2.3 Firm-level technology absorption.....	55.45.....	80
1.2.4 R&D expenditure.....	0.87.....	91
Connectivity		
1.2.5 ICT access.....	26.34.....	78
Ease of doing business		
1.2.6 Ease of doing business.....	29.50.....	73
1.3 Business landscape	29.68.....	98
Labour market flexibility		
1.3.1 Labour market flexibility.....	17.51.....	93
Ownership and governance		
1.3.2 Reliance on professional management.....	41.85.....	90
2 Attract	50.59.....	56
2.1 External openness	34.07.....	79
FDI		
2.1.1 FDI inflow.....	11.53.....	81
Brain gain		
2.1.2 Qualified labour inflow.....	32.88.....	77
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	57.80.....	58
2.2 Internal openness	67.10.....	34
Diversity		
2.2.1 Tolerance of minorities.....	79.13.....	36
2.2.2 Tolerance of immigrants.....	90.07.....	14
Social mobility		
2.2.3 Social mobility.....	48.64.....	68
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00.....	1
2.2.5 Female parliamentarians.....	17.67.....	75
3 Grow	42.35.....	70
3.1 Formal education	45.87.....	46
Education climate		
3.1.1 Pupil-teacher ratio.....	85.31.....	35
3.1.2 Technical/vocational enrolment.....	21.38.....	62
3.1.3 Tertiary enrolment.....	30.93.....	66
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a.....	n/a
Top universities		
3.1.5 QS university ranking.....	n/a.....	n/a
International students		
3.1.6 International students inflow.....	n/a.....	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	40.12.....	93
Further education and training climate		
3.2.1 Quality of management schools.....	37.84.....	96
3.2.2 Extent of staff training.....	42.40.....	82
3.3 Access to growth opportunities	41.05.....	91
Networks		
3.3.1 Use of virtual social networks.....	65.22.....	85
3.3.2 State of cluster development.....	32.74.....	91
Research quality		
3.3.3 Quality of scientific research institutions.....	17.18.....	103
Voice		
3.3.4 Voicing concern to officials.....	49.06.....	42
4 Retain	36.47.....	88
4.1 Sustainability	37.62.....	72
Social protection		
4.1.1 Pension system	11.91.....	75
Taxation		
4.1.2 Extent and effect of taxation.....	63.32.....	7
4.2 Lifestyle	35.32.....	95
Quality of life		
4.2.1 Environmental performance.....	44.48.....	61
4.2.2 Property stolen.....	38.15.....	94
4.2.3 Safety at night.....	40.75.....	98
Services		
4.2.4 Physicians density.....	17.89.....	72
5 Labour and Vocational	39.11.....	52
5.1 Employable skills	38.32.....	60
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	25.71.....	65
Technical professions		
5.1.2 Technicians and associate professionals.....	18.88.....	77
Youth employment		
5.1.3 Youth employment.....	70.38.....	14
5.2 Labour productivity	39.89.....	46
Productivity per employee		
5.2.1 Labour productivity per employee.....	n/a.....	n/a
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	39.89.....	83
6 Global Knowledge	21.58.....	76
6.1 Higher skills and competencies	15.08.....	82
Educated workforce		
6.1.1 Tertiary-educated workforce.....	23.69.....	69
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	18.54.....	65
6.1.3 Professionals.....	17.38.....	71
6.1.4 Researchers.....	0.72.....	83
6.2 Talent impact	28.08.....	68
Innovation		
6.2.1 Innovation output.....	28.08.....	57
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a.....	n/a

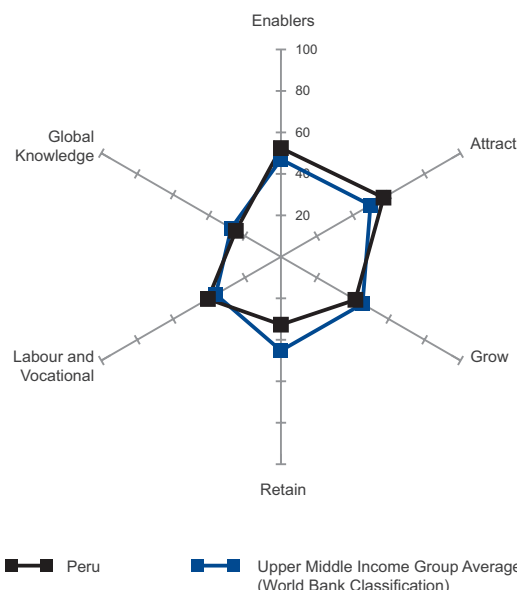
PERU

RANK
(out of 103)

65

Population (millions) **30.04**
 GDP per capita (PPP\$) **10,719.48**
 GDP (US\$ billions) **199.00**

Global Talent Competitiveness Index Score **41.58**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	52.46	51
1.1 Regulatory landscape	50.01	62
Government efficiency.....		
1.1.1 Government effectiveness.....	28.43	67
1.1.2 Political stability.....	49.22	76
FDI climate.....		
1.1.3 Starting a foreign business.....	72.39	25
1.2 Market landscape	43.12	50
Competition climate.....		
1.2.1 Intensity of local competition.....	68.25	43
Innovation climate.....		
1.2.2 Venture capital availability.....	32.17	39
1.2.3 Firm-level technology absorption.....	60.86	63
1.2.4 R&D expenditure.....	2.91	83
Connectivity.....		
1.2.5 ICT access.....	30.76	72
Ease of doing business.....		
1.2.6 Ease of doing business.....	63.80	38
1.3 Business landscape	64.24	25
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	68.82	33
Ownership and governance.....		
1.3.2 Reliance on professional management.....	59.65	37
2 Attract	57.10	33
2.1 External openness	51.98	25
FDI.....		
2.1.1 FDI inflow.....	35.17	29
Brain gain.....		
2.1.2 Qualified labour inflow.....	49.05	35
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	71.71	27
2.2 Internal openness	62.22	50
Diversity.....		
2.2.1 Tolerance of minorities.....	72.93	56
2.2.2 Tolerance of immigrants.....	71.50	46
Social mobility.....		
2.2.3 Social mobility.....	51.44	63
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	81.35	69
2.2.5 Female parliamentarians.....	33.88	44
3 Grow	41.45	75
3.1 Formal education	26.81	86
Education climate.....		
3.1.1 Pupil-teacher ratio.....	72.07	61
3.1.2 Technical/vocational enrolment.....	0.00	96
3.1.3 Tertiary enrolment.....	39.42	53
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	17.13	65
Top universities.....		
3.1.5 QS university ranking.....	5.46	55
International students.....		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	52.15	54
Further education and training climate.....		
3.2.1 Quality of management schools.....	57.66	43
3.2.2 Extent of staff training.....	46.64	63
3.3 Access to growth opportunities	45.38	79
Networks.....		
3.3.1 Use of virtual social networks.....	68.58	80
3.3.2 State of cluster development.....	43.54	60
Research quality.....		
3.3.3 Quality of scientific research institutions.....	29.80	91
Voice.....		
3.3.4 Voicing concern to officials.....	39.62	62
4 Retain	32.70	95
4.1 Sustainability	30.83	83
Social protection.....		
4.1.1 Pension system.....	21.72	72
Taxation.....		
4.1.2 Extent and effect of taxation.....	39.93	55
4.2 Lifestyle	34.58	97
Quality of life.....		
4.2.1 Environmental performance.....	39.66	68
4.2.2 Property stolen.....	34.12	95
4.2.3 Safety at night.....	49.73	83
Services.....		
4.2.4 Physicians density.....	14.81	76
5 Labour and Vocational	40.65	45
5.1 Employable skills	51.23	28
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	45.43	39
Technical professions.....		
5.1.2 Technicians and associate professionals.....	39.80	53
Youth employment.....		
5.1.3 Youth employment.....	68.47	19
5.2 Labour productivity	30.07	79
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	16.12	59
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	44.03	71
6 Global Knowledge	25.10	66
6.1 Higher skills and competencies	19.94	74
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	47.61	36
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	3.93	86
6.1.3 Professionals.....	26.83	59
6.1.4 Researchers.....	1.39	77
6.2 Talent impact	30.27	62
Innovation.....		
6.2.1 Innovation output.....	18.98	78
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	41.56	35

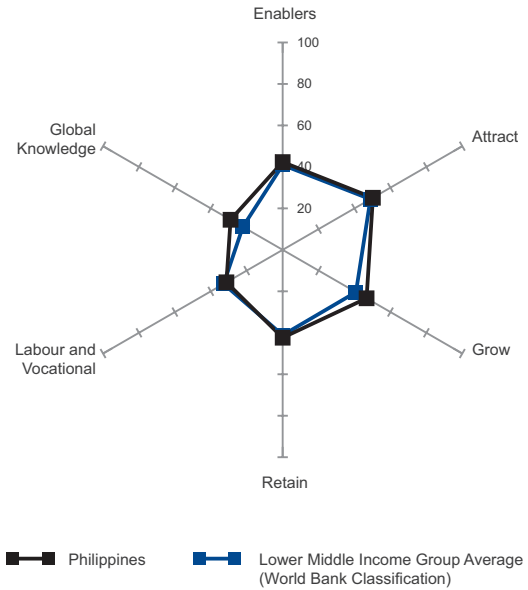
PHILIPPINES

RANK
(out of 103)

73

Population (millions) **96.90**
 GDP per capita (PPP\$) **4,429.59**
 GDP (US\$ billions) **250.44**

Global Talent Competitiveness Index Score **40.33**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	42.32	79
1.1 Regulatory landscape	38.94	83
Government efficiency		
1.1.1 Government effectiveness.....	32.84	58
1.1.2 Political stability.....	32.16	98
FDI climate		
1.1.3 Starting a foreign business.....	51.83	48
1.2 Market landscape	33.26	85
Competition climate		
1.2.1 Intensity of local competition.....	68.23	44
Innovation climate		
1.2.2 Venture capital availability.....	28.74	51
1.2.3 Firm-level technology absorption.....	69.49	41
1.2.4 R&D expenditure.....	2.01	86
Connectivity		
1.2.5 ICT access.....	23.17	83
Ease of doing business		
1.2.6 Ease of doing business.....	7.90	95
1.3 Business landscape	54.77	48
Labour market flexibility		
1.3.1 Labour market flexibility.....	44.23	63
Ownership and governance		
1.3.2 Reliance on professional management.....	65.30	30
2 Attract	50.23	59
2.1 External openness	36.40	75
FDI		
2.1.1 FDI inflow.....	5.68	94
Brain gain		
2.1.2 Qualified labour inflow.....	40.06	54
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	63.47	48
2.2 Internal openness	64.06	41
Diversity		
2.2.1 Tolerance of minorities.....	59.78	82
2.2.2 Tolerance of immigrants.....	67.66	57
Social mobility		
2.2.3 Social mobility.....	56.09	48
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	36.75	36
3 Grow	46.72	55
3.1 Formal education	16.57	96
Education climate		
3.1.1 Pupil-teacher ratio.....	20.01	87
3.1.2 Technical/vocational enrolment.....	n/a	n/a
3.1.3 Tertiary enrolment.....	24.55	71
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	21.74	39
International students		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	60.44	29
Further education and training climate		
3.2.1 Quality of management schools.....	61.66	35
3.2.2 Extent of staff training.....	59.21	26
3.3 Access to growth opportunities	63.14	26
Networks		
3.3.1 Use of virtual social networks.....	84.10	22
3.3.2 State of cluster development.....	52.31	34
Research quality		
3.3.3 Quality of scientific research institutions.....	36.19	82
Voice		
3.3.4 Voicing concern to officials.....	79.95	6
4 Retain	42.37	71
4.1 Sustainability	34.39	78
Social protection		
4.1.1 Pension system.....	25.28	65
Taxation		
4.1.2 Extent and effect of taxation.....	43.50	40
4.2 Lifestyle	50.36	64
Quality of life		
4.2.1 Environmental performance.....	55.91	38
4.2.2 Property stolen.....	59.24	68
4.2.3 Safety at night.....	67.70	50
Services		
4.2.4 Physicians density.....	18.59	70
5 Labour and Vocational	31.32	79
5.1 Employable skills	34.14	75
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	49.86	32
Technical professions		
5.1.2 Technicians and associate professionals.....	7.65	87
Youth employment		
5.1.3 Youth employment.....	44.90	45
5.2 Labour productivity	28.49	85
Productivity per employee		
5.2.1 Labour productivity per employee.....	5.98	82
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	51.00	47
6 Global Knowledge	29.01	58
6.1 Higher skills and competencies	37.01	37
Educated workforce		
6.1.1 Tertiary-educated workforce.....	55.13	30
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	78.65	3
6.1.3 Professionals.....	13.72	77
6.1.4 Researchers.....	0.55	86
6.2 Talent impact	21.00	80
Innovation		
6.2.1 Innovation output.....	19.92	73
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	22.08	65

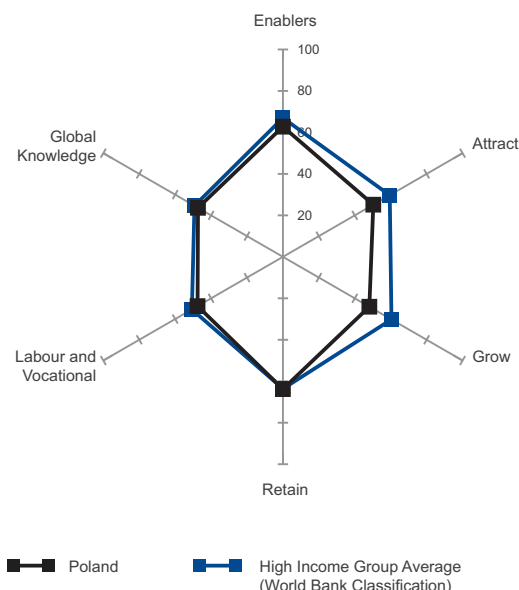
POLAND

RANK
(out of 103)

32

Population (millions) **38.18**
GDP per capita (PPP\$) **20,591.75**
GDP (US\$ billions) **487.67**

Global Talent Competitiveness
Index Score **53.29**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	62.77	27
1.1 Regulatory landscape	78.65	23
Government efficiency.....		
1.1.1 Government effectiveness.....	53.11	38
1.1.2 Political stability.....	92.85	14
FDI climate.....		
1.1.3 Starting a foreign business.....	90.00	3
1.2 Market landscape	48.14	41
Competition climate.....		
1.2.1 Intensity of local competition.....	73.61	27
Innovation climate.....		
1.2.2 Venture capital availability.....	22.70	72
1.2.3 Firm-level technology absorption.....	53.85	86
1.2.4 R&D expenditure.....	16.30	41
Connectivity.....		
1.2.5 ICT access.....	66.48	38
Ease of doing business.....		
1.2.6 Ease of doing business.....	55.90	46
1.3 Business landscape	61.52	34
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	70.05	30
Ownership and governance.....		
1.3.2 Reliance on professional management.....	52.99	52
2 Attract	50.31	57
2.1 External openness	38.59	70
FDI.....		
2.1.1 FDI inflow.....	23.28	44
Brain gain.....		
2.1.2 Qualified labour inflow.....	31.53	78
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	60.95	51
2.2 Internal openness	62.03	52
Diversity.....		
2.2.1 Tolerance of minorities.....	58.91	85
2.2.2 Tolerance of immigrants.....	61.79	67
Social mobility.....		
2.2.3 Social mobility.....	51.02	64
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	38.43	33
3 Grow	48.11	52
3.1 Formal education	52.42	34
Education climate.....		
3.1.1 Pupil-teacher ratio.....	89.41	27
3.1.2 Technical/vocational enrolment.....	60.53	21
3.1.3 Tertiary enrolment.....	69.01	17
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	69.94	14
Top universities.....		
3.1.5 QS university ranking.....	21.70	40
International students.....		
3.1.6 International students inflow.....	3.93	63

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	50.00	58
Further education and training climate.....		
3.2.1 Quality of management schools.....	49.52	65
3.2.2 Extent of staff training.....	50.49	46
3.3 Access to growth opportunities	41.90	88
Networks.....		
3.3.1 Use of virtual social networks.....	62.24	93
3.3.2 State of cluster development.....	37.43	77
Research quality.....		
3.3.3 Quality of scientific research institutions.....	52.36	41
Voice.....		
3.3.4 Voicing concern to officials.....	15.57	97
4 Retain	63.76	24
4.1 Sustainability	61.42	25
Social protection.....		
4.1.1 Pension system.....	85.13	27
Taxation.....		
4.1.2 Extent and effect of taxation.....	37.72	65
4.2 Lifestyle	66.09	21
Quality of life.....		
4.2.1 Environmental performance.....	69.78	22
4.2.2 Property stolen.....	86.73	7
4.2.3 Safety at night.....	72.94	42
Services.....		
4.2.4 Physicians density.....	34.89	51
5 Labour and Vocational	47.52	30
5.1 Employable skills	51.53	27
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	81.29	6
Technical professions.....		
5.1.2 Technicians and associate professionals.....	51.02	40
Youth employment.....		
5.1.3 Youth employment.....	22.29	75
5.2 Labour productivity	43.52	36
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	31.83	38
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	55.21	33
6 Global Knowledge	47.29	30
6.1 Higher skills and competencies	38.08	36
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	48.06	35
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	34.27	36
6.1.3 Professionals.....	52.13	20
6.1.4 Researchers.....	17.84	38
6.2 Talent impact	56.50	19
Innovation.....		
6.2.1 Innovation output.....	33.78	48
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	79.22	4

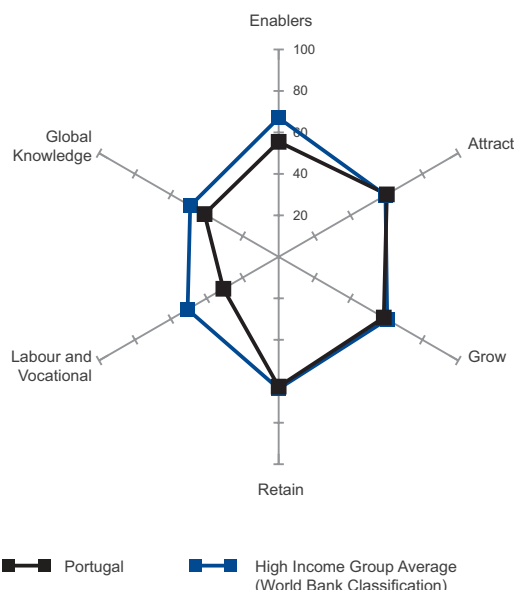
PORTUGAL

RANK
(out of 103)

38

Population (millions) **10.61**
 GDP per capita (PPP\$) **23,385.17**
 GDP (US\$ billions) **212.72**

Global Talent Competitiveness Index Score **51.47**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	55.46	41
1.1 Regulatory landscape	72.66	30
Government efficiency.....		
1.1.1 Government effectiveness.....	62.02	31
1.1.2 Political stability.....	83.30	29
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	57.81	28
Competition climate.....		
1.2.1 Intensity of local competition.....	65.61	53
Innovation climate.....		
1.2.2 Venture capital availability.....	21.27	77
1.2.3 Firm-level technology absorption.....	76.39	23
1.2.4 R&D expenditure.....	35.85	25
Connectivity.....		
1.2.5 ICT access.....	73.10	28
Ease of doing business.....		
1.2.6 Ease of doing business.....	74.60	27
1.3 Business landscape	35.92	91
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	19.55	89
Ownership and governance.....		
1.3.2 Reliance on professional management.....	52.28	56
2 Attract	60.23	26
2.1 External openness	42.39	58
FDI.....		
2.1.1 FDI inflow.....	33.52	32
Brain gain.....		
2.1.2 Qualified labour inflow.....	36.36	67
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	57.29	60
2.2 Internal openness	78.06	13
Diversity.....		
2.2.1 Tolerance of minorities.....	89.13	21
2.2.2 Tolerance of immigrants.....	91.68	12
Social mobility.....		
2.2.3 Social mobility.....	59.70	38
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	49.80	20
3 Grow	58.53	27
3.1 Formal education	52.72	33
Education climate.....		
3.1.1 Pupil-teacher ratio.....	98.07	2
3.1.2 Technical/vocational enrolment.....	53.69	24
3.1.3 Tertiary enrolment.....	62.09	23
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	65.42	26
Top universities.....		
3.1.5 QS university ranking.....	23.84	37
International students.....		
3.1.6 International students inflow.....	13.23	44

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	58.83	31
Further education and training climate.....		
3.2.1 Quality of management schools.....	69.14	20
3.2.2 Extent of staff training.....	48.53	55
3.3 Access to growth opportunities	64.03	24
Networks.....		
3.3.1 Use of virtual social networks.....	81.75	33
3.3.2 State of cluster development.....	48.99	46
Research quality.....		
3.3.3 Quality of scientific research institutions.....	67.37	21
Voice.....		
3.3.4 Voicing concern to officials.....	58.02	24
4 Retain	62.57	29
4.1 Sustainability	60.03	32
Social protection.....		
4.1.1 Pension system.....	96.40	10
Taxation.....		
4.1.2 Extent and effect of taxation.....	23.66	95
4.2 Lifestyle	65.12	27
Quality of life.....		
4.2.1 Environmental performance.....	56.46	37
4.2.2 Property stolen.....	70.85	47
4.2.3 Safety at night.....	70.48	49
Services.....		
4.2.4 Physicians density.....	62.67	9
5 Labour and Vocational	30.79	83
5.1 Employable skills	26.00	91
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	17.86	78
Technical professions.....		
5.1.2 Technicians and associate professionals.....	39.29	54
Youth employment.....		
5.1.3 Youth employment.....	20.86	76
5.2 Labour productivity	35.58	59
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	32.61	36
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	38.54	91
6 Global Knowledge	41.26	35
6.1 Higher skills and competencies	40.00	32
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	28.93	63
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	34.83	35
6.1.3 Professionals.....	42.68	34
6.1.4 Researchers.....	53.57	12
6.2 Talent impact	42.51	41
Innovation.....		
6.2.1 Innovation output.....	43.45	32
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	41.56	35

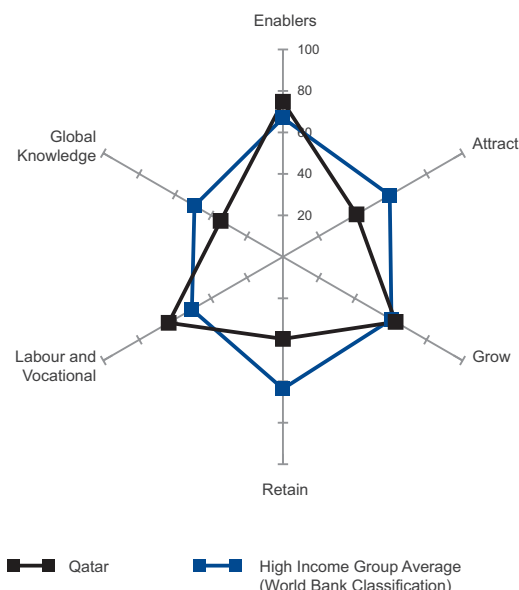
QATAR

RANK
(out of 103)

34

Population (millions) **2.05**
 GDP per capita (PPP\$) **102,211.00**
 GDP (US\$ billions) **183.38**

Global Talent Competitiveness Index Score **52.73**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	74.79	15
1.1 Regulatory landscape	76.81	26
Government efficiency.....		
1.1.1 Government effectiveness.....	57.82	34
1.1.2 Political stability.....	95.80	8
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	72.20	14
Competition climate.....		
1.2.1 Intensity of local competition.....	78.93	10
Innovation climate.....		
1.2.2 Venture capital availability.....	61.40	1
1.2.3 Firm-level technology absorption.....	83.33	8
1.2.4 R&D expenditure.....	n/a	n/a
Connectivity.....		
1.2.5 ICT access.....	72.55	29
Ease of doing business.....		
1.2.6 Ease of doing business.....	64.80	37
1.3 Business landscape	75.36	12
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	74.95	21
Ownership and governance.....		
1.3.2 Reliance on professional management.....	75.78	15
2 Attract	40.97	93
2.1 External openness	47.82	36
FDI.....		
2.1.1 FDI inflow.....	1.17	102
Brain gain.....		
2.1.2 Qualified labour inflow.....	77.89	3
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	64.41	46
2.2 Internal openness	34.12	100
Diversity.....		
2.2.1 Tolerance of minorities.....	n/a	n/a
2.2.2 Tolerance of immigrants.....	n/a	n/a
Social mobility.....		
2.2.3 Social mobility.....	81.36	11
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	21.00	89
2.2.5 Female parliamentarians.....	0.00	102
3 Grow	62.74	19
3.1 Formal education	36.79	61
Education climate.....		
3.1.1 Pupil-teacher ratio.....	90.17	25
3.1.2 Technical/vocational enrolment.....	1.76	94
3.1.3 Tertiary enrolment.....	7.80	86
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	19.13	63
Top universities.....		
3.1.5 QS university ranking.....	1.91	58
International students.....		
3.1.6 International students inflow.....	100.00	1

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	72.61	7
Further education and training climate.....		
3.2.1 Quality of management schools.....	77.95	7
3.2.2 Extent of staff training.....	67.27	11
3.3 Access to growth opportunities	78.80	2
Networks.....		
3.3.1 Use of virtual social networks.....	87.82	10
3.3.2 State of cluster development.....	69.06	6
Research quality.....		
3.3.3 Quality of scientific research institutions.....	79.53	5
Voice.....		
3.3.4 Voicing concern to officials.....	n/a	n/a
4 Retain	39.56	77
4.1 Sustainability	41.21	63
Social protection.....		
4.1.1 Pension system.....	3.34	86
Taxation.....		
4.1.2 Extent and effect of taxation.....	79.08	2
4.2 Lifestyle	37.92	90
Quality of life.....		
4.2.1 Environmental performance.....	31.20	80
4.2.2 Property stolen.....	n/a	n/a
4.2.3 Safety at night.....	n/a	n/a
Services.....		
4.2.4 Physicians density.....	44.63	39
5 Labour and Vocational	63.62	4
5.1 Employable skills	44.17	44
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	26.86	63
Technical professions.....		
5.1.2 Technicians and associate professionals.....	26.02	69
Youth employment.....		
5.1.3 Youth employment.....	79.62	7
5.2 Labour productivity	83.08	1
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	100.00	1
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	66.17	4
6 Global Knowledge	34.68	48
6.1 Higher skills and competencies	29.33	50
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	42.82	41
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	17.42	66
6.1.3 Professionals.....	27.74	57
6.1.4 Researchers.....	n/a	n/a
6.2 Talent impact	40.04	46
Innovation.....		
6.2.1 Innovation output.....	40.04	40
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

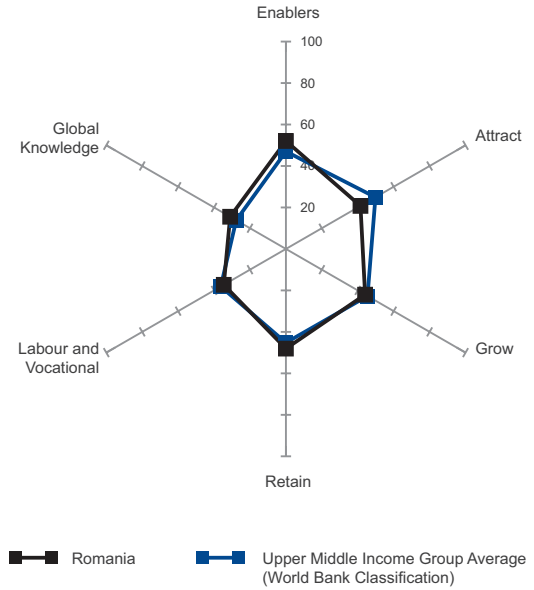
ROMANIA

RANK
(out of 103)

63

Population (millions) **21.74**
 GDP per capita (PPP\$) **12,808.08**
 GDP (US\$ billions) **169.38**

Global Talent Competitiveness Index Score **41.89**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	52.06	55
1.1 Regulatory landscape	63.95	42
Government efficiency		
1.1.1 Government effectiveness.....	26.39	71
1.1.2 Political stability.....	69.14	51
FDI climate		
1.1.3 Starting a foreign business.....	96.34	2
1.2 Market landscape	40.89	64
Competition climate		
1.2.1 Intensity of local competition.....	55.07	77
Innovation climate		
1.2.2 Venture capital availability.....	24.92	62
1.2.3 Firm-level technology absorption.....	52.31	87
1.2.4 R&D expenditure.....	10.24	55
Connectivity		
1.2.5 ICT access.....	56.69	47
Ease of doing business		
1.2.6 Ease of doing business.....	46.10	56
1.3 Business landscape	51.33	58
Labour market flexibility		
1.3.1 Labour market flexibility.....	61.01	39
Ownership and governance		
1.3.2 Reliance on professional management.....	41.64	93
2 Attract	41.51	91
2.1 External openness	27.09	98
FDI		
2.1.1 FDI inflow.....	12.10	78
Brain gain		
2.1.2 Qualified labour inflow.....	17.80	97
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	51.37	78
2.2 Internal openness	55.93	72
Diversity		
2.2.1 Tolerance of minorities.....	73.70	55
2.2.2 Tolerance of immigrants.....	56.67	79
Social mobility		
2.2.3 Social mobility.....	33.67	95
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	15.60	79
3 Grow	44.08	64
3.1 Formal education	44.47	48
Education climate		
3.1.1 Pupil-teacher ratio.....	83.49	42
3.1.2 Technical/vocational enrolment.....	70.49	13
3.1.3 Tertiary enrolment.....	55.39	34
Performance of education system		
3.1.4 Reading, maths and science scores.....	40.35	46
Top universities		
3.1.5 QS university ranking.....	10.91	50
International students		
3.1.6 International students inflow.....	6.19	59

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	41.51	88
Further education and training climate		
3.2.1 Quality of management schools.....	42.21	87
3.2.2 Extent of staff training.....	40.82	85
3.3 Access to growth opportunities	46.27	76
Networks		
3.3.1 Use of virtual social networks.....	73.48	64
3.3.2 State of cluster development.....	35.33	83
Research quality		
3.3.3 Quality of scientific research institutions.....	40.42	70
Voice		
3.3.4 Voicing concern to officials.....	35.85	70
4 Retain	48.07	61
4.1 Sustainability	45.44	54
Social protection		
4.1.1 Pension system.....	70.85	35
Taxation		
4.1.2 Extent and effect of taxation.....	20.04	102
4.2 Lifestyle	50.69	62
Quality of life		
4.2.1 Environmental performance.....	35.20	74
4.2.2 Property stolen.....	68.48	58
4.2.3 Safety at night.....	62.35	60
Services		
4.2.4 Physicians density.....	36.71	50
5 Labour and Vocational	34.60	67
5.1 Employable skills	38.87	57
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	68.43	15
Technical professions		
5.1.2 Technicians and associate professionals.....	29.08	63
Youth employment		
5.1.3 Youth employment.....	19.11	79
5.2 Labour productivity	30.33	76
Productivity per employee		
5.2.1 Labour productivity per employee.....	15.94	61
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	44.71	70
6 Global Knowledge	31.05	54
6.1 Higher skills and competencies	22.99	63
Educated workforce		
6.1.1 Tertiary-educated workforce.....	27.11	66
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	11.80	78
6.1.3 Professionals.....	42.07	37
6.1.4 Researchers.....	10.96	49
6.2 Talent impact	39.11	48
Innovation		
6.2.1 Innovation output.....	30.17	54
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	48.05	27

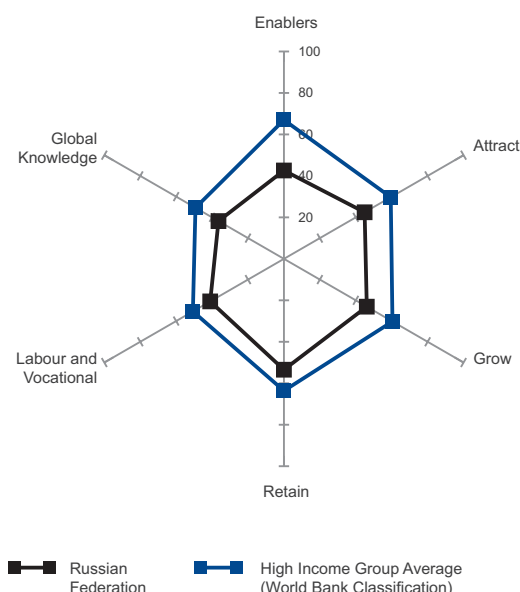
RUSSIAN FEDERATION

RANK
(out of 103)

51

Population (millions) **143.02**
GDP per capita (PPP\$) **17,708.74**
GDP (US\$ billions) **2,021.96**

Global Talent Competitiveness
Index Score **44.10**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	42.61	77
1.1 Regulatory landscape	44.05	77
Government efficiency		
1.1.1 Government effectiveness.....	20.87	76
1.1.2 Political stability.....	44.67	85
FDI climate		
1.1.3 Starting a foreign business.....	66.62	31
1.2 Market landscape	39.48	69
Competition climate		
1.2.1 Intensity of local competition.....	49.40	92
Innovation climate		
1.2.2 Venture capital availability.....	23.33	67
1.2.3 Firm-level technology absorption.....	43.89	101
1.2.4 R&D expenditure.....	25.97	32
Connectivity		
1.2.5 ICT access.....	69.66	31
Ease of doing business		
1.2.6 Ease of doing business.....	24.60	78
1.3 Business landscape	44.30	77
Labour market flexibility		
1.3.1 Labour market flexibility.....	44.89	62
Ownership and governance		
1.3.2 Reliance on professional management.....	43.72	81
2 Attract	44.92	82
2.1 External openness	30.93	90
FDI		
2.1.1 FDI inflow.....	22.73	45
Brain gain		
2.1.2 Qualified labour inflow.....	30.07	81
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	40.00	98
2.2 Internal openness	58.90	59
Diversity		
2.2.1 Tolerance of minorities.....	62.50	76
2.2.2 Tolerance of immigrants.....	62.01	66
Social mobility		
2.2.3 Social mobility.....	50.51	66
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	19.47	73
3 Grow	46.13	57
3.1 Formal education	51.42	36
Education climate		
3.1.1 Pupil-teacher ratio.....	94.89	8
3.1.2 Technical/vocational enrolment.....	34.21	41
3.1.3 Tertiary enrolment.....	72.57	12
Performance of education system		
3.1.4 Reading, maths and science scores.....	57.00	36
Top universities		
3.1.5 QS university ranking.....	43.47	24
International students		
3.1.6 International students inflow.....	6.39	57

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	43.37	80
Further education and training climate		
3.2.1 Quality of management schools.....	41.01	88
3.2.2 Extent of staff training.....	45.73	67
3.3 Access to growth opportunities	43.59	83
Networks		
3.3.1 Use of virtual social networks.....	68.42	81
3.3.2 State of cluster development.....	34.16	88
Research quality		
3.3.3 Quality of scientific research institutions.....	43.00	63
Voice		
3.3.4 Voicing concern to officials.....	28.77	82
4 Retain	53.46	49
4.1 Sustainability	50.96	47
Social protection		
4.1.1 Pension system.....	69.65	36
Taxation		
4.1.2 Extent and effect of taxation.....	32.27	85
4.2 Lifestyle	55.97	50
Quality of life		
4.2.1 Environmental performance.....	28.55	85
4.2.2 Property stolen.....	78.44	20
4.2.3 Safety at night.....	47.06	87
Services		
4.2.4 Physicians density.....	69.83	4
5 Labour and Vocational	41.05	44
5.1 Employable skills	45.44	38
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	23.29	68
Technical professions		
5.1.2 Technicians and associate professionals.....	71.94	19
Youth employment		
5.1.3 Youth employment.....	41.08	51
5.2 Labour productivity	36.66	55
Productivity per employee		
5.2.1 Labour productivity per employee.....	24.08	45
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	49.24	54
6 Global Knowledge	36.44	45
6.1 Higher skills and competencies	45.40	25
Educated workforce		
6.1.1 Tertiary-educated workforce.....	57.18	27
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	39.33	30
6.1.3 Professionals.....	55.79	16
6.1.4 Researchers.....	29.33	29
6.2 Talent impact	27.47	70
Innovation		
6.2.1 Innovation output.....	34.16	47
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	20.78	68

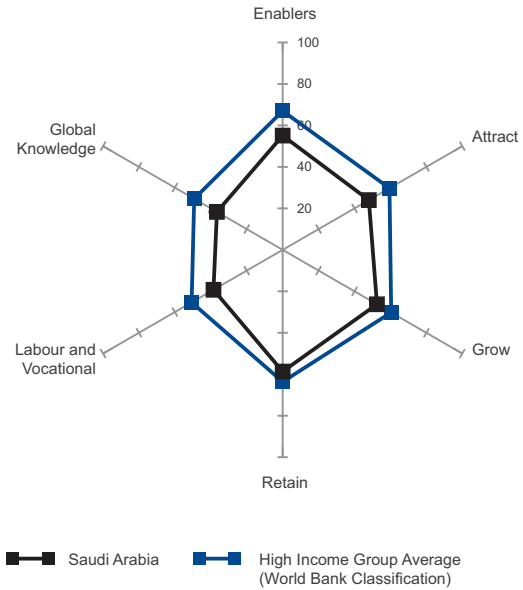
SAUDI ARABIA

RANK
(out of 103)

42

Population (millions) **28.4**
 GDP per capita (PPP\$) **31,275.49**
 GDP (US\$ billions) **727.31**

Global Talent Competitiveness Index Score **48.23**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	55.10	44
1.1 Regulatory landscape	32.80	93
Government efficiency		
1.1.1 Government effectiveness.....	20.06	79
1.1.2 Political stability.....	58.77	64
FDI climate		
1.1.3 Starting a foreign business.....	19.58	64
1.2 Market landscape	59.38	27
Competition climate		
1.2.1 Intensity of local competition.....	78.45	12
Innovation climate		
1.2.2 Venture capital availability.....	44.82	14
1.2.3 Firm-level technology absorption.....	80.36	18
1.2.4 R&D expenditure.....	1.41	87
Connectivity		
1.2.5 ICT access.....	68.83	33
Ease of doing business		
1.2.6 Ease of doing business.....	82.40	19
1.3 Business landscape	73.12	15
Labour market flexibility		
1.3.1 Labour market flexibility.....	79.96	11
Ownership and governance		
1.3.2 Reliance on professional management.....	66.29	29
2 Attract	47.98	72
2.1 External openness	50.33	29
FDI		
2.1.1 FDI inflow.....	23.30	43
Brain gain		
2.1.2 Qualified labour inflow.....	67.46	12
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	60.24	54
2.2 Internal openness	45.62	94
Diversity		
2.2.1 Tolerance of minorities.....	40.87	97
2.2.2 Tolerance of immigrants.....	85.81	20
Social mobility		
2.2.3 Social mobility.....	73.88	22
Gender mobility		
2.2.4 Female professionals and technical workers.....	27.54	87
2.2.5 Female parliamentarians.....	0.00	102
3 Grow	52.50	37
3.1 Formal education	37.90	59
Education climate		
3.1.1 Pupil-teacher ratio.....	86.78	34
3.1.2 Technical/vocational enrolment.....	7.57	85
3.1.3 Tertiary enrolment.....	37.60	58
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	41.83	27
International students		
3.1.6 International students inflow.....	15.73	39

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	57.78	34
Further education and training climate		
3.2.1 Quality of management schools.....	59.43	40
3.2.2 Extent of staff training.....	56.13	28
3.3 Access to growth opportunities	61.82	31
Networks		
3.3.1 Use of virtual social networks.....	75.72	55
3.3.2 State of cluster development.....	60.30	18
Research quality		
3.3.3 Quality of scientific research institutions.....	58.20	35
Voice		
3.3.4 Voicing concern to officials.....	53.07	35
4 Retain	58.69	39
4.1 Sustainability	68.03	12
Social protection		
4.1.1 Pension system.....	n/a	n/a
Taxation		
4.1.2 Extent and effect of taxation.....	68.03	6
4.2 Lifestyle	49.35	66
Quality of life		
4.2.1 Environmental performance.....	38.93	69
4.2.2 Property stolen.....	59.72	67
4.2.3 Safety at night.....	83.64	24
Services		
4.2.4 Physicians density.....	15.12	75
5 Labour and Vocational	38.51	55
5.1 Employable skills	23.57	95
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	20.71	74
Technical professions		
5.1.2 Technicians and associate professionals.....	50.00	42
Youth employment		
5.1.3 Youth employment.....	0.00	102
5.2 Labour productivity	53.45	14
Productivity per employee		
5.2.1 Labour productivity per employee.....	44.87	25
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	62.02	12
6 Global Knowledge	36.60	44
6.1 Higher skills and competencies	20.68	72
Educated workforce		
6.1.1 Tertiary-educated workforce.....	33.94	57
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	23.60	57
6.1.3 Professionals.....	25.00	62
6.1.4 Researchers.....	0.17	94
6.2 Talent impact	52.51	26
Innovation		
6.2.1 Innovation output.....	25.81	62
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	79.22	4

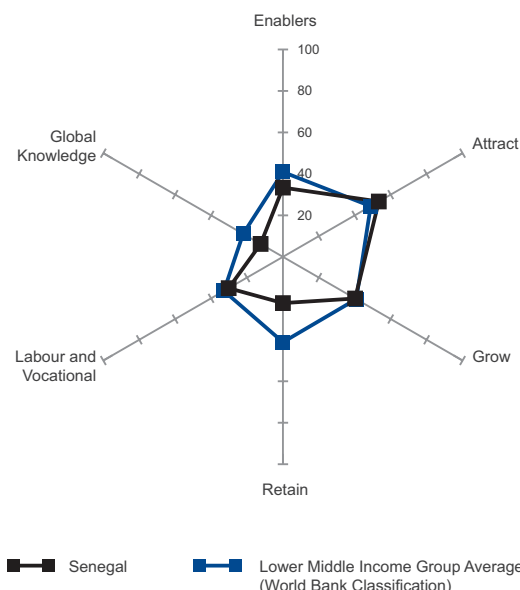
SENEGAL

RANK
(out of 103)

93

Population (millions) **13.73**
GDP per capita (PPP\$) **2,026.55**
GDP (US\$ billions) **13.86**

Global Talent Competitiveness
Index Score **31.98**
Global Talent Competitiveness
Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	33.39	95
1.1 Regulatory landscape	37.40	87
Government efficiency.....		
1.1.1 Government effectiveness.....	19.93	80
1.1.2 Political stability.....	58.61	65
FDI climate.....		
1.1.3 Starting a foreign business.....	33.66	59
1.2 Market landscape	29.93	93
Competition climate.....		
1.2.1 Intensity of local competition.....	67.60	46
Innovation climate.....		
1.2.2 Venture capital availability.....	18.42	88
1.2.3 Firm-level technology absorption.....	74.72	32
1.2.4 R&D expenditure.....	7.92	64
Connectivity.....		
1.2.5 ICT access.....	9.93	91
Ease of doing business.....		
1.2.6 Ease of doing business.....	1.00	102
1.3 Business landscape	32.84	94
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	17.31	94
Ownership and governance.....		
1.3.2 Reliance on professional management.....	48.36	70
2 Attract	53.37	45
2.1 External openness	42.19	60
FDI.....		
2.1.1 FDI inflow.....	16.17	67
Brain gain.....		
2.1.2 Qualified labour inflow.....	39.74	56
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	70.65	31
2.2 Internal openness	64.56	37
Diversity.....		
2.2.1 Tolerance of minorities.....	92.50	13
2.2.2 Tolerance of immigrants.....	80.36	29
Social mobility.....		
2.2.3 Social mobility.....	49.05	67
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	n/a	n/a
2.2.5 Female parliamentarians.....	36.33	37
3 Grow	40.18	83
3.1 Formal education	18.78	92
Education climate.....		
3.1.1 Pupil-teacher ratio.....	41.22	81
3.1.2 Technical/vocational enrolment.....	9.50	81
3.1.3 Tertiary enrolment.....	4.09	93
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	20.32	28

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	47.47	67
Further education and training climate.....		
3.2.1 Quality of management schools.....	61.20	37
3.2.2 Extent of staff training.....	33.75	99
3.3 Access to growth opportunities	54.28	48
Networks.....		
3.3.1 Use of virtual social networks.....	73.88	61
3.3.2 State of cluster development.....	39.46	72
Research quality.....		
3.3.3 Quality of scientific research institutions.....	48.36	50
Voice.....		
3.3.4 Voicing concern to officials.....	55.42	29
4 Retain	22.30	102
4.1 Sustainability	16.80	103
Social protection.....		
4.1.1 Pension system.....	4.17	85
Taxation.....		
4.1.2 Extent and effect of taxation.....	29.43	90
4.2 Lifestyle	27.80	100
Quality of life.....		
4.2.1 Environmental performance.....	31.52	79
4.2.2 Property stolen.....	20.14	101
4.2.3 Safety at night.....	58.72	65
Services.....		
4.2.4 Physicians density.....	0.83	94
5 Labour and Vocational	30.21	85
5.1 Employable skills	37.14	66
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	2.14	89
Technical professions.....		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment.....		
5.1.3 Youth employment.....	72.13	13
5.2 Labour productivity	23.28	95
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	1.45	88
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	45.11	69
6 Global Knowledge	12.42	91
6.1 Higher skills and competencies	3.21	98
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	1.82	86
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	n/a	n/a
6.1.3 Professionals.....	n/a	n/a
6.1.4 Researchers.....	4.60	68
6.2 Talent impact	21.63	78
Innovation.....		
6.2.1 Innovation output.....	21.63	68
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

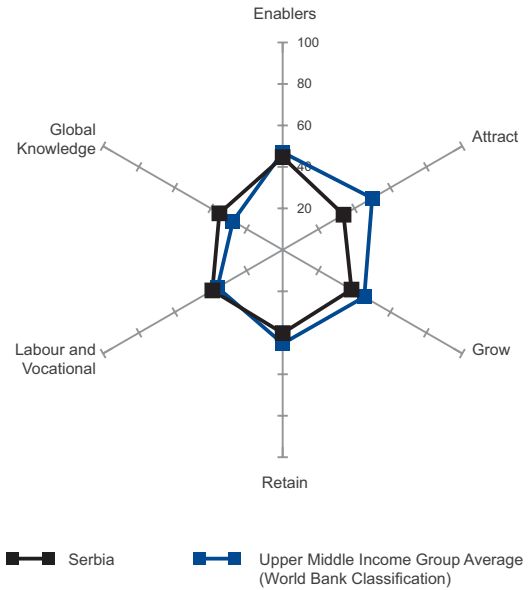
SERBIA

RANK
(out of 103)

79

Population (millions) **9.56**
 GDP per capita (PPP\$) **10,404.84**
 GDP (US\$ billions) **37.40**

Global Talent Competitiveness Index Score **38.57**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	44.70	70
1.1 Regulatory landscape	58.47	51
Government efficiency		
1.1.1 Government effectiveness.....	28.59	66
1.1.2 Political stability.....	57.94	66
FDI climate		
1.1.3 Starting a foreign business.....	88.87	5
1.2 Market landscape	37.46	74
Competition climate		
1.2.1 Intensity of local competition.....	43.58	99
Innovation climate		
1.2.2 Venture capital availability.....	15.58	94
1.2.3 Firm-level technology absorption.....	42.57	102
1.2.4 R&D expenditure.....	20.50	35
Connectivity		
1.2.5 ICT access.....	65.24	40
Ease of doing business		
1.2.6 Ease of doing business.....	37.30	65
1.3 Business landscape	38.17	88
Labour market flexibility		
1.3.1 Labour market flexibility.....	38.45	70
Ownership and governance		
1.3.2 Reliance on professional management.....	37.89	101
2 Attract	33.89	100
2.1 External openness	33.94	80
FDI		
2.1.1 FDI inflow.....	40.76	21
Brain gain		
2.1.2 Qualified labour inflow.....	14.34	102
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	46.71	92
2.2 Internal openness	33.84	101
Diversity		
2.2.1 Tolerance of minorities.....	0.00	102
2.2.2 Tolerance of immigrants.....	0.00	102
Social mobility		
2.2.3 Social mobility.....	34.33	94
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	34.89	41
3 Grow	38.32	89
3.1 Formal education	47.05	45
Education climate		
3.1.1 Pupil-teacher ratio.....	92.42	17
3.1.2 Technical/vocational enrolment.....	79.78	5
3.1.3 Tertiary enrolment.....	46.86	44
Performance of education system		
3.1.4 Reading, maths and science scores.....	46.63	41
Top universities		
3.1.5 QS university ranking.....	0.00	61
International students		
3.1.6 International students inflow.....	16.59	35

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	36.46	100
Further education and training climate		
3.2.1 Quality of management schools.....	40.98	89
3.2.2 Extent of staff training.....	31.93	102
3.3 Access to growth opportunities	31.46	103
Networks		
3.3.1 Use of virtual social networks.....	53.82	99
3.3.2 State of cluster development.....	28.37	97
Research quality		
3.3.3 Quality of scientific research institutions.....	43.63	61
Voice		
3.3.4 Voicing concern to officials.....	0.00	102
4 Retain	40.16	76
4.1 Sustainability	39.24	71
Social protection		
4.1.1 Pension system.....	46.49	49
Taxation		
4.1.2 Extent and effect of taxation.....	31.98	86
4.2 Lifestyle	41.08	86
Quality of life		
4.2.1 Environmental performance.....	30.17	83
4.2.2 Property stolen.....	100.00	1
4.2.3 Safety at night.....	0.00	102
Services		
4.2.4 Physicians density.....	34.16	53
5 Labour and Vocational	39.15	51
5.1 Employable skills	49.11	33
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	68.43	15
Technical professions		
5.1.2 Technicians and associate professionals.....	68.88	21
Youth employment		
5.1.3 Youth employment.....	10.03	94
5.2 Labour productivity	29.18	83
Productivity per employee		
5.2.1 Labour productivity per employee.....	17.37	57
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	41.00	81
6 Global Knowledge	35.22	47
6.1 Higher skills and competencies	28.13	53
Educated workforce		
6.1.1 Tertiary-educated workforce.....	37.13	52
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	28.65	49
6.1.3 Professionals.....	35.37	48
6.1.4 Researchers.....	11.35	47
6.2 Talent impact	42.32	43
Innovation		
6.2.1 Innovation output.....	43.07	33
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	41.56	35

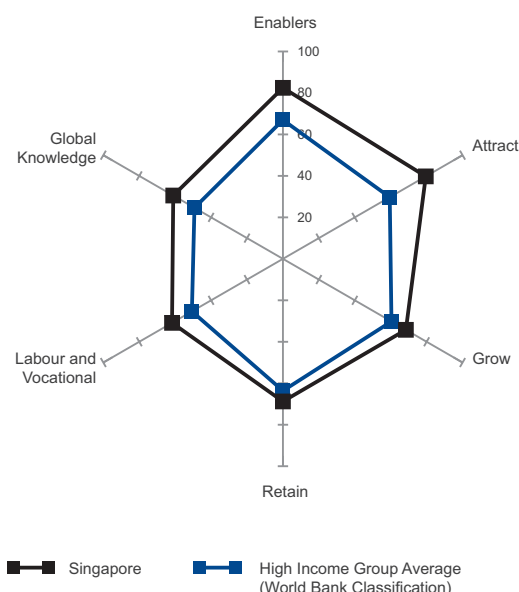
SINGAPORE

RANK
(out of 103)

2

Population (millions) **5.30**
GDP per capita (PPP\$) **60,409.98**
GDP (US\$ billions) **276.52**

Global Talent Competitiveness
Index Score **70.34**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	82.47	3
1.1 Regulatory landscape	91.50	8
Government efficiency		
1.1.1 Government effectiveness.....	97.31	3
1.1.2 Political stability.....	95.78	9
FDI climate		
1.1.3 Starting a foreign business.....	81.41	14
1.2 Market landscape	77.30	2
Competition climate		
1.2.1 Intensity of local competition.....	75.73	18
Innovation climate		
1.2.2 Venture capital availability.....	56.45	3
1.2.3 Firm-level technology absorption.....	83.71	7
1.2.4 R&D expenditure.....	54.96	12
Connectivity		
1.2.5 ICT access.....	92.97	7
Ease of doing business		
1.2.6 Ease of doing business.....	100.00	1
1.3 Business landscape	78.60	10
Labour market flexibility		
1.3.1 Labour market flexibility.....	75.52	18
Ownership and governance		
1.3.2 Reliance on professional management.....	81.68	11
2 Attract	79.53	3
2.1 External openness	87.82	1
FDI		
2.1.1 FDI inflow.....	100.00	1
Brain gain		
2.1.2 Qualified labour inflow.....	78.61	2
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	84.84	3
2.2 Internal openness	71.24	27
Diversity		
2.2.1 Tolerance of minorities.....	84.46	29
2.2.2 Tolerance of immigrants.....	70.33	50
Social mobility		
2.2.3 Social mobility.....	80.27	15
Gender mobility		
2.2.4 Female professionals and technical workers.....	85.83	64
2.2.5 Female parliamentarians.....	35.30	40
3 Grow	68.45	11
3.1 Formal education	68.15	8
Education climate		
3.1.1 Pupil-teacher ratio.....	76.57	56
3.1.2 Technical/vocational enrolment.....	24.44	56
3.1.3 Tertiary enrolment.....	n/a	n/a
Performance of education system		
3.1.4 Reading, maths and science scores.....	86.65	3
Top universities		
3.1.5 QS university ranking.....	53.10	18
International students		
3.1.6 International students inflow.....	100.00	1

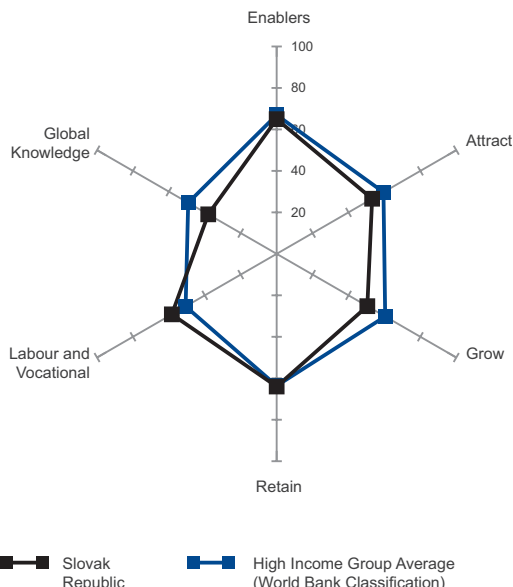
VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	75.38	2
Further education and training climate		
3.2.1 Quality of management schools.....	78.62	6
3.2.2 Extent of staff training.....	72.13	3
3.3 Access to growth opportunities	61.82	30
Networks		
3.3.1 Use of virtual social networks.....	86.44	15
3.3.2 State of cluster development.....	70.77	2
Research quality		
3.3.3 Quality of scientific research institutions.....	76.16	12
Voice		
3.3.4 Voicing concern to officials.....	13.92	99
4 Retain	68.77	10
4.1 Sustainability	69.47	9
Social protection		
4.1.1 Pension system.....	64.61	39
Taxation		
4.1.2 Extent and effect of taxation.....	74.32	4
4.2 Lifestyle	68.07	17
Quality of life		
4.2.1 Environmental performance.....	53.53	47
4.2.2 Property stolen.....	93.60	3
4.2.3 Safety at night.....	95.51	3
Services		
4.2.4 Physicians density.....	29.63	59
5 Labour and Vocational	61.74	7
5.1 Employable skills	54.51	20
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	27.71	62
Technical professions		
5.1.2 Technicians and associate professionals.....	100.00	1
Youth employment		
5.1.3 Youth employment.....	35.83	57
5.2 Labour productivity	68.97	2
Productivity per employee		
5.2.1 Labour productivity per employee.....	64.94	6
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	73.01	1
6 Global Knowledge	61.07	6
6.1 Higher skills and competencies	68.96	2
Educated workforce		
6.1.1 Tertiary-educated workforce.....	86.79	5
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	100.00	1
6.1.3 Professionals.....	41.16	38
6.1.4 Researchers.....	47.88	15
6.2 Talent impact	53.18	25
Innovation		
6.2.1 Innovation output.....	68.69	11
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	37.66	45

SLOVAK REPUBLIC

RANK **27**
(out of 103)

Population (millions) **5.44**
GDP per capita (PPP\$) **24,249.11**
GDP (US\$ billions) **91.92**

Global Talent Competitiveness Index Score **54.84**
Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	64.95	26
1.1 Regulatory landscape	82.76	17
Government efficiency		
1.1.1 Government effectiveness	58.49	33
1.1.2 Political stability	89.79	20
FDI climate		
1.1.3 Starting a foreign business	100.00	1
1.2 Market landscape	51.33	36
Competition climate		
1.2.1 Intensity of local competition	74.63	24
Innovation climate		
1.2.2 Venture capital availability	29.36	49
1.2.3 Firm-level technology absorption	64.66	51
1.2.4 R&D expenditure	13.97	45
Connectivity		
1.2.5 ICT access	64.55	41
Ease of doing business		
1.2.6 Ease of doing business	60.80	41
1.3 Business landscape	60.76	36
Labour market flexibility		
1.3.1 Labour market flexibility	68.26	34
Ownership and governance		
1.3.2 Reliance on professional management	53.26	49
2 Attract	53.15	49
2.1 External openness	42.46	57
FDI		
2.1.1 FDI inflow	17.98	60
Brain gain		
2.1.2 Qualified labour inflow	24.42	88
Foreign companies		
2.1.3 Prevalence of foreign ownership	84.97	2
2.2 Internal openness	63.84	43
Diversity		
2.2.1 Tolerance of minorities	69.57	62
2.2.2 Tolerance of immigrants	66.60	59
Social mobility		
2.2.3 Social mobility	59.48	41
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	23.56	64
3 Grow	50.47	43
3.1 Formal education	58.04	22
Education climate		
3.1.1 Pupil-teacher ratio	84.75	38
3.1.2 Technical/vocational enrolment	73.72	10
3.1.3 Tertiary enrolment	51.37	41
Performance of education system		
3.1.4 Reading, maths and science scores	64.79	27
Top universities		
3.1.5 QS university ranking	n/a	n/a
International students		
3.1.6 International students inflow	15.58	40

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	43.62	79
Further education and training climate		
3.2.1 Quality of management schools	42.83	86
3.2.2 Extent of staff training	44.41	71
3.3 Access to growth opportunities	49.77	58
Networks		
3.3.1 Use of virtual social networks	78.27	45
3.3.2 State of cluster development	45.84	54
Research quality		
3.3.3 Quality of scientific research institutions	39.81	75
Voice		
3.3.4 Voicing concern to officials	35.14	71
4 Retain	63.99	22
4.1 Sustainability	62.41	22
Social protection		
4.1.1 Pension system	82.47	29
Taxation		
4.1.2 Extent and effect of taxation	42.36	44
4.2 Lifestyle	65.56	22
Quality of life		
4.2.1 Environmental performance	76.98	12
4.2.2 Property stolen	70.14	51
4.2.3 Safety at night	66.52	54
Services		
4.2.4 Physicians density	48.58	31
5 Labour and Vocational	58.36	14
5.1 Employable skills	66.73	8
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	96.29	2
Technical professions		
5.1.2 Technicians and associate professionals	91.33	5
Youth employment		
5.1.3 Youth employment	12.58	89
5.2 Labour productivity	49.99	27
Productivity per employee		
5.2.1 Labour productivity per employee	37.40	34
Pay and productivity		
5.2.2 Relationship of pay to productivity	62.58	11
6 Global Knowledge	38.10	40
6.1 Higher skills and competencies	30.98	46
Educated workforce		
6.1.1 Tertiary-educated workforce	30.07	61
Knowledge workers		
6.1.2 Legislators, senior officials and managers	29.78	46
6.1.3 Professionals	34.76	49
6.1.4 Researchers	29.31	30
6.2 Talent impact	45.22	36
Innovation		
6.2.1 Innovation output	37.19	42
Entrepreneurship		
6.2.2 New product entrepreneurial activity	53.25	17

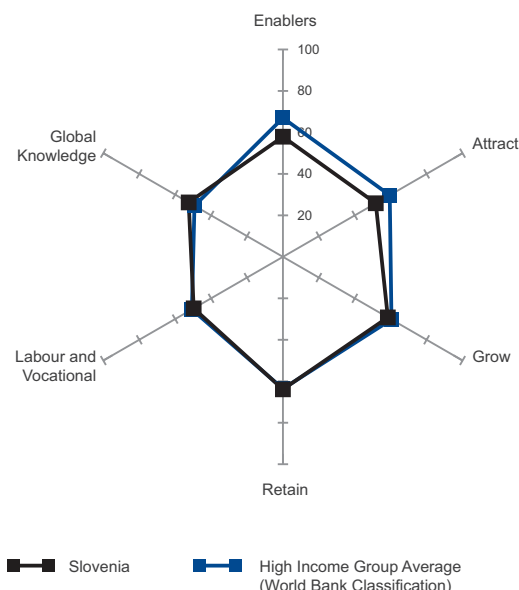
SLOVENIA

RANK
(out of 103)

25

Population (millions) **2.07**
GDP per capita (PPP\$) **28,195.24**
GDP (US\$ billions) **45.62**

Global Talent Competitiveness
Index Score **55.68**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	57.93	36
1.1 Regulatory landscape	74.58	29
Government efficiency.....		
1.1.1 Government effectiveness.....	62.34	30
1.1.2 Political stability.....	86.83	27
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	57.48	29
Competition climate.....		
1.2.1 Intensity of local competition.....	70.00	37
Innovation climate.....		
1.2.2 Venture capital availability.....	18.66	87
1.2.3 Firm-level technology absorption.....	61.00	62
1.2.4 R&D expenditure.....	47.61	15
Connectivity.....		
1.2.5 ICT access.....	77.93	24
Ease of doing business.....		
1.2.6 Ease of doing business.....	69.70	32
1.3 Business landscape	41.73	82
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	33.23	78
Ownership and governance.....		
1.3.2 Reliance on professional management.....	50.24	61
2 Attract	51.69	51
2.1 External openness	31.89	88
FDI.....		
2.1.1 FDI inflow.....	16.42	66
Brain gain.....		
2.1.2 Qualified labour inflow.....	38.48	63
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	40.77	97
2.2 Internal openness	71.48	26
Diversity.....		
2.2.1 Tolerance of minorities.....	77.61	42
2.2.2 Tolerance of immigrants.....	59.02	76
Social mobility.....		
2.2.3 Social mobility.....	62.02	31
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	58.75	17
3 Grow	58.41	28
3.1 Formal education	55.60	26
Education climate.....		
3.1.1 Pupil-teacher ratio.....	92.85	14
3.1.2 Technical/vocational enrolment.....	75.71	8
3.1.3 Tertiary enrolment.....	86.37	4
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	69.01	19
Top universities.....		
3.1.5 QS university ranking.....	1.91	58
International students.....		
3.1.6 International students inflow.....	7.74	52

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	49.64	60
Further education and training climate.....		
3.2.1 Quality of management schools.....	54.23	55
3.2.2 Extent of staff training.....	45.06	69
3.3 Access to growth opportunities	69.98	15
Networks.....		
3.3.1 Use of virtual social networks.....	73.89	60
3.3.2 State of cluster development.....	42.73	62
Research quality.....		
3.3.3 Quality of scientific research institutions.....	63.30	28
Voice.....		
3.3.4 Voicing concern to officials.....	100.00	1
4 Retain	63.89	23
4.1 Sustainability	60.38	30
Social protection.....		
4.1.1 Pension system.....	91.53	20
Taxation.....		
4.1.2 Extent and effect of taxation.....	29.24	91
4.2 Lifestyle	67.40	19
Quality of life.....		
4.2.1 Environmental performance.....	66.99	27
4.2.2 Property stolen.....	70.38	50
4.2.3 Safety at night.....	91.66	6
Services.....		
4.2.4 Physicians density.....	40.56	46
5 Labour and Vocational	49.68	27
5.1 Employable skills	58.27	18
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	80.00	7
Technical professions.....		
5.1.2 Technicians and associate professionals.....	65.82	26
Youth employment.....		
5.1.3 Youth employment.....	28.98	67
5.2 Labour productivity	41.10	42
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	39.77	30
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	42.44	79
6 Global Knowledge	52.48	20
6.1 Higher skills and competencies	51.06	20
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	50.57	33
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	46.63	16
6.1.3 Professionals.....	58.84	14
6.1.4 Researchers.....	48.19	14
6.2 Talent impact	53.90	23
Innovation.....		
6.2.1 Innovation output.....	58.44	22
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	49.35	23

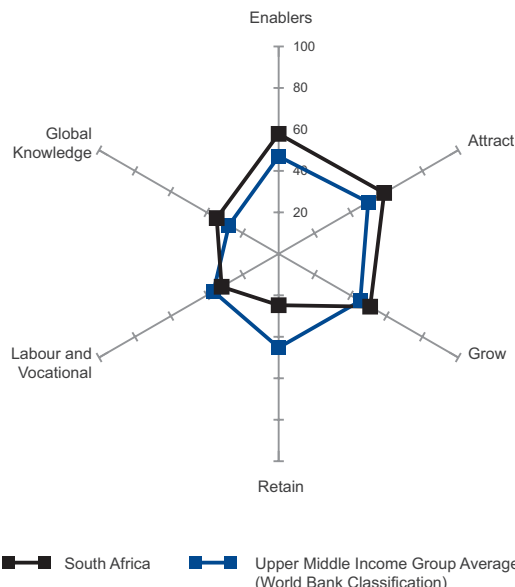
SOUTH AFRICA

RANK
(out of 103)

55

Population (millions) **52.46**
 GDP per capita (PPP\$) **11,375.48**
 GDP (US\$ billions) **384.32**

Global Talent Competitiveness Index Score **43.09**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	57.86	37
1.1 Regulatory landscape	64.00	41
Government efficiency		
1.1.1 Government effectiveness.....	43.94	46
1.1.2 Political stability.....	66.64	54
FDI climate		
1.1.3 Starting a foreign business.....	81.41	14
1.2 Market landscape	48.62	40
Competition climate		
1.2.1 Intensity of local competition.....	67.77	45
Innovation climate		
1.2.2 Venture capital availability.....	34.24	30
1.2.3 Firm-level technology absorption.....	73.61	33
1.2.4 R&D expenditure.....	20.75	34
Connectivity		
1.2.5 ICT access.....	29.66	73
Ease of doing business		
1.2.6 Ease of doing business.....	65.70	36
1.3 Business landscape	60.97	35
Labour market flexibility		
1.3.1 Labour market flexibility.....	45.23	61
Ownership and governance		
1.3.2 Reliance on professional management.....	76.71	13
2 Attract	58.73	31
2.1 External openness	43.51	52
FDI		
2.1.1 FDI inflow.....	12.04	79
Brain gain		
2.1.2 Qualified labour inflow.....	46.43	39
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	72.06	24
2.2 Internal openness	73.95	24
Diversity		
2.2.1 Tolerance of minorities.....	65.98	70
2.2.2 Tolerance of immigrants.....	61.26	70
Social mobility		
2.2.3 Social mobility.....	51.84	60
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	90.69	3
3 Grow	50.94	42
3.1 Formal education	32.20	70
Education climate		
3.1.1 Pupil-teacher ratio.....	47.77	76
3.1.2 Technical/vocational enrolment.....	12.13	75
3.1.3 Tertiary enrolment.....	n/a	n/a
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	36.71	30
International students		
3.1.6 International students inflow.....	n/a	n/a

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	66.01	18
Further education and training climate		
3.2.1 Quality of management schools.....	71.34	15
3.2.2 Extent of staff training.....	60.68	22
3.3 Access to growth opportunities	54.61	46
Networks		
3.3.1 Use of virtual social networks.....	70.90	73
3.3.2 State of cluster development.....	50.83	41
Research quality		
3.3.3 Quality of scientific research institutions.....	60.40	32
Voice		
3.3.4 Voicing concern to officials.....	36.32	68
4 Retain	24.77	101
4.1 Sustainability	28.24	91
Social protection		
4.1.1 Pension system.....	5.80	84
Taxation		
4.1.2 Extent and effect of taxation.....	50.67	21
4.2 Lifestyle	21.30	102
Quality of life		
4.2.1 Environmental performance.....	3.68	98
4.2.2 Property stolen.....	28.20	98
4.2.3 Safety at night.....	40.96	97
Services		
4.2.4 Physicians density.....	12.37	79
5 Labour and Vocational	31.75	77
5.1 Employable skills	39.42	56
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	65.00	18
Technical professions		
5.1.2 Technicians and associate professionals.....	51.02	40
Youth employment		
5.1.3 Youth employment.....	2.23	101
5.2 Labour productivity	24.08	94
Productivity per employee		
5.2.1 Labour productivity per employee.....	16.06	60
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	32.09	99
6 Global Knowledge	34.50	49
6.1 Higher skills and competencies	21.23	68
Educated workforce		
6.1.1 Tertiary-educated workforce.....	13.90	78
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	47.75	15
6.1.3 Professionals.....	16.77	73
6.1.4 Researchers.....	6.49	55
6.2 Talent impact	47.76	31
Innovation		
6.2.1 Innovation output.....	24.10	65
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	71.43	7

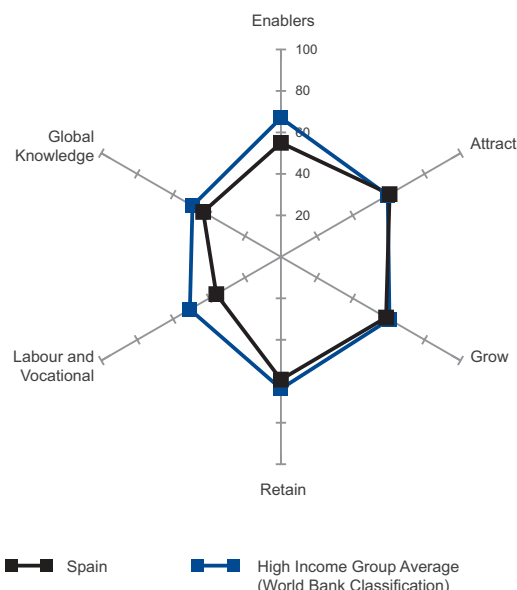
SPAIN

RANK
(out of 103)

35

Population (millions) **46.71**
 GDP per capita (PPP\$) **30,557.47**
 GDP (US\$ billions) **1,352.06**

Global Talent Competitiveness Index Score **52.08**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	54.98	45
1.1 Regulatory landscape	67.74	37
Government efficiency		
1.1.1 Government effectiveness	63.42	27
1.1.2 Political stability	69.37	50
FDI climate		
1.1.3 Starting a foreign business	70.42	27
1.2 Market landscape	56.33	30
Competition climate		
1.2.1 Intensity of local competition	75.27	20
Innovation climate		
1.2.2 Venture capital availability	24.96	61
1.2.3 Firm-level technology absorption	68.14	43
1.2.4 R&D expenditure	31.20	27
Connectivity		
1.2.5 ICT access	75.59	26
Ease of doing business		
1.2.6 Ease of doing business	62.80	39
1.3 Business landscape	40.86	84
Labour market flexibility		
1.3.1 Labour market flexibility	20.40	88
Ownership and governance		
1.3.2 Reliance on professional management	61.33	34
2 Attract	60.49	25
2.1 External openness	40.95	66
FDI		
2.1.1 FDI inflow	15.96	68
Brain gain		
2.1.2 Qualified labour inflow	38.52	62
Foreign companies		
2.1.3 Prevalence of foreign ownership	68.37	34
2.2 Internal openness	80.03	12
Diversity		
2.2.1 Tolerance of minorities	86.63	24
2.2.2 Tolerance of immigrants	90.29	13
Social mobility		
2.2.3 Social mobility	62.03	30
Gender mobility		
2.2.4 Female professionals and technical workers	91.60	56
2.2.5 Female parliamentarians	69.59	12
3 Grow	58.54	26
3.1 Formal education	54.22	29
Education climate		
3.1.1 Pupil-teacher ratio	88.24	29
3.1.2 Technical/vocational enrolment	36.87	37
3.1.3 Tertiary enrolment	74.85	10
Performance of education system		
3.1.4 Reading, maths and science scores	63.25	31
Top universities		
3.1.5 QS university ranking	48.38	21
International students		
3.1.6 International students inflow	13.71	43

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	61.38	27
Further education and training climate		
3.2.1 Quality of management schools	79.83	4
3.2.2 Extent of staff training	42.94	80
3.3 Access to growth opportunities	60.01	37
Networks		
3.3.1 Use of virtual social networks	76.96	50
3.3.2 State of cluster development	51.50	36
Research quality		
3.3.3 Quality of scientific research institutions	59.20	34
Voice		
3.3.4 Voicing concern to officials	52.36	37
4 Retain	59.18	37
4.1 Sustainability	53.16	44
Social protection		
4.1.1 Pension system	72.38	34
Taxation		
4.1.2 Extent and effect of taxation	65.20	78
4.2 Lifestyle	65.2	26
Quality of life		
4.2.1 Environmental performance	62.56	30
4.2.2 Property stolen	59.24	68
4.2.3 Safety at night	74.87	36
Services		
4.2.4 Physicians density	64.12	8
5 Labour and Vocational	35.97	65
5.1 Employable skills	29.41	82
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	26.29	64
Technical professions		
5.1.2 Technicians and associate professionals	50.00	42
Youth employment		
5.1.3 Youth employment	11.94	91
5.2 Labour productivity	42.53	39
Productivity per employee		
5.2.1 Labour productivity per employee	52.46	17
Pay and productivity		
5.2.2 Relationship of pay to productivity	32.60	98
6 Global Knowledge	43.30	33
6.1 Higher skills and competencies	44.94	27
Educated workforce		
6.1.1 Tertiary-educated workforce	58.54	25
Knowledge workers		
6.1.2 Legislators, senior officials and managers	28.09	50
6.1.3 Professionals	48.17	27
6.1.4 Researchers	44.96	18
6.2 Talent impact	41.67	44
Innovation		
6.2.1 Innovation output	43.07	33
Entrepreneurship		
6.2.2 New product entrepreneurial activity	40.26	40

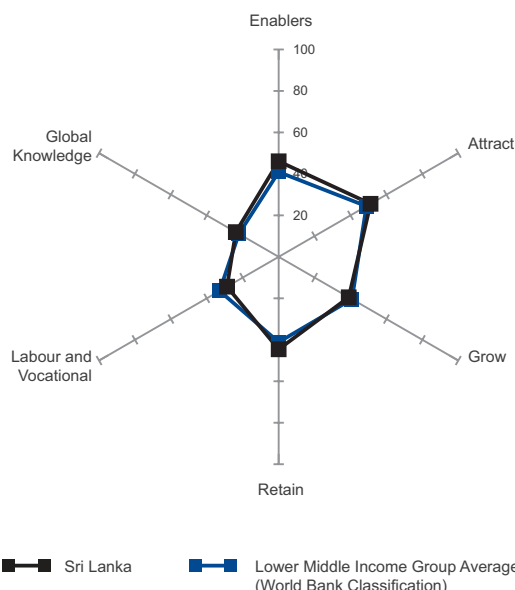
SRI LANKA

RANK
(out of 103)

76

Population (millions) **21.08**
 GDP per capita (PPP\$) **6,106.59**
 GDP (US\$ billions) **59.41**

Global Talent Competitiveness Index Score **38.91**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	46.08	61
1.1 Regulatory landscape	40.33	81
Government efficiency		
1.1.1 Government effectiveness.....	30.41	62
1.1.2 Political stability.....	52.83	74
FDI climate		
1.1.3 Starting a foreign business.....	37.75	57
1.2 Market landscape	38.74	72
Competition climate		
1.2.1 Intensity of local competition.....	74.93	23
Innovation climate		
1.2.2 Venture capital availability.....	19.96	82
1.2.3 Firm-level technology absorption.....	70.33	37
1.2.4 R&D expenditure.....	2.12	84
Connectivity		
1.2.5 ICT access.....	22.90	84
Ease of doing business		
1.2.6 Ease of doing business.....	42.20	60
1.3 Business landscape	59.18	38
Labour market flexibility		
1.3.1 Labour market flexibility.....	52.04	51
Ownership and governance		
1.3.2 Reliance on professional management.....	66.31	28
2 Attract	51.15	54
2.1 External openness	40.09	68
FDI		
2.1.1 FDI inflow.....	5.28	95
Brain gain		
2.1.2 Qualified labour inflow.....	46.83	38
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	68.16	36
2.2 Internal openness	62.22	51
Diversity		
2.2.1 Tolerance of minorities.....	85.98	26
2.2.2 Tolerance of immigrants.....	67.66	57
Social mobility		
2.2.3 Social mobility.....	n/a	n/a
Gender mobility		
2.2.4 Female professionals and technical workers.....	87.61	61
2.2.5 Female parliamentarians.....	7.62	97
3 Grow	39.01	85
3.1 Formal education	6.02	102
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	12.38	74
3.1.3 Tertiary enrolment.....	11.68	83
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	0.00	61
International students		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	54.93	43
Further education and training climate		
3.2.1 Quality of management schools.....	62.90	34
3.2.2 Extent of staff training.....	46.96	61
3.3 Access to growth opportunities	56.08	43
Networks		
3.3.1 Use of virtual social networks.....	64.03	88
3.3.2 State of cluster development.....	55.67	28
Research quality		
3.3.3 Quality of scientific research institutions.....	47.55	52
Voice		
3.3.4 Voicing concern to officials.....	57.08	26
4 Retain	44.58	66
4.1 Sustainability	35.73	74
Social protection		
4.1.1 Pension system.....	24.31	67
Taxation		
4.1.2 Extent and effect of taxation.....	47.16	31
4.2 Lifestyle	53.43	57
Quality of life		
4.2.1 Environmental performance.....	52.07	50
4.2.2 Property stolen.....	69.19	57
4.2.3 Safety at night.....	84.60	22
Services		
4.2.4 Physicians density.....	7.86	82
5 Labour and Vocational	28.76	88
5.1 Employable skills	25.13	94
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	21.86	72
Technical professions		
5.1.2 Technicians and associate professionals.....	22.96	74
Youth employment		
5.1.3 Youth employment.....	30.57	65
5.2 Labour productivity	32.40	68
Productivity per employee		
5.2.1 Labour productivity per employee.....	9.56	76
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	55.23	32
6 Global Knowledge	23.85	71
6.1 Higher skills and competencies	24.55	59
Educated workforce		
6.1.1 Tertiary-educated workforce.....	32.12	58
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	46.63	16
6.1.3 Professionals.....	17.07	72
6.1.4 Researchers.....	2.39	75
6.2 Talent impact	23.15	76
Innovation		
6.2.1 Innovation output.....	23.15	66
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

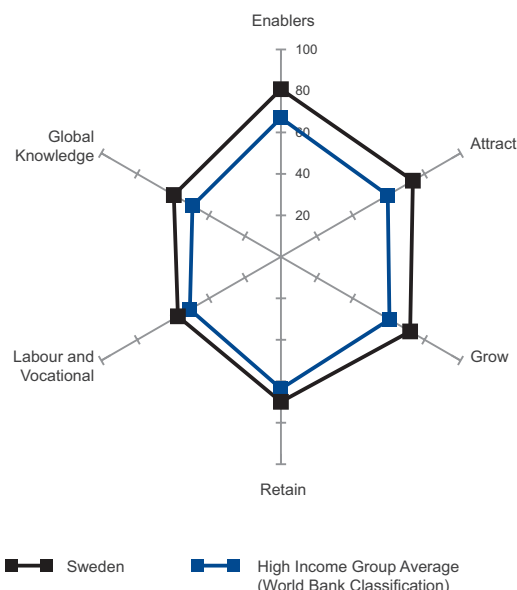
SWEDEN

RANK
(out of 103)

4

Population (millions) **9.51**
 GDP per capita (PPP\$) **41,191.47**
 GDP (US\$ billions) **526.19**

Global Talent Competitiveness Index Score **68.86**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	80.85	5
1.1 Regulatory landscape	94.28	4
Government efficiency.....		
1.1.1 Government effectiveness.....	91.46	4
1.1.2 Political stability.....	97.10	6
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	80.22	1
Competition climate.....		
1.2.1 Intensity of local competition.....	75.58	19
Innovation climate.....		
1.2.2 Venture capital availability.....	56.26	4
1.2.3 Firm-level technology absorption.....	88.41	1
1.2.4 R&D expenditure.....	77.14	4
Connectivity.....		
1.2.5 ICT access.....	94.62	5
Ease of doing business.....		
1.2.6 Ease of doing business.....	89.30	12
1.3 Business landscape	68.04	20
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	51.84	52
Ownership and governance.....		
1.3.2 Reliance on professional management.....	84.25	5
2 Attract	73.46	4
2.1 External openness	54.21	17
FDI.....		
2.1.1 FDI inflow.....	18.25	57
Brain gain.....		
2.1.2 Qualified labour inflow.....	69.35	10
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	75.04	19
2.2 Internal openness	92.70	1
Diversity.....		
2.2.1 Tolerance of minorities.....	95.65	7
2.2.2 Tolerance of immigrants.....	95.30	4
Social mobility.....		
2.2.3 Social mobility.....	72.54	23
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	100.00	1
3 Grow	71.93	5
3.1 Formal education	65.81	11
Education climate.....		
3.1.1 Pupil-teacher ratio.....	91.35	18
3.1.2 Technical/vocational enrolment.....	68.51	15
3.1.3 Tertiary enrolment.....	70.43	16
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	67.75	24
Top universities.....		
3.1.5 QS university ranking.....	64.95	13
International students.....		
3.1.6 International students inflow.....	31.87	20

VARIABLE	SCORE	RANK/103
3.2 Lifelong Learning	71.87	8
Further education and training climate.....		
3.2.1 Quality of management schools.....	73.63	11
3.2.2 Extent of staff training.....	70.10	6
3.3 Access to Growth Opportunities	78.12	3
Networks.....		
3.3.1 Use of virtual social networks.....	90.10	5
3.3.2 State of cluster development.....	66.00	12
Research quality.....		
3.3.3 Quality of scientific research institutions.....	77.38	9
Voice.....		
3.3.4 Voicing concern to officials.....	79.01	7
4 Retain	69.91	7
4.1 Sustainability	64.26	20
Social protection.....		
4.1.1 Pension system.....	93.01	19
Taxation.....		
4.1.2 Extent and effect of taxation.....	35.51	71
4.2 Lifestyle	75.56	5
Quality of life.....		
4.2.1 Environmental performance.....	82.01	9
4.2.2 Property stolen.....	72.75	39
4.2.3 Safety at night.....	86.42	16
Services.....		
4.2.4 Physicians density.....	61.08	11
5 Labour and Vocational	57.35	19
5.1 Employable skills	62.11	12
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	61.29	20
Technical professions.....		
5.1.2 Technicians and associate professionals.....	78.06	13
Youth employment.....		
5.1.3 Youth employment.....	46.97	41
5.2 Labour productivity	52.60	21
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	57.50	10
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	47.70	59
6 Global Knowledge	59.64	10
6.1 Higher skills and competencies	60.44	12
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	64.01	21
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	30.90	45
6.1.3 Professionals.....	76.22	2
6.1.4 Researchers.....	70.64	6
6.2 Talent impact	58.83	13
Innovation.....		
6.2.1 Innovation output.....	85.20	2
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	32.47	53

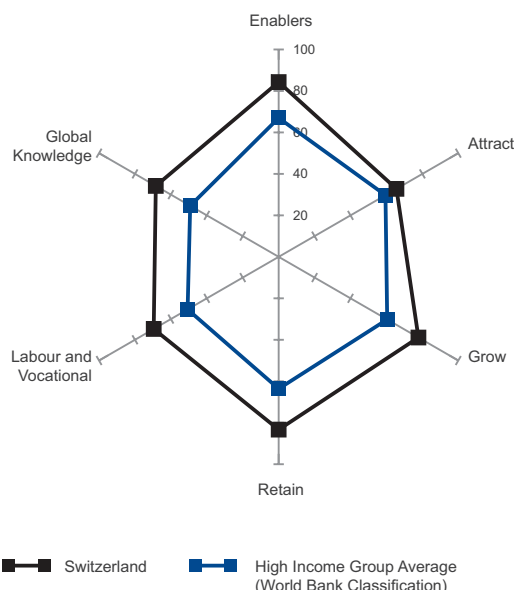
SWITZERLAND

RANK
(out of 103)

1

Population (millions) **7.99**
 GDP per capita (PPP\$) **45,417.81**
 GDP (US\$ billions) **632.40**

Global Talent Competitiveness Index Score **74.83**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	84.29	1
1.1 Regulatory landscape	93.58	5
Government efficiency		
1.1.1 Government effectiveness	89.38	6
1.1.2 Political stability	97.78	5
FDI climate		
1.1.3 Starting a foreign business	n/a	n/a
1.2 Market landscape	75.20	7
Competition climate		
1.2.1 Intensity of local competition	76.45	17
Innovation climate		
1.2.2 Venture capital availability	43.82	15
1.2.3 Firm-level technology absorption	86.64	3
1.2.4 R&D expenditure	67.82	7
Connectivity		
1.2.5 ICT access	100.00	1
Ease of doing business		
1.2.6 Ease of doing business	76.50	25
1.3 Business landscape	84.09	4
Labour market flexibility		
1.3.1 Labour market flexibility	84.13	8
Ownership and governance		
1.3.2 Reliance on professional management	84.05	6
2 Attract	65.57	18
2.1 External openness	55.52	13
FDI		
2.1.1 FDI inflow	1.31	101
Brain gain		
2.1.2 Qualified labour inflow	88.09	1
Foreign companies		
2.1.3 Prevalence of foreign ownership	77.16	13
2.2 Internal openness	75.62	21
Diversity		
2.2.1 Tolerance of minorities	77.61	42
2.2.2 Tolerance of immigrants	79.08	31
Social mobility		
2.2.3 Social mobility	88.11	2
Gender mobility		
2.2.4 Female professionals and technical workers	83.97	67
2.2.5 Female parliamentarians	49.31	22
3 Grow	77.81	1
3.1 Formal education	70.67	4
Education climate		
3.1.1 Pupil-teacher ratio	n/a	n/a
3.1.2 Technical/vocational enrolment	72.34	11
3.1.3 Tertiary enrolment	51.34	42
Performance of education system		
3.1.4 Reading, maths and science scores	76.25	10
Top universities		
3.1.5 QS university ranking	82.78	5
International students		
3.1.6 International students inflow	70.64	9

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	80.47	1
Further education and training climate		
3.2.1 Quality of management schools	83.54	3
3.2.2 Extent of staff training	77.39	1
3.3 Access to growth opportunities	82.30	1
Networks		
3.3.1 Use of virtual social networks	87.28	12
3.3.2 State of cluster development	68.11	8
Research quality		
3.3.3 Quality of scientific research institutions	88.92	2
Voice		
3.3.4 Voicing concern to officials	84.91	3
4 Retain	83.32	1
4.1 Sustainability	85.25	2
Social protection		
4.1.1 Pension system	99.98	2
Taxation		
4.1.2 Extent and effect of taxation	70.51	5
4.2 Lifestyle	81.40	2
Quality of life		
4.2.1 Environmental performance	100.00	1
4.2.2 Property stolen	75.36	29
4.2.3 Safety at night	84.28	23
Services		
4.2.4 Physicians density	65.95	7
5 Labour and Vocational	69.56	1
5.1 Employable skills	77.16	1
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	62.71	19
Technical professions		
5.1.2 Technicians and associate professionals	87.24	8
Youth employment		
5.1.3 Youth employment	81.53	5
5.2 Labour productivity	61.96	5
Productivity per employee		
5.2.1 Labour productivity per employee	51.76	18
Pay and productivity		
5.2.2 Relationship of pay to productivity	72.15	3
6 Global Knowledge	68.40	1
6.1 Higher skills and competencies	66.03	6
Educated workforce		
6.1.1 Tertiary-educated workforce	75.17	11
Knowledge workers		
6.1.2 Legislators, senior officials and managers	43.82	21
6.1.3 Professionals	69.21	5
6.1.4 Researchers	75.91	5
6.2 Talent impact	70.78	3
Innovation		
6.2.1 Innovation output	100.00	1
Entrepreneurship		
6.2.2 New product entrepreneurial activity	41.56	35

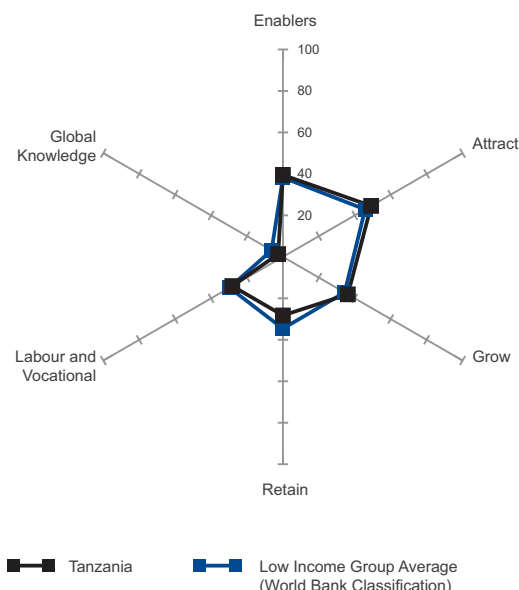
TANZANIA

RANK
(out of 103)

97

Population (millions) **47.91**
GDP per capita (PPP\$) **1,566.71**
GDP (US\$ billions) **28.25**

Global Talent Competitiveness
Index Score **30.64**
Global Talent Competitiveness
Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	39.50	86
1.1 Regulatory landscape	47.07	72
Government efficiency.....		
1.1.1 Government effectiveness.....	16.91	84
1.1.2 Political stability.....	65.99	55
FDI climate.....		
1.1.3 Starting a foreign business.....	58.31	44
1.2 Market landscape	24.75	100
Competition climate.....		
1.2.1 Intensity of local competition.....	53.51	83
Innovation climate.....		
1.2.2 Venture capital availability.....	24.07	64
1.2.3 Firm-level technology absorption.....	48.70	96
1.2.4 R&D expenditure.....	9.43	58
Connectivity.....		
1.2.5 ICT access.....	2.90	95
Ease of doing business.....		
1.2.6 Ease of doing business.....	9.90	93
1.3 Business landscape	46.67	72
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	40.99	67
Ownership and governance.....		
1.3.2 Reliance on professional management.....	52.34	55
2 Attract	49.11	63
2.1 External openness	42.24	59
FDI.....		
2.1.1 FDI inflow.....	35.35	28
Brain gain.....		
2.1.2 Qualified labour inflow.....	35.75	69
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	55.61	69
2.2 Internal openness	55.99	70
Diversity.....		
2.2.1 Tolerance of minorities.....	53.37	91
2.2.2 Tolerance of immigrants.....	61.05	73
Social mobility.....		
2.2.3 Social mobility.....	40.37	88
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	55.57	77
2.2.5 Female parliamentarians.....	69.59	12
3 Grow	36.15	93
3.1 Formal education	17.57	94
Education climate.....		
3.1.1 Pupil-teacher ratio.....	43.94	79
3.1.2 Technical/vocational enrolment.....	23.32	61
3.1.3 Tertiary enrolment.....	0.06	98
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	2.94	66

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	43.92	78
Further education and training climate.....		
3.2.1 Quality of management schools.....	40.35	91
3.2.2 Extent of staff training.....	47.48	59
3.3 Access to growth opportunities	46.98	72
Networks.....		
3.3.1 Use of virtual social networks.....	54.06	98
3.3.2 State of cluster development.....	38.51	76
Research quality.....		
3.3.3 Quality of scientific research institutions.....	43.00	64
Voice.....		
3.3.4 Voicing concern to officials.....	52.36	37
4 Retain	28.26	99
4.1 Sustainability	20.68	101
Social protection.....		
4.1.1 Pension system.....	3.26	87
Taxation.....		
4.1.2 Extent and effect of taxation.....	38.10	64
4.2 Lifestyle	35.83	93
Quality of life.....		
4.2.1 Environmental performance.....	48.73	57
4.2.2 Property stolen.....	29.15	97
4.2.3 Safety at night.....	65.45	57
Services.....		
4.2.4 Physicians density.....	0.00	97
5 Labour and Vocational	28.17	91
5.1 Employable skills	34.76	73
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	0.71	90
Technical professions.....		
5.1.2 Technicians and associate professionals.....	3.57	90
Youth employment.....		
5.1.3 Youth employment.....	100.00	1
5.2 Labour productivity	21.58	99
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	0.62	92
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	42.53	78
6 Global Knowledge	2.65	103
6.1 Higher skills and competencies	1.12	101
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	2.05	85
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	1.12	90
6.1.3 Professionals.....	1.22	91
6.1.4 Researchers.....	0.11	95
6.2 Talent impact	4.17	101
Innovation.....		
6.2.1 Innovation output.....	4.17	100
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

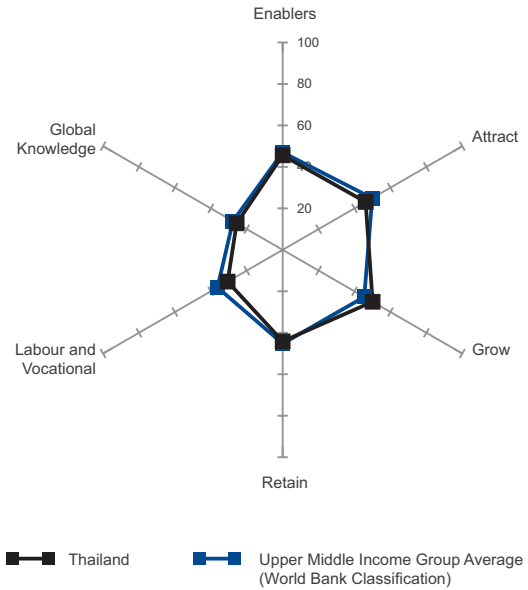
THAILAND

RANK
(out of 103)

72

Population (millions) **66.84**
 GDP per capita (PPP\$) **10,125.58**
 GDP (US\$ billions) **365.56**

Global Talent Competitiveness Index Score **40.37**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	45.58	64
1.1 Regulatory landscape	44.20	76
Government efficiency		
1.1.1 Government effectiveness	35.99	52
1.1.2 Political stability	41.12	88
FDI climate		
1.1.3 Starting a foreign business	55.49	46
1.2 Market landscape	47.38	45
Competition climate		
1.2.1 Intensity of local competition	67.16	47
Innovation climate		
1.2.2 Venture capital availability	31.60	42
1.2.3 Firm-level technology absorption	66.32	47
1.2.4 R&D expenditure	4.39	73
Connectivity		
1.2.5 ICT access	29.52	74
Ease of doing business		
1.2.6 Ease of doing business	85.30	16
1.3 Business landscape	45.15	73
Labour market flexibility		
1.3.1 Labour market flexibility	37.04	73
Ownership and governance		
1.3.2 Reliance on professional management	53.25	50
2 Attract	46.19	78
2.1 External openness	46.05	44
FDI		
2.1.1 FDI inflow	21.98	47
Brain gain		
2.1.2 Qualified labour inflow	52.27	29
Foreign companies		
2.1.3 Prevalence of foreign ownership	63.90	47
2.2 Internal openness	46.33	92
Diversity		
2.2.1 Tolerance of minorities	29.46	99
2.2.2 Tolerance of immigrants	21.88	100
Social mobility		
2.2.3 Social mobility	57.08	46
Gender mobility		
2.2.4 Female professionals and technical workers	100.00	1
2.2.5 Female parliamentarians	23.21	66
3 Grow	50.08	46
3.1 Formal education	35.59	62
Education climate		
3.1.1 Pupil-teacher ratio	62.37	70
3.1.2 Technical/vocational enrolment	32.63	48
3.1.3 Tertiary enrolment	44.17	48
Performance of education system		
3.1.4 Reading, maths and science scores	38.44	47
Top universities		
3.1.5 QS university ranking	32.21	33
International students		
3.1.6 International students inflow	3.71	64

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	53.57	46
Further education and training climate		
3.2.1 Quality of management schools	54.61	54
3.2.2 Extent of staff training	52.53	39
3.3 Access to growth opportunities	61.06	34
Networks		
3.3.1 Use of virtual social networks	73.51	63
3.3.2 State of cluster development	54.12	30
Research quality		
3.3.3 Quality of scientific research institutions	45.62	55
Voice		
3.3.4 Voicing concern to officials	70.99	12
4 Retain	44.12	69
4.1 Sustainability	33.49	80
Social protection		
4.1.1 Pension system	22.89	70
Taxation		
4.1.2 Extent and effect of taxation	44.08	38
4.2 Lifestyle	54.76	52
Quality of life		
4.2.1 Environmental performance	61.81	32
4.2.2 Property stolen	72.27	42
4.2.3 Safety at night	79.89	28
Services		
4.2.4 Physicians density	5.05	86
5 Labour and Vocational	30.64	84
5.1 Employable skills	26.70	88
Vocationally trained workforce		
5.1.1 Secondary-educated workforce	13.43	81
Technical professions		
5.1.2 Technicians and associate professionals	11.73	83
Youth employment		
5.1.3 Youth employment	54.94	28
5.2 Labour productivity	34.57	60
Productivity per employee		
5.2.1 Labour productivity per employee	10.96	70
Pay and productivity		
5.2.2 Relationship of pay to productivity	58.19	23
6 Global Knowledge	25.61	64
6.1 Higher skills and competencies	15.91	80
Educated workforce		
6.1.1 Tertiary-educated workforce	29.16	62
Knowledge workers		
6.1.2 Legislators, senior officials and managers	14.61	72
6.1.3 Professionals	14.02	76
6.1.4 Researchers	5.86	58
6.2 Talent impact	35.31	53
Innovation		
6.2.1 Innovation output	30.36	53
Entrepreneurship		
6.2.2 New product entrepreneurial activity	40.26	40

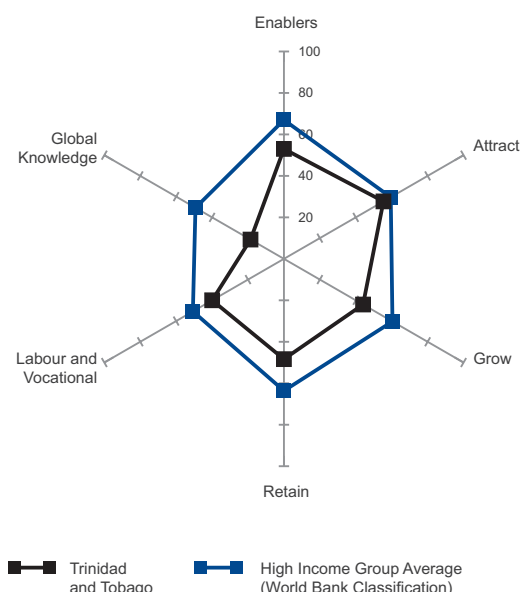
TRINIDAD AND TOBAGO

RANK
(out of 103)

53

Population (millions) **1.34**
GDP per capita (PPP\$) **20,087.13**
GDP (US\$ billions) **25.28**

Global Talent Competitiveness
Index Score **43.23**
Global Talent Competitiveness
Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	53.01	48
1.1 Regulatory landscape	56.04	53
Government efficiency		
1.1.1 Government effectiveness.....	42.20	49
1.1.2 Political stability.....	69.88	49
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	41.20	62
Competition climate		
1.2.1 Intensity of local competition.....	59.37	71
Innovation climate		
1.2.2 Venture capital availability.....	23.05	69
1.2.3 Firm-level technology absorption.....	60.49	66
1.2.4 R&D expenditure.....	0.71	93
Connectivity		
1.2.5 ICT access.....	54.48	51
Ease of doing business		
1.2.6 Ease of doing business.....	49.10	53
1.3 Business landscape	61.78	33
Labour market flexibility		
1.3.1 Labour market flexibility.....	69.20	32
Ownership and governance		
1.3.2 Reliance on professional management.....	54.35	47
2 Attract	55.40	38
2.1 External openness	41.40	64
FDI		
2.1.1 FDI inflow.....	20.74	50
Brain gain		
2.1.2 Qualified labour inflow.....	43.11	45
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	60.33	52
2.2 Internal openness	69.41	30
Diversity		
2.2.1 Tolerance of minorities.....	70.11	60
2.2.2 Tolerance of immigrants.....	71.61	45
Social mobility		
2.2.3 Social mobility.....	55.77	52
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	49.55	21
3 Grow	44.05	65
3.1 Formal education	30.36	75
Education climate		
3.1.1 Pupil-teacher ratio.....	80.51	46
3.1.2 Technical/vocational enrolment.....	1.79	93
3.1.3 Tertiary enrolment.....	7.71	87
Performance of education system		
3.1.4 Reading, maths and science scores.....	35.19	49
Top universities		
3.1.5 QS university ranking.....	n/a	n/a
International students		
3.1.6 International students inflow.....	26.60	23

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	56.10	40
Further education and training climate		
3.2.1 Quality of management schools.....	63.26	32
3.2.2 Extent of staff training.....	48.93	53
3.3 Access to growth opportunities	45.70	78
Networks		
3.3.1 Use of virtual social networks.....	75.26	56
3.3.2 State of cluster development.....	40.73	67
Research quality		
3.3.3 Quality of scientific research institutions.....	37.09	79
Voice		
3.3.4 Voicing concern to officials.....	29.72	80
4 Retain	48.37	60
4.1 Sustainability	61.39	26
Social protection		
4.1.1 Pension system.....	74.19	33
Taxation		
4.1.2 Extent and effect of taxation.....	48.60	28
4.2 Lifestyle	35.34	94
Quality of life		
4.2.1 Environmental performance.....	32.23	77
4.2.2 Property stolen.....	45.26	89
4.2.3 Safety at night.....	44.92	92
Services		
4.2.4 Physicians density.....	18.95	69
5 Labour and Vocational	39.96	48
5.1 Employable skills	42.15	51
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	17.86	78
Technical professions		
5.1.2 Technicians and associate professionals.....	52.55	39
Youth employment		
5.1.3 Youth employment.....	56.05	26
5.2 Labour productivity	37.78	51
Productivity per employee		
5.2.1 Labour productivity per employee.....	40.79	28
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	34.76	94
6 Global Knowledge	18.60	85
6.1 Higher skills and competencies	20.39	73
Educated workforce		
6.1.1 Tertiary-educated workforce.....	21.87	72
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	44.94	20
6.1.3 Professionals.....	9.45	85
6.1.4 Researchers.....	5.29	64
6.2 Talent impact	16.82	87
Innovation		
6.2.1 Innovation output.....	19.35	74
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	14.29	73

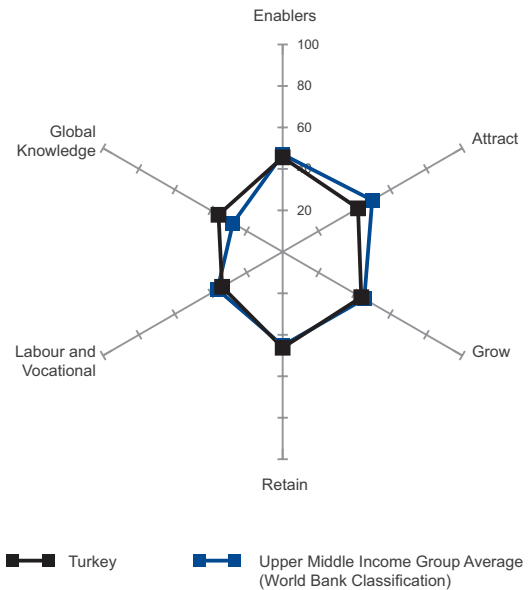
TURKEY

RANK
(out of 103)

67

Population (millions) **74.08**
 GDP per capita (PPP\$) **15,001.41**
 GDP (US\$ billions) **794.47**

Global Talent Competitiveness Index Score **41.16**
 Global Talent Competitiveness Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	45.56	65
1.1 Regulatory landscape	50.50	61
Government efficiency		
1.1.1 Government effectiveness.....	45.14	45
1.1.2 Political stability.....	43.40	87
FDI climate		
1.1.3 Starting a foreign business.....	62.96	34
1.2 Market landscape	48.14	42
Competition climate		
1.2.1 Intensity of local competition.....	78.09	14
Innovation climate		
1.2.2 Venture capital availability.....	25.22	59
1.2.3 Firm-level technology absorption.....	71.63	34
1.2.4 R&D expenditure.....	18.77	37
Connectivity		
1.2.5 ICT access.....	48.00	57
Ease of doing business		
1.2.6 Ease of doing business.....	47.10	55
1.3 Business landscape	38.03	89
Labour market flexibility		
1.3.1 Labour market flexibility.....	21.24	87
Ownership and governance		
1.3.2 Reliance on professional management.....	54.81	45
2 Attract	41.96	87
2.1 External openness	36.56	74
FDI		
2.1.1 FDI inflow.....	16.57	65
Brain gain		
2.1.2 Qualified labour inflow.....	39.63	57
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	53.47	74
2.2 Internal openness	47.35	90
Diversity		
2.2.1 Tolerance of minorities.....	57.07	86
2.2.2 Tolerance of immigrants.....	51.12	88
Social mobility		
2.2.3 Social mobility.....	57.97	44
Gender mobility		
2.2.4 Female professionals and technical workers.....	50.13	78
2.2.5 Female parliamentarians.....	20.47	71
3 Grow	43.76	66
3.1 Formal education	34.74	63
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	46.01	28
3.1.3 Tertiary enrolment.....	51.95	40
Performance of education system		
3.1.4 Reading, maths and science scores.....	51.45	40
Top universities		
3.1.5 QS university ranking.....	20.92	42
International students		
3.1.6 International students inflow.....	3.37	65

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	48.06	65
Further education and training climate		
3.2.1 Quality of management schools.....	46.32	75
3.2.2 Extent of staff training.....	49.80	48
3.3 Access to growth opportunities	48.47	64
Networks		
3.3.1 Use of virtual social networks.....	73.70	62
3.3.2 State of cluster development.....	51.15	37
Research quality		
3.3.3 Quality of scientific research institutions.....	40.04	74
Voice		
3.3.4 Voicing concern to officials.....	29.01	81
4 Retain	46.25	63
4.1 Sustainability	46.96	53
Social protection		
4.1.1 Pension system.....	60.94	41
Taxation		
4.1.2 Extent and effect of taxation.....	32.98	83
4.2 Lifestyle	45.54	77
Quality of life		
4.2.1 Environmental performance.....	27.11	88
4.2.2 Property stolen.....	75.36	29
4.2.3 Safety at night.....	54.87	72
Services		
4.2.4 Physicians density.....	24.84	65
5 Labour and Vocational	33.72	69
5.1 Employable skills	27.36	87
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	22.71	69
Technical professions		
5.1.2 Technicians and associate professionals.....	24.49	71
Youth employment		
5.1.3 Youth employment.....	34.87	60
5.2 Labour productivity	40.07	45
Productivity per employee		
5.2.1 Labour productivity per employee.....	26.76	42
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	53.39	40
6 Global Knowledge	35.72	46
6.1 Higher skills and competencies	25.49	58
Educated workforce		
6.1.1 Tertiary-educated workforce.....	23.01	71
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	46.63	16
6.1.3 Professionals.....	21.04	65
6.1.4 Researchers.....	11.29	48
6.2 Talent impact	45.95	35
Innovation		
6.2.1 Innovation output.....	28.27	56
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	63.64	11

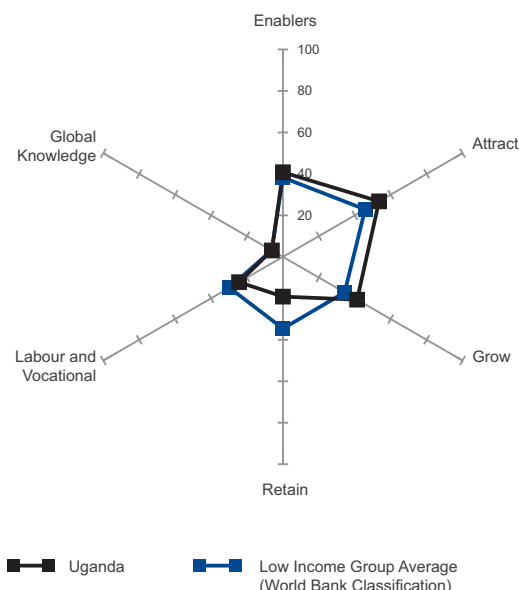
UGANDA

RANK
(out of 103)

96

Population (millions) **36.48**
 GDP per capita (PPP\$) **1,414.93**
 GDP (US\$ billions) **21.00**

Global Talent Competitiveness Index Score **30.89**
 Global Talent Competitiveness Index Score (Income Group Average) **31.51**



VARIABLE	SCORE	RANK/103
1 Enablers	40.79	83
1.1 Regulatory landscape	31.33	94
Government efficiency.....		
1.1.1 Government effectiveness.....	17.74	82
1.1.2 Political stability.....	39.21	90
FDI climate.....		
1.1.3 Starting a foreign business.....	37.04	58
1.2 Market landscape	29.15	94
Competition climate.....		
1.2.1 Intensity of local competition.....	62.12	64
Innovation climate.....		
1.2.2 Venture capital availability.....	25.02	60
1.2.3 Firm-level technology absorption.....	55.41	81
1.2.4 R&D expenditure.....	8.91	61
Connectivity.....		
1.2.5 ICT access.....	3.72	94
Ease of doing business.....		
1.2.6 Ease of doing business.....	19.70	83
1.3 Business landscape	61.90	32
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	75.35	20
Ownership and governance.....		
1.3.2 Reliance on professional management.....	48.45	69
2 Attract	53.51	43
2.1 External openness	47.90	35
FDI.....		
2.1.1 FDI inflow.....	37.12	25
Brain gain.....		
2.1.2 Qualified labour inflow.....	34.62	72
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	71.98	25
2.2 Internal openness	59.12	58
Diversity.....		
2.2.1 Tolerance of minorities.....	64.13	73
2.2.2 Tolerance of immigrants.....	70.22	51
Social mobility.....		
2.2.3 Social mobility.....	47.84	71
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	46.81	81
2.2.5 Female parliamentarians.....	66.62	14
3 Grow	41.29	78
3.1 Formal education	27.75	83
Education climate.....		
3.1.1 Pupil-teacher ratio.....	68.05	66
3.1.2 Technical/vocational enrolment.....	13.74	70
3.1.3 Tertiary enrolment.....	5.33	90
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a	n/a
International students.....		
3.1.6 International students inflow.....	23.88	24

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	46.11	73
Further education and training climate.....		
3.2.1 Quality of management schools.....	48.28	68
3.2.2 Extent of staff training.....	43.95	75
3.3 Access to growth opportunities	50.02	57
Networks.....		
3.3.1 Use of virtual social networks.....	55.69	97
3.3.2 State of cluster development.....	34.49	86
Research quality.....		
3.3.3 Quality of scientific research institutions.....	40.08	72
Voice.....		
3.3.4 Voicing concern to officials.....	69.81	13
4 Retain	19.18	103
4.1 Sustainability	22.90	97
Social protection.....		
4.1.1 Pension system.....	9.62	79
Taxation.....		
4.1.2 Extent and effect of taxation.....	36.19	69
4.2 Lifestyle	15.46	103
Quality of life.....		
4.2.1 Environmental performance.....	n/a	n/a
4.2.2 Property stolen.....	0.00	102
4.2.3 Safety at night.....	44.60	94
Services.....		
4.2.4 Physicians density.....	1.77	92
5 Labour and Vocational	24.43	101
5.1 Employable skills	28.71	83
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	3.29	88
Technical professions.....		
5.1.2 Technicians and associate professionals.....	13.27	82
Youth employment.....		
5.1.3 Youth employment.....	69.59	17
5.2 Labour productivity	20.15	100
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	1.05	91
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	39.25	86
6 Global Knowledge	6.16	99
6.1 Higher skills and competencies	3.47	97
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	6.61	82
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	0.56	92
6.1.3 Professionals.....	6.40	87
6.1.4 Researchers.....	0.31	92
6.2 Talent impact	8.84	95
Innovation.....		
6.2.1 Innovation output.....	11.20	92
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	6.49	75

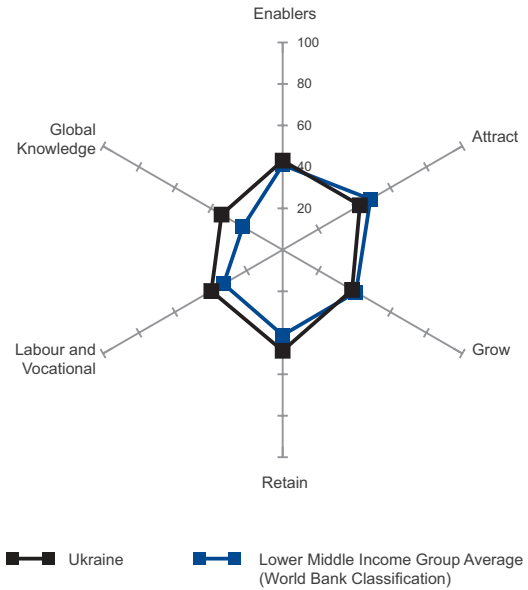
UKRAINE

RANK
(out of 103)

66

Population (millions) **45.49**
 GDP per capita (PPP\$) **7,373.99**
 GDP (US\$ billions) **176.24**

Global Talent Competitiveness Index Score **41.18**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	43.04	74
1.1 Regulatory landscape	51.24	60
Government efficiency		
1.1.1 Government effectiveness.....	8.24	98
1.1.2 Political stability.....	62.53	61
FDI climate		
1.1.3 Starting a foreign business.....	82.96	12
1.2 Market landscape	34.96	78
Competition climate		
1.2.1 Intensity of local competition.....	54.67	79
Innovation climate		
1.2.2 Venture capital availability.....	20.06	81
1.2.3 Firm-level technology absorption.....	62.66	56
1.2.4 R&D expenditure.....	19.07	36
Connectivity		
1.2.5 ICT access.....	44.41	58
Ease of doing business		
1.2.6 Ease of doing business.....	8.90	94
1.3 Business landscape	42.91	79
Labour market flexibility		
1.3.1 Labour market flexibility.....	45.44	60
Ownership and governance		
1.3.2 Reliance on professional management.....	40.39	98
2 Attract	43.00	86
2.1 External openness	32.90	83
FDI		
2.1.1 FDI inflow.....	33.78	31
Brain gain		
2.1.2 Qualified labour inflow.....	21.31	94
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	43.62	93
2.2 Internal openness	53.09	81
Diversity		
2.2.1 Tolerance of minorities.....	62.50	76
2.2.2 Tolerance of immigrants.....	60.83	74
Social mobility		
2.2.3 Social mobility.....	31.38	97
Gender mobility		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	10.76	92
3 Grow	38.65	88
3.1 Formal education	29.47	78
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	18.63	64
3.1.3 Tertiary enrolment.....	78.43	7
Performance of education system		
3.1.4 Reading, maths and science scores.....	n/a	n/a
Top universities		
3.1.5 QS university ranking.....	13.89	48
International students		
3.1.6 International students inflow.....	6.95	55

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	41.68	86
Further education and training climate		
3.2.1 Quality of management schools.....	40.64	90
3.2.2 Extent of staff training.....	42.72	81
3.3 Access to growth opportunities	44.79	82
Networks		
3.3.1 Use of virtual social networks.....	69.69	78
3.3.2 State of cluster development.....	30.89	95
Research quality		
3.3.3 Quality of scientific research institutions.....	44.62	58
Voice		
3.3.4 Voicing concern to officials.....	33.96	73
4 Retain	48.67	58
4.1 Sustainability	43.31	58
Social protection		
4.1.1 Pension system.....	64.68	38
Taxation		
4.1.2 Extent and effect of taxation.....	21.94	99
4.2 Lifestyle	54.03	54
Quality of life		
4.2.1 Environmental performance.....	30.56	82
4.2.2 Property stolen.....	77.25	25
4.2.3 Safety at night.....	55.72	69
Services		
4.2.4 Physicians density.....	52.57	25
5 Labour and Vocational	39.71	50
5.1 Employable skills	44.94	40
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	n/a	n/a
Technical professions		
5.1.2 Technicians and associate professionals.....	53.57	36
Youth employment		
5.1.3 Youth employment.....	36.31	55
5.2 Labour productivity	34.48	62
Productivity per employee		
5.2.1 Labour productivity per employee.....	10.44	74
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	58.52	21
6 Global Knowledge	34.01	50
6.1 Higher skills and competencies	33.10	43
Educated workforce		
6.1.1 Tertiary-educated workforce.....	n/a	n/a
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	42.13	23
6.1.3 Professionals.....	39.02	42
6.1.4 Researchers.....	18.13	37
6.2 Talent impact	34.91	54
Innovation		
6.2.1 Innovation output.....	34.91	46
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	n/a	n/a

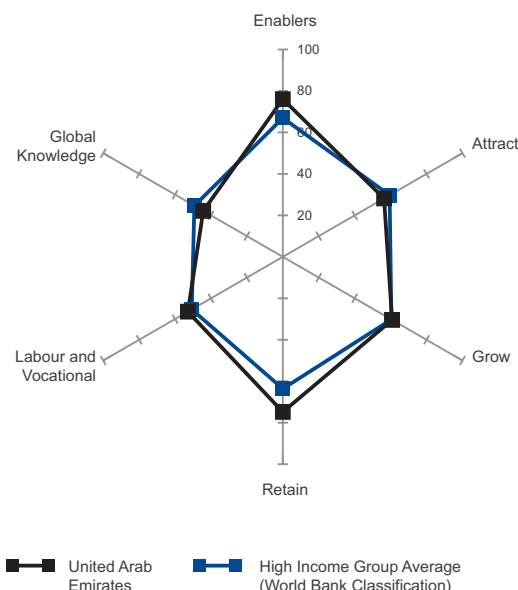
UNITED ARAB EMIRATES

RANK
(out of 103)

19

Population (millions) **9.22**
 GDP per capita (PPP\$) **49,011.59**
 GDP (US\$ billions) **358.94**

Global Talent Competitiveness Index Score **60.87**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	76.04	14
1.1 Regulatory landscape	75.47	27
Government efficiency		
1.1.1 Government effectiveness.....	61.34	32
1.1.2 Political stability.....	89.59	21
FDI climate		
1.1.3 Starting a foreign business.....	n/a	n/a
1.2 Market landscape	72.83	12
Competition climate		
1.2.1 Intensity of local competition.....	78.24	13
Innovation climate		
1.2.2 Venture capital availability.....	52.39	6
1.2.3 Firm-level technology absorption.....	82.62	11
1.2.4 R&D expenditure.....	n/a	n/a
Connectivity		
1.2.5 ICT access.....	72.41	30
Ease of doing business		
1.2.6 Ease of doing business.....	78.50	23
1.3 Business landscape	79.82	9
Labour market flexibility		
1.3.1 Labour market flexibility.....	89.72	3
Ownership and governance		
1.3.2 Reliance on professional management.....	69.93	24
2 Attract	56.35	37
2.1 External openness	54.73	14
FDI		
2.1.1 FDI inflow.....	17.27	61
Brain gain		
2.1.2 Qualified labour inflow.....	75.12	6
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	71.82	26
2.2 Internal openness	57.96	63
Diversity		
2.2.1 Tolerance of minorities.....	72.83	57
2.2.2 Tolerance of immigrants.....	92.64	10
Social mobility		
2.2.3 Social mobility.....	81.19	12
Gender mobility		
2.2.4 Female professionals and technical workers.....	16.93	92
2.2.5 Female parliamentarians.....	26.24	60
3 Grow	60.85	23
3.1 Formal education	53.07	31
Education climate		
3.1.1 Pupil-teacher ratio.....	84.70	39
3.1.2 Technical/vocational enrolment.....	1.98	92
3.1.3 Tertiary enrolment.....	n/a	n/a
Performance of education system		
3.1.4 Reading, maths and science scores.....	53.42	37
Top universities		
3.1.5 QS university ranking.....	25.26	34
International students		
3.1.6 International students inflow.....	100.00	1

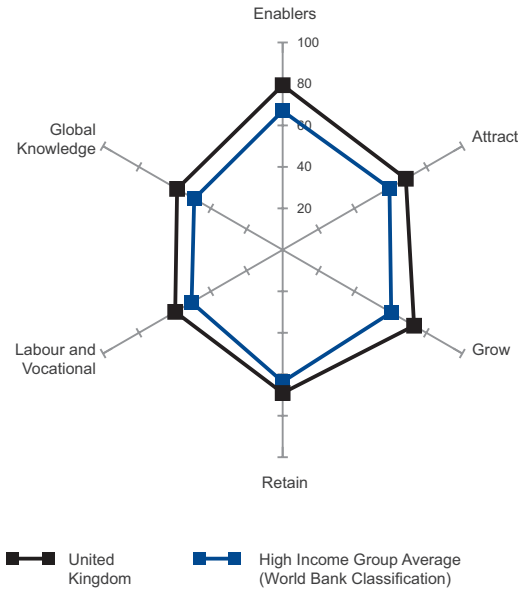
VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	65.50	21
Further education and training climate		
3.2.1 Quality of management schools.....	66.62	25
3.2.2 Extent of staff training.....	64.37	17
3.3 Access to growth opportunities	63.98	25
Networks		
3.3.1 Use of virtual social networks.....	85.84	18
3.3.2 State of cluster development.....	70.55	3
Research quality		
3.3.3 Quality of scientific research institutions.....	60.38	33
Voice		
3.3.4 Voicing concern to officials.....	39.15	63
4 Retain	74.79	3
4.1 Sustainability	85.93	1
Social protection		
4.1.1 Pension system.....	n/a	n/a
Taxation		
4.1.2 Extent and effect of taxation.....	85.93	1
4.2 Lifestyle	63.66	31
Quality of life		
4.2.1 Environmental performance.....	41.07	65
4.2.2 Property stolen.....	83.65	10
4.2.3 Safety at night.....	98.72	2
Services		
4.2.4 Physicians density.....	31.21	58
5 Labour and Vocational	52.87	21
5.1 Employable skills	49.59	31
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	34.71	50
Technical professions		
5.1.2 Technicians and associate professionals.....	68.37	23
Youth employment		
5.1.3 Youth employment.....	45.70	43
5.2 Labour productivity	56.14	10
Productivity per employee		
5.2.1 Labour productivity per employee.....	46.34	24
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	65.93	5
6 Global Knowledge	44.30	31
6.1 Higher skills and competencies	41.84	31
Educated workforce		
6.1.1 Tertiary-educated workforce.....	41.00	44
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	42.13	23
6.1.3 Professionals.....	42.38	35
6.1.4 Researchers.....	n/a	n/a
6.2 Talent impact	46.76	34
Innovation		
6.2.1 Innovation output.....	33.78	48
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	59.74	14

UNITED KINGDOM

RANK (OUT OF 103) **7**

Population (millions) **62.78**
 GDP per capita (PPP\$) **36,941.06**
 GDP (US\$ billions) **2,440.51**

Global Talent Competitiveness Index Score **68.13**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	79.39	10
1.1 Regulatory landscape	81.48	18
Government efficiency.....		
1.1.1 Government effectiveness.....	79.13	15
1.1.2 Political stability.....	75.29	41
FDI climate.....		
1.1.3 Starting a foreign business.....	90.00	3
1.2 Market landscape	72.77	13
Competition climate.....		
1.2.1 Intensity of local competition.....	82.64	4
Innovation climate.....		
1.2.2 Venture capital availability.....	46.12	12
1.2.3 Firm-level technology absorption.....	78.81	20
1.2.4 R&D expenditure.....	39.76	20
Connectivity.....		
1.2.5 ICT access.....	94.21	6
Ease of doing business.....		
1.2.6 Ease of doing business.....	95.10	6
1.3 Business landscape	83.93	5
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	85.07	7
Ownership and governance.....		
1.3.2 Reliance on professional management.....	82.80	9
2 Attract	68.57	12
2.1 External openness	59.90	10
FDI.....		
2.1.1 FDI inflow.....	18.07	58
Brain gain.....		
2.1.2 Qualified labour inflow.....	77.08	4
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	84.54	4
2.2 Internal openness	77.24	18
Diversity.....		
2.2.1 Tolerance of minorities.....	96.96	5
2.2.2 Tolerance of immigrants.....	87.62	19
Social mobility.....		
2.2.3 Social mobility.....	74.53	20
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	91.58	57
2.2.5 Female parliamentarians.....	35.51	39
3 Grow	73.17	2
3.1 Formal education	67.42	10
Education climate.....		
3.1.1 Pupil-teacher ratio.....	78.40	52
3.1.2 Technical/vocational enrolment.....	27.96	52
3.1.3 Tertiary enrolment.....	56.31	32
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	69.54	17
Top universities.....		
3.1.5 QS university ranking.....	100.00	1
International students.....		
3.1.6 International students inflow.....	72.33	8

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	75.21	3
Further education and training climate.....		
3.2.1 Quality of management schools.....	84.32	1
3.2.2 Extent of staff training.....	66.10	14
3.3 Access to growth opportunities	76.88	4
Networks.....		
3.3.1 Use of virtual social networks.....	93.23	2
3.3.2 State of cluster development.....	67.86	9
Research quality.....		
3.3.3 Quality of scientific research institutions.....	86.29	3
Voice.....		
3.3.4 Voicing concern to officials.....	60.14	20
4 Retain	69.04	9
4.1 Sustainability	69.10	11
Social protection.....		
4.1.1 Pension system.....	97.64	7
Taxation.....		
4.1.2 Extent and effect of taxation.....	40.57	53
4.2 Lifestyle	68.97	16
Quality of life.....		
4.2.1 Environmental performance.....	82.01	9
4.2.2 Property stolen.....	72.99	38
4.2.3 Safety at night.....	76.47	31
Services.....		
4.2.4 Physicians density.....	44.41	40
5 Labour and Vocational	59.83	11
5.1 Employable skills	61.06	14
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	74.86	9
Technical professions.....		
5.1.2 Technicians and associate professionals.....	53.06	38
Youth employment.....		
5.1.3 Youth employment.....	55.25	27
5.2 Labour productivity	58.59	7
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	54.53	14
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	62.66	10
6 Global Knowledge	58.76	12
6.1 Higher skills and competencies	63.28	7
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	76.77	9
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	57.30	8
6.1.3 Professionals.....	71.95	4
6.1.4 Researchers.....	47.10	17
6.2 Talent impact	54.25	22
Innovation.....		
6.2.1 Innovation output.....	73.43	6
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	35.06	49

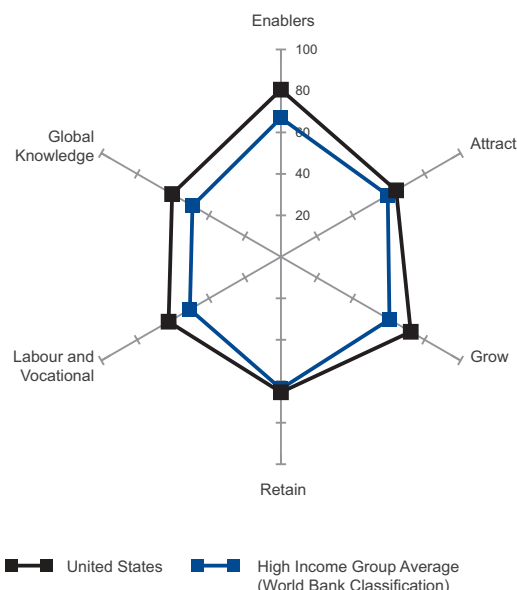
UNITED STATES

RANK
(OUT OF 103)

9

Population (millions) **317.81**
 GDP per capita (PPP\$) **49,922.11**
 GDP (US\$ billions) **15,684.75**

Global Talent Competitiveness Index Score **67.58**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	80.63	7
1.1 Regulatory landscape	79.05	21
Government efficiency.....		
1.1.1 Government effectiveness.....	74.90	19
1.1.2 Political stability.....	79.30	38
FDI climate.....		
1.1.3 Starting a foreign business.....	82.96	12
1.2 Market landscape	75.91	4
Competition climate.....		
1.2.1 Intensity of local competition.....	77.44	15
Innovation climate.....		
1.2.2 Venture capital availability.....	51.75	7
1.2.3 Firm-level technology absorption.....	81.65	13
1.2.4 R&D expenditure.....	65.67	8
Connectivity.....		
1.2.5 ICT access.....	80.83	22
Ease of doing business.....		
1.2.6 Ease of doing business.....	98.10	3
1.3 Business landscape	86.92	2
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	100.00	1
Ownership and governance.....		
1.3.2 Reliance on professional management.....	73.85	18
2 Attract	64.13	22
2.1 External openness	52.16	24
FDI.....		
2.1.1 FDI inflow.....	12.62	76
Brain gain.....		
2.1.2 Qualified labour inflow.....	76.37	5
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	67.48	39
2.2 Internal openness	76.11	19
Diversity.....		
2.2.1 Tolerance of minorities.....	90.87	17
2.2.2 Tolerance of immigrants.....	89.11	17
Social mobility.....		
2.2.3 Social mobility.....	75.57	19
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00	1
2.2.5 Female parliamentarians.....	24.98	63
3 Grow	72.27	3
3.1 Formal education	70.96	3
Education climate.....		
3.1.1 Pupil-teacher ratio.....	79.84	49
3.1.2 Technical/vocational enrolment.....	n/a	n/a
3.1.3 Tertiary enrolment.....	91.63	2
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	68.07	22
Top universities.....		
3.1.5 QS university ranking.....	99.85	2
International students.....		
3.1.6 International students inflow.....	15.42	41

VARIABLE	SCORE	RANK/103
3.2 Lifelong Learning	69.58	10
Further education and training climate.....		
3.2.1 Quality of management schools.....	73.28	12
3.2.2 Extent of staff training.....	65.88	15
3.3 Access to growth opportunities	76.26	7
Networks.....		
3.3.1 Use of virtual social networks.....	86.87	13
3.3.2 State of cluster development.....	67.19	10
Research quality.....		
3.3.3 Quality of scientific research institutions.....	79.29	6
Voice.....		
3.3.4 Voicing concern to officials.....	71.70	11
4 Retain	65.31	19
4.1 Sustainability	69.36	10
Social protection.....		
4.1.1 Pension system.....	96.57	9
Taxation.....		
4.1.2 Extent and effect of taxation.....	42.15	45
4.2 Lifestyle	61.27	38
Quality of life.....		
4.2.1 Environmental performance.....	54.06	45
4.2.2 Property stolen.....	70.85	47
4.2.3 Safety at night.....	80.96	27
Services.....		
4.2.4 Physicians density.....	39.19	48
5 Labour and Vocational	62.54	5
5.1 Employable skills	58.67	17
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	68.29	17
Technical professions.....		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment.....		
5.1.3 Youth employment.....	49.04	36
5.2 Labour productivity	66.41	3
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	70.09	3
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	62.74	9
6 Global Knowledge	60.57	7
6.1 Higher skills and competencies	66.17	5
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	89.07	3
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	85.39	2
6.1.3 Professionals.....	63.72	12
6.1.4 Researchers.....	26.51	31
6.2 Talent impact	54.97	21
Innovation.....		
6.2.1 Innovation output.....	63.19	16
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	46.75	29

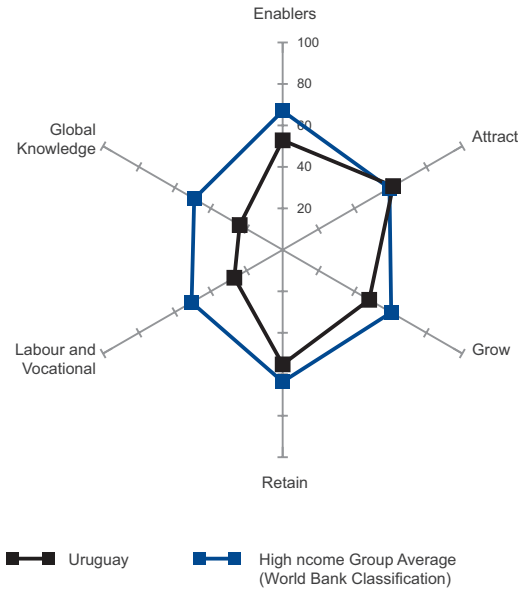
URUGUAY

RANK
(OUT OF 103)

49

Population (millions) **3.40**
 GDP per capita (PPP\$) **15,910.80**
 GDP (US\$ billions) **49.40**

Global Talent Competitiveness Index Score **44.75**
 Global Talent Competitiveness Index Score (Income Group Average) **58.40**



VARIABLE	SCORE	RANK/103
1 Enablers	52.81.....	50
1.1 Regulatory landscape	69.62.....	34
Government efficiency.....		
1.1.1 Government effectiveness.....	50.13.....	39
1.1.2 Political stability.....	89.11.....	22
FDI climate.....		
1.1.3 Starting a foreign business.....	n/a.....	n/a
1.2 Market landscape	41.34.....	60
Competition climate.....		
1.2.1 Intensity of local competition.....	56.05.....	75
Innovation climate.....		
1.2.2 Venture capital availability.....	24.82.....	63
1.2.3 Firm-level technology absorption.....	60.27.....	67
1.2.4 R&D expenditure.....	9.42.....	59
Connectivity.....		
1.2.5 ICT access.....	62.21.....	42
Ease of doing business.....		
1.2.6 Ease of doing business.....	35.30.....	67
1.3 Business landscape	47.47.....	68
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	47.57.....	58
Ownership and governance.....		
1.3.2 Reliance on professional management.....	47.37.....	71
2 Attract	61.48.....	24
2.1 External openness	50.87.....	26
FDI.....		
2.1.1 FDI inflow.....	35.42.....	27
Brain gain.....		
2.1.2 Qualified labour inflow.....	38.56.....	61
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	78.64.....	11
2.2 Internal openness	72.08.....	25
Diversity.....		
2.2.1 Tolerance of minorities.....	89.78.....	20
2.2.2 Tolerance of immigrants.....	93.92.....	9
Social mobility.....		
2.2.3 Social mobility.....	59.67.....	39
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00.....	1
2.2.5 Female parliamentarians.....	17.03.....	77
3 Grow	48.18.....	51
3.1 Formal education	38.85.....	58
Education climate.....		
3.1.1 Pupil-teacher ratio.....	86.78.....	33
3.1.2 Technical/vocational enrolment.....	32.31.....	49
3.1.3 Tertiary enrolment.....	59.79.....	28
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	40.36.....	45
Top universities.....		
3.1.5 QS university ranking.....	9.51.....	53
International students.....		
3.1.6 International students inflow.....	4.36.....	62

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	51.18.....	55
Further education and training climate.....		
3.2.1 Quality of management schools.....	55.95.....	47
3.2.2 Extent of staff training.....	46.41.....	65
3.3 Access to growth opportunities	54.52.....	47
Networks.....		
3.3.1 Use of virtual social networks.....	77.74.....	47
3.3.2 State of cluster development.....	41.26.....	64
Research quality.....		
3.3.3 Quality of scientific research institutions.....	44.85.....	56
Voice.....		
3.3.4 Voicing concern to officials.....	54.25.....	31
4 Retain	55.23.....	44
4.1 Sustainability	58.16.....	37
Social protection.....		
4.1.1 Pension system.....	82.02.....	31
Taxation.....		
4.1.2 Extent and effect of taxation.....	34.30.....	77
4.2 Lifestyle	52.30.....	58
Quality of life.....		
4.2.1 Environmental performance.....	55.13.....	42
4.2.2 Property stolen.....	40.05.....	91
4.2.3 Safety at night.....	53.48.....	76
Services.....		
4.2.4 Physicians density.....	60.53.....	13
5 Labour and Vocational	26.90.....	93
5.1 Employable skills	31.72.....	79
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	17.57.....	80
Technical professions.....		
5.1.2 Technicians and associate professionals.....	25.51.....	70
Youth employment.....		
5.1.3 Youth employment.....	52.07.....	31
5.2 Labour productivity	22.09.....	97
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	19.45.....	54
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	24.74.....	102
6 Global Knowledge	23.93.....	70
6.1 Higher skills and competencies	22.04.....	65
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	21.41.....	73
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	33.15.....	37
6.1.3 Professionals.....	28.05.....	54
6.1.4 Researchers.....	5.56.....	61
6.2 Talent impact	25.81.....	74
Innovation.....		
6.2.1 Innovation output.....	26.94.....	60
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	24.68.....	62

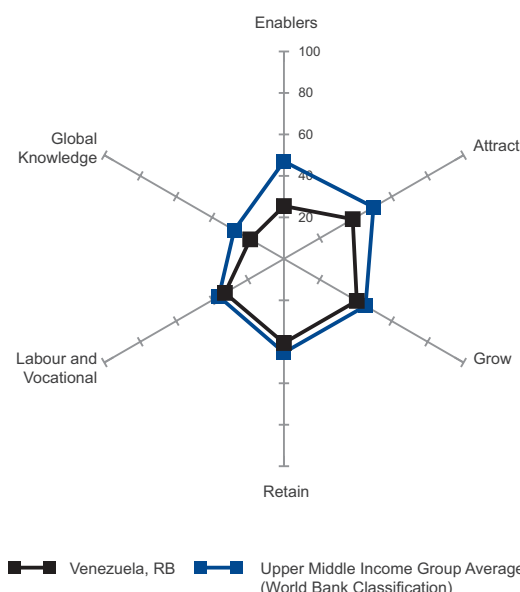
VENEZUELA, RB

RANK
(OUT OF 103)

92

Population (millions) **30.00**
GDP per capita (PPP\$) **13,615.82**
GDP (US\$ billions) **382.42**

Global Talent Competitiveness
Index Score **32.75**
Global Talent Competitiveness
Index Score (Income Group Average) **41.91**



VARIABLE	SCORE	RANK/103
1 Enablers	25.46	102
1.1 Regulatory landscape	21.45	102
Government efficiency		
1.1.1 Government effectiveness.....	0.00	103
1.1.2 Political stability.....	34.22	95
FDI climate		
1.1.3 Starting a foreign business.....	30.14	62
1.2 Market landscape	28.47	96
Competition climate		
1.2.1 Intensity of local competition.....	37.82	102
Innovation climate		
1.2.2 Venture capital availability.....	19.88	83
1.2.3 Firm-level technology absorption.....	51.97	88
1.2.4 R&D expenditure.....	n/a	n/a
Connectivity		
1.2.5 ICT access.....	32.69	70
Ease of doing business		
1.2.6 Ease of doing business.....	0.00	103
1.3 Business landscape	26.45	102
Labour market flexibility		
1.3.1 Labour market flexibility.....	0.00	102
Ownership and governance		
1.3.2 Reliance on professional management.....	52.90	53
2 Attract	38.29	97
2.1 External openness	24.54	99
FDI		
2.1.1 FDI inflow.....	14.00	73
Brain gain		
2.1.2 Qualified labour inflow.....	17.48	99
Foreign companies		
2.1.3 Prevalence of foreign ownership.....	42.15	95
2.2 Internal openness	52.03	84
Diversity		
2.2.1 Tolerance of minorities.....	74.78	53
2.2.2 Tolerance of immigrants.....	72.47	43
Social mobility		
2.2.3 Social mobility.....	35.53	93
Gender mobility		
2.2.4 Female professionals and technical workers.....	n/a	n/a
2.2.5 Female parliamentarians.....	25.34	61
3 Grow	40.56	80
3.1 Formal education	27.17	84
Education climate		
3.1.1 Pupil-teacher ratio.....	n/a	n/a
3.1.2 Technical/vocational enrolment.....	11.13	77
3.1.3 Tertiary enrolment.....	74.83	11
Performance of education system		
3.1.4 Reading, maths and science scores.....	35.14	50
Top universities		
3.1.5 QS university ranking.....	14.74	47
International students		
3.1.6 International students inflow.....	0.00	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	48.05	66
Further education and training climate		
3.2.1 Quality of management schools.....	52.86	60
3.2.2 Extent of staff training.....	43.24	79
3.3 Access to growth opportunities	46.45	74
Networks		
3.3.1 Use of virtual social networks.....	79.58	38
3.3.2 State of cluster development.....	30.83	96
Research quality		
3.3.3 Quality of scientific research institutions.....	29.65	92
Voice		
3.3.4 Voicing concern to officials.....	45.75	48
4 Retain	40.58	74
4.1 Sustainability	34.26	79
Social protection		
4.1.1 Pension system.....	34.67	56
Taxation		
4.1.2 Extent and effect of taxation.....	33.84	79
4.2 Lifestyle	46.90	75
Quality of life		
4.2.1 Environmental performance.....	51.84	51
4.2.2 Property stolen.....	54.74	81
4.2.3 Safety at night.....	34.12	100
Services		
4.2.4 Physicians density.....	n/a	n/a
5 Labour and Vocational	32.85	71
5.1 Employable skills	40.72	53
Vocationally trained workforce		
5.1.1 Secondary-educated workforce.....	38.29	47
Technical professions		
5.1.2 Technicians and associate professionals.....	n/a	n/a
Youth employment		
5.1.3 Youth employment.....	43.15	48
5.2 Labour productivity	24.98	92
Productivity per employee		
5.2.1 Labour productivity per employee.....	21.38	52
Pay and productivity		
5.2.2 Relationship of pay to productivity.....	28.57	101
6 Global Knowledge	18.79	84
6.1 Higher skills and competencies	18.60	77
Educated workforce		
6.1.1 Tertiary-educated workforce.....	36.22	55
Knowledge workers		
6.1.2 Legislators, senior officials and managers.....	n/a	n/a
6.1.3 Professionals.....	n/a	n/a
6.1.4 Researchers.....	0.98	82
6.2 Talent impact	18.98	83
Innovation		
6.2.1 Innovation output.....	13.28	88
Entrepreneurship		
6.2.2 New product entrepreneurial activity.....	24.68	62

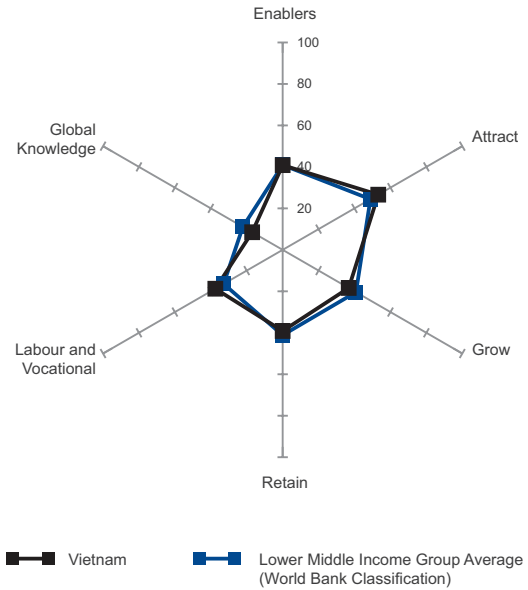
VIETNAM

RANK
(OUT OF 103)

82

Population (millions) **90.95**
 GDP per capita (PPP\$) **3,547.77**
 GDP (US\$ billions) **138.07**

Global Talent Competitiveness Index Score **37.41**
 Global Talent Competitiveness Index Score (Income Group Average) **37.79**



VARIABLE	SCORE	RANK/103
1 Enablers	40.84.....	82
1.1 Regulatory landscape	48.90.....	67
Government efficiency.....		
1.1.1 Government effectiveness.....	24.61.....	74
1.1.2 Political stability.....	70.27.....	47
FDI climate.....		
1.1.3 Starting a foreign business.....	51.83.....	48
1.2 Market landscape	34.71.....	80
Competition climate.....		
1.2.1 Intensity of local competition.....	69.14.....	39
Innovation climate.....		
1.2.2 Venture capital availability.....	21.51.....	76
1.2.3 Firm-level technology absorption.....	49.73.....	94
1.2.4 R&D expenditure.....	3.91.....	77
Connectivity.....		
1.2.5 ICT access.....	32.55.....	71
Ease of doing business.....		
1.2.6 Ease of doing business.....	31.40.....	71
1.3 Business landscape	38.92.....	86
Labour market flexibility.....		
1.3.1 Labour market flexibility.....	32.98.....	79
Ownership and governance.....		
1.3.2 Reliance on professional management.....	44.86.....	80
2 Attract	53.21.....	48
2.1 External openness	43.99.....	49
FDI.....		
2.1.1 FDI inflow.....	46.98.....	17
Brain gain.....		
2.1.2 Qualified labour inflow.....	34.61.....	73
Foreign companies.....		
2.1.3 Prevalence of foreign ownership.....	50.39.....	82
2.2 Internal openness	62.43.....	45
Diversity.....		
2.2.1 Tolerance of minorities.....	66.85.....	67
2.2.2 Tolerance of immigrants.....	61.26.....	70
Social mobility.....		
2.2.3 Social mobility.....	44.13.....	78
Gender mobility.....		
2.2.4 Female professionals and technical workers.....	100.00.....	1
2.2.5 Female parliamentarians.....	39.93.....	30
3 Grow	36.77.....	91
3.1 Formal education	28.97.....	79
Education climate.....		
3.1.1 Pupil-teacher ratio.....	66.23.....	68
3.1.2 Technical/vocational enrolment.....	n/a.....	n/a
3.1.3 Tertiary enrolment.....	20.68.....	76
Performance of education system.....		
3.1.4 Reading, maths and science scores.....	n/a.....	n/a
Top universities.....		
3.1.5 QS university ranking.....	n/a.....	n/a
International students.....		
3.1.6 International students inflow.....	0.00.....	72

VARIABLE	SCORE	RANK/103
3.2 Lifelong learning	37.79.....	98
Further education and training climate.....		
3.2.1 Quality of management schools.....	37.10.....	97
3.2.2 Extent of staff training.....	38.47.....	88
3.3 Access to growth opportunities	43.57.....	85
Networks.....		
3.3.1 Use of virtual social networks.....	62.46.....	92
3.3.2 State of cluster development.....	54.05.....	32
Research quality.....		
3.3.3 Quality of scientific research institutions.....	40.07.....	73
Voice.....		
3.3.4 Voicing concern to officials.....	17.69.....	95
4 Retain	39.13.....	80
4.1 Sustainability	29.66.....	89
Social protection.....		
4.1.1 Pension system.....	19.20.....	74
Taxation.....		
4.1.2 Extent and effect of taxation.....	40.12.....	54
4.2 Lifestyle	48.60.....	70
Quality of life.....		
4.2.1 Environmental performance.....	40.46.....	67
4.2.2 Property stolen.....	56.87.....	76
4.2.3 Safety at night.....	77.33.....	29
Services.....		
4.2.4 Physicians density.....	19.74.....	67
5 Labour and Vocational	37.49.....	58
5.1 Employable skills	42.86.....	50
Vocationally trained workforce.....		
5.1.1 Secondary-educated workforce.....	n/a.....	n/a
Technical professions.....		
5.1.2 Technicians and associate professionals.....	10.71.....	85
Youth employment.....		
5.1.3 Youth employment.....	75.00.....	10
5.2 Labour productivity	32.12.....	71
Productivity per employee.....		
5.2.1 Labour productivity per employee.....	3.30.....	84
Pay and productivity.....		
5.2.2 Relationship of pay to productivity.....	60.95.....	15
6 Global Knowledge	16.99.....	88
6.1 Higher skills and competencies	5.51.....	93
Educated workforce.....		
6.1.1 Tertiary-educated workforce.....	n/a.....	n/a
Knowledge workers.....		
6.1.2 Legislators, senior officials and managers.....	3.93.....	86
6.1.3 Professionals.....	10.06.....	83
6.1.4 Researchers.....	2.55.....	73
6.2 Talent impact	28.46.....	66
Innovation.....		
6.2.1 Innovation output.....	28.46.....	55
Entrepreneurship.....		
6.2.2 New product entrepreneurial activity.....	n/a.....	n/a

APPENDICES

APPENDIX I

TECHNICAL NOTES

TECHNICAL NOTES

Audit by the Joint Research Centre of the European Commission

The Joint Research Centre (JRC) of the European Commission has conducted extensive research on the development of composite indicators, most notably, publishing the *Handbook on Constructing Composite Indicators: Methodology and User Guide*, in collaboration with the Organization for Economic Co-operation and Development (OECD). In its first edition, the Global Talent Competitiveness Index (GTCI) team engaged the JRC to conduct audits.¹ This exercise has proven to be enriching, providing external validation and improving the statistical methods to ensure consistency and rigour in the model.

In July 2013, an earlier version of the GTCI 2013 was submitted to the JRC team. The results from the preliminary audit and extensive face-to-face discussions were taken into account and reflected in the final version of the GTCI model, as appropriate. The final audit was then performed in September 2013 based on the latest model, the results of which can be found in Chapter 5.

Composite indicators

The GTCI framework builds on six pillars: Enablers, Attract, Grow, Retain, Labour and Vocational, and Global Knowledge. Each pillar consists of two to three sub-pillars. Each sub-pillar is composed of two to six variables. Each sub-pillar score is derived as a weighted average of its individual variables. The successive arithmetic aggregation continues at pillar-level.

Overall, the GTCI consists of three indices:

1. The Talent Competitiveness Input Sub-Index is the simple average of the first four pillars.
2. The Talent Competitiveness Output Sub-Index is the simple average of the last two pillars.
3. The Global Talent Competitiveness Index is the simple average of the six pillars.²

In addition to the overall scores, country rankings are provided for each variable, sub-pillar and pillar in the Country Profiles section.

Individual Variables

The GTCI model includes 48 variables, which fall within the following categories:

1. Hard/quantitative data (19 variables)
2. Index/composite indicator data (9 variables)
3. Survey/qualitative data (20 variables)

Hard data

The 19 variables in this category are drawn from a variety of public sources, such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Conference on Trade and Development (UNCTAD), International Labour Organization (ILO), World Bank, OECD, and The Conference Board. Most variables are already scaled at source and therefore do not need to be scaled for this exercise.

Indices

The 9 indices series come from the World Bank, INSEAD and the World Intellectual Property Organization (WIPO), the Fraser Institute, the QS Intelligence Unit, Yale University and Columbia University, and the International Telecommunication Union. There are two main concerns about using “index within an index”: (1) doubts over its methodology to derive a single score, and (2) the risk of duplicating variables. Despite these concerns, the GTCI team determined that the gains outweigh the downsides as there are certain phenomena that are best captured by a multi-dimensional index. To address the concerns, only indices that transparently indicate their methodology and are widely well-received are included in the GTCI. Additionally, to avoid double-counting, only indices with a narrow focus were selected.

Survey data

The 20 survey data series are extracted from the World Economic Forum’s Executive Opinion Survey and the Legatum Institute’s Legatum Prosperity Index, which draws on the Gallup World Poll. Qualitative information tends to provide the most current assessment of certain areas related to talent competitiveness for which hard data either do not exist or have low country coverage.

Country coverage and missing data

The 103 countries covered in the GTCI 2013 are selected based on a data availability threshold of at least 80% aggregate data availability (39 out of 48 variables) and at least 50% data availability at the sub-pillar level. The most recent data points available for each country are considered in the calculation with 2002 as the cut-off year. Meanwhile, each variable has to pass an availability threshold of 60% (63 out of 103 countries). In order to provide transparency and replicability, there is no imputation effort to fill in missing values in the data set. Missing values are noted with “n/a” and are not considered in the calculation of sub-pillar scores.

Treatment of series with outliers

Inclusion of series with outliers can be problematic and potentially bias the rankings. Outliers are detected based on absolute value of skewness greater than 2 and kurtosis greater than 3.5.³ In our data set, there are two variables with outliers. As a general rule, for variables with one to four outliers, the Winsorisation method should be applied. This is the case for the FDI inflow and international students inflow variables, which have four outliers. The values distorting the variable distribution were assigned the next highest value until the skewness and/or kurtosis reported the ranges specified above.

Normalisation

To adjust for differences in terms of units of measurement and ranges of variation, all 48 variables are normalised into the [0, 100] range, with higher scores representing better comes. A min-max normalisation method was adopted, given the minimum and maximum values of each variable respectively, except for the World Economic Forum Executive Opinion Survey questions, where the original range of [1, 7] was kept as minimum and maximum values. Additionally, for the Ease of Doing Business variable, which is based on percent ranks, percent ranks were recalibrated for the sample of 103 countries.

For the variables where higher values indicate higher outcomes, the following normalisation formula is applied:

$$100 \times \frac{(\text{country value} - \text{min})}{(\text{max} - \text{min})}$$

For the variables where higher values indicate worse outcomes, the following reverse normalisation formula is applied⁴:

$$-100 \times \frac{(\text{country value} - \text{min})}{(\text{max} - \text{min})} + 100$$

Notes

- ¹ The JRC has audited various index projects. The most recent ones include The Global Innovation Index (WIPO and INSEAD), Environment Performance Index (Yale and Columbia), and Corruption Perceptions Index (Transparency International).
- ² One factor emerged from Principal Component Analysis (PCA) of the six pillars, which suggests using the simple average of the six pillars instead of the weighted average of Input and Output Sub-Indices.
- ³ Adopted from Groeneveld and Meeden (1984). This selection rule is also used by INSEAD-WIPO's The Global Innovation Index (GII).
- ⁴ The reverse normalisation only affects two indicators, namely, pupil-teacher ratio and property stolen.

References

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OECD and JRC European Commission (2008). “Handbook on Constructing Composite Indicators: Methodology and User Guide”. OECD Publishing.

APPENDIX II

SOURCES AND DEFINITIONS

SOURCES AND DEFINITIONS

1. Enablers

1.1 Regulatory Landscape

Government efficiency

1.1.1 Government effectiveness

Government effectiveness index | 2011

The government effectiveness index captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation and the credibility of the government's commitment to such policies. Scores are standardised.

Source: World Bank, *The Worldwide Governance Indicators, 2012 Update*. (<http://info.worldbank.org/governance/wgi/index.asp>)

1.1.2 Political stability

Political stability and absence of violence index | 2011

The political stability and absence of violence index captures perceptions of the likelihood that the government will be destabilised or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. Scores are standardised.

Source: World Bank, *The Worldwide Governance Indicators, 2012 Update*. (<http://info.worldbank.org/governance/wgi/index.asp>)

FDI climate

1.1.3 Starting a foreign business

Ease of establishment index | 2010

The ease of establishment index evaluates the characteristics of the regulatory regimes for business start-up. The index takes values from 0 to 100, where higher values denote a start-up regime with fewer to no legal and administrative restrictions on the establishment process. It is based on a case study setting out assumptions about a foreign company that is establishing a local subsidiary. It focuses on the following areas: (1) Restrictions on the composition of the board of directors or appointment of managers; (2) Requirements forcing the use of a local third party (counsel, notary, investment promotion agency) during the establishment process; (3) Possibility of expediting establishment procedures through an official channel (availability of fast-track procedures); (4) Requirement of an investment approval (nature of investment approval requirement, possibility of appeal, minimum required amount of investment, period of validity); (5) Business registration process; (6) Restrictions on holding a foreign currency bank account; (7) Minimum capital requirements; and (8) Availability of electronic services (online laws, regulations, documents, and registration).

Source: World Bank, *Investing Across Borders 2010*. (<http://iab.worldbank.org/>)

1.2 Market Landscape

Competition climate

1.2.1 Intensity of local competition

Average answer to the question: How would you assess the intensity of competition in the local markets in your country? [1 = limited in most industries; 7 = intense in most industries] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, *Executive Opinion Survey 2011–2012*. (<https://wefsurvey.org>)

Innovation climate

1.2.2 Venture capital availability

Average answer to the question: In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital? [1 = very difficult; 7 = very easy] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, *Executive Opinion Survey 2011–2012*. (<https://wefsurvey.org>)

1.2.3 Firm-level technology absorption

Average answer to the question: To what extent do businesses in your country absorb new technology? [1 = not at all; 7 = aggressively absorb] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, *Executive Opinion Survey 2011–2012*. (<https://wefsurvey.org>)

1.2.4 R&D expenditure

Gross expenditure on R&D (% of GDP) | 2010

Total domestic intramural expenditure on R&D during a given period as a percentage of the GDP. Intramural R&D expenditure is all expenditure for R&D performed within a statistical unit or sector of the economy during a specific period, whatever the source of funds.

Source: UNESCO Institute for Statistics, *UIS online database*. (<http://stats.uis.unesco.org>)

Connectivity

1.2.5 ICT access

ICT access index | 2011

The ICT access index is a composite indicator that weights five ICT indicators (20% each): (1) Fixed telephone lines per 100 inhabitants; (2) Mobile cellular telephone subscriptions per 100 inhabitants; (3) International internet bandwidth (bit/s) per internet user; (4) Proportion of households with a computer; and (5) Proportion of households with internet access at home. It is the first sub-index in ITU's ICT Development Index (IDI).

Source: International Telecommunication Union, *Measuring the Information Society 2012, ICT Development Index 2010–2011*. (<http://www.itu.int/ITU-D/ict/publications/idi/>)

Ease of doing business

1.2.6 Ease of doing business

Ease of doing business index | 2013

Ease of doing business ranks economies from 1 to 185, with first place being the best. A high ranking (a low numerical rank) means that the regulatory environment is conducive to business operation. The index averages the country's percentile rankings on 10 topics covered in the World Bank's Doing Business, which include starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. The value is derived from the percent ranks based on 103 countries included in the GTCI 2013.

Source: World Bank, *Ease of Doing Business Index 2013, Doing Business 2013*. (<http://www.doingbusiness.org/>)

1.3 Business Landscape

Labour market flexibility

1.3.1 Labour market flexibility

Labour market flexibility index | 2010

The index provides a composite measure of labour market flexibility and indicators of labour market flexibility in six policy areas: (1) Minimum wage; (2) Hiring and firing regulation; (3) Centralised collective wage bargaining; (4) Mandated cost of hiring; (5) Mandated cost of work dismissal; and (6) Conscription. In order to earn high marks in the component rating regulation of the labour market, a country must allow market forces to determine wages and establish the conditions of hiring and firing, and refrain from the use of conscription.

Source: Fraser Institute, *Economic Freedom of the World: 2012 Annual Report*. (<http://www.freetheworld.com/>)

Ownership and governance

1.3.2 Reliance on professional management

Average answer to the question: In your country, who holds senior management positions? [1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, *Executive Opinion Survey 2011–2012*. (<https://wefsurvey.org>)

2. Attract

2.1 External Openness

FDI

2.1.1 FDI inflow

FDI inflows (% of GDP) | 2011

FDI inflows comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to an FDI enterprise, or capital received by a foreign direct investor from an FDI enterprise. FDI includes the following three components: equity capital, reinvested earnings and intra-company loans. Data on FDI flows are presented on net bases (capital transactions' credits less debits between direct investors and their foreign affiliates). Net decreases in assets or net increases in liabilities are recorded as credits, while net increases in assets or net decreases in liabilities are recorded as debits. This series shows inflows in the reporting economy from foreign investors, and is divided by GDP.

Source: United Nations Conference on Trade and Development (UNCTAD) Division on Investment and Enterprise, *UNCTAD STAT*. (<http://unctadstat.unctad.org/>)

Brain gain

2.1.2 Qualified labour inflow

Average answer to the question: Does your country retain and attract talented people? [1 = no, the best and brightest normally leave to pursue opportunities in other countries; 7 = yes, there are many opportunities for talented people within the country] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

Foreign companies

2.1.3 Prevalence of foreign ownership

Average answer to the question: How prevalent is foreign ownership of companies in your country? [1 = very rare; 7 = highly prevalent] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

2.2 Internal Openness

Diversity

2.2.1 Tolerance of minorities

Percentage of respondents who answered yes for the question: Is the area where you live a good place or not a good place to live for racial and ethnic minorities? | 2012

The Legatum Institute adopted surveys from Gallup World Poll in their publication of the Legatum Prosperity Index, which offers a unique insight into how prosperity is forming and changing across the world. The survey is conducted in different time periods across countries between 2007 and 2011.

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>) Last accessed April 2013.

2.2.2 Tolerance of immigrants

Percentage of respondents who answered yes for the question: Is the area where you live a good place or not a good place to live for immigrants? | 2012

The Legatum Institute adopted surveys from Gallup World Poll in their publication of the Legatum Prosperity Index, which offers a unique insight into how prosperity is forming and changing across the world. The survey is conducted in different time periods across countries between 2007 and 2011.

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>) Last accessed April 2013.

Social mobility

2.2.3 Social mobility

Average answer to the question: To what extent do individuals in your country have the opportunity to improve their economic situation through their personal efforts regardless of the socioeconomic status of their parents? [1 = little opportunity exists to improve one's economic situation; 7 = significant opportunity exists to improve one's economic situation] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

Gender mobility

2.2.4 Female professionals and technical workers

Ratio of female professionals and technical workers over male value | 2011

The ratio of female professionals and technical workers over male value. To account for gender equality, the data is truncated at the equality benchmarks, which is equal to 1, meaning equal numbers of women and men. Hence, the same score is assigned to a country that has reached parity between women and men and one where women have surpassed men. The classification of professionals and technical workers is based on International Standard Classification of Occupation (ISCO) Revision 1988. It includes physical and engineering science associate professionals, life science and health associate professionals, teaching associate professionals and other associate professionals (finance and sales, social work, artistic, entertainment and sports, religious associate professionals, police inspectors and detectives, administrative, customs, tax and related government associate professionals).

Source: International Labour Organization, Key Indicators of the Labour Market, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

2.2.5 Female parliamentarians

Ratio of female parliamentarians over male value | 2011

Female parliamentarians is the percentage of parliamentary seats in a single or lower chamber held by women. The value is derived from the ratio of females with a seat in parliament to males with a seat in parliament.

Source: World Bank, World Development Indicators based on Inter-Parliamentary Union (IPU). (<http://data.worldbank.org/>)

3. Grow

3.1 Formal Education

Education climate

3.1.1 Pupil-teacher ratio

Pupil-teacher ratio, secondary | 2010

The number of pupils enrolled in secondary school divided by the number of secondary school teachers (regardless of their teaching assignment).

Source: UNESCO Institute for Statistics, UIS online database. (<http://stats.uis.unesco.org>)

3.1.2 Technical/vocational enrolment

Technical/vocational enrolment (%) | 2011

Total number of pupils or students enrolled in technical/vocational programmes at a given level of education, expressed as a percentage of the total number of pupils or students enrolled in all programmes (technical/vocational and general) at that level. The level of educational attainment is based on International Standard Classification of Education (ISCED) Level 3.

Source: UNESCO Institute for Statistics, UIS online database. (<http://stats.uis.unesco.org>)

3.1.3 Tertiary enrolment

School enrolment, tertiary (% gross) | 2010

The ratio of total tertiary enrolment, regardless of age, to the population of the age group that officially corresponds to the tertiary level of education. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level. The level of educational attainment is based on International Standard Classification of Education (ISCED) Level 5–6.

Source: UNESCO Institute for Statistics, UIS online database. (<http://stats.uis.unesco.org>)

Performance of education system

3.1.4 Reading, maths, and science scores

PISA average scales in reading, mathematics, and science | 2009

The OECD Programme for International Student Assessment (PISA) develops three-yearly surveys that examine 15-year-old students' performance in reading, mathematics and science. The scores are calculated in each year so that the mean is 500 and the standard deviation 100. The scores for China come from Shanghai; those for India from Himachal Pradesh and Tamil Nadu (average); those for the United Arab Emirates from Dubai; and those for the Bolivarian Republic of Venezuela from Miranda.

Source: OECD Programme for International Student Assessment (PISA) 2009 and 2010. (www.pisa.oecd.org/)

Top universities

3.1.5 QS university ranking

QS university ranking, average score top 3 | 2012

The assessment for QS World University Ranking is based on six indicators (with their weight in parentheses): (1) Academic reputation from global survey (40%); (2) Employer reputation from global survey (10%); (3) Citations per faculty from SciVerse Scopus (20%); (4) Faculty-student ratio (20%); (5) Proportion of international students (5%); and (6) Proportion of international faculty (5%).

The value is derived from the average score of the top three universities per country. The scores for the universities ranked above 400 are not provided from the source, hence, they were extrapolated. QS reported five group rankings: 401–450, 451–500, 501–550, 551–600 and 601+ (until 729). The extrapolation method predicts the data points in the upper and lower range of group rankings and the scores assigned are the average between the two. The universities in similar groups were assigned similar scores. If the country has fewer than three universities listed in the QS ranking, the sum of the scores of the listed universities was still divided by three, implying a score of zero for the non-listed universities.

Source: Quacquarelli Symonds Ltd (QS), QS World University Ranking 2012/2013, Top Universities. (<http://www.topuniversities.com/university-rankings/world-universityrankings/2012>)

International students

3.1.6 International students inflow

Tertiary inbound mobility ratio (%) | 2010

The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.

Source: UNESCO Institute for Statistics, UIS online database. (<http://stats.uis.unesco.org>)

3.2 Lifelong Learning

Further education and training climate

3.2.1 Quality of management schools

Average answer to the question: How would you assess the quality of management or business schools in your country? [1 = poor; 7 = excellent – among the best in the world] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.2.2 Extent of staff training

Average answer to the question: To what extent do companies in your country invest in training and employee development? [1 = hardly at all; 7 = to a great extent] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.3 Access to Growth Opportunities

Networks

3.3.1 Use of virtual social networks

Average answer to the question: How widely used are virtual social networks (e.g., Facebook, Twitter, LinkedIn) for professional and personal communication in your country? [1 = not used at all; 7 = used widely] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.3.2 State of cluster development

Average answer to the question: In your country's economy, how prevalent are well-developed and deep clusters? [1 = nonexistent; 7 = widespread in many fields] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

Research quality

3.3.3 Quality of scientific research institutions

Average answer to the question: How would you assess the quality of scientific research institutions in your country? [1 = very poor; 7 = the best in their field internationally] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

Voice

3.3.4 Voicing concern to officials

Percentage of respondents who answered yes for the question: Have you voiced your opinion to a public official in the past month? | 2012

The Legatum Institute adopted surveys from Gallup World Poll in their publication of the Legatum Prosperity Index, which offers a unique insight into how prosperity is forming and changing across the world. The survey is conducted in different time periods across countries between 2007 and 2011.

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>) Last accessed April 2013.

4. Retain**4.1 Sustainability**

Social protection

4.1.1 Pension system

Share of workforce contributing to pension system | 2005

Pension system coverage includes both mandatory and voluntary schemes. It is reported as a share of active workforce contributing to the pension system.

Source: World Bank, International patterns of pension provision II: a worldwide overview of facts and figures. (<http://web.worldbank.org/wbsite/external/topics/extsocialprotection/extpensions/>)

Taxation

4.1.2 Extent and effect of taxation

Average answer to the question: What impact does the level of taxes in your country have on incentives to work or invest? [1 = significantly limits incentives to work and invest; 7 = has no impact on incentives to work or invest] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

4.2 Lifestyle

Quality of life

4.2.1 Environmental performance

Environmental performance index | 2012

This index ranks countries on 22 performance indicators tracked across policy categories that cover both environmental public health and ecosystem vitality. These indicators gauge how close countries are to established environmental policy goals. The index ranges from 0 to 100, 100 indicating best performance.

Source: Yale University and Columbia University, Environmental Performance Index 2012. (<http://epi.yale.edu/>)

4.2.2 Property stolen

Percentage of respondents who answered yes for the question: Within the past 12 months, have you had money or property stolen from you or another household member? | 2012

The Legatum Institute adopted surveys from Gallup World Poll in their publication of the Legatum Prosperity Index, which offers a unique insight into how prosperity is forming and changing across the world. The survey is conducted in different time periods across countries between 2007 and 2011.

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>) Last accessed April 2013.

4.2.3 Safety at night

Percentage of respondents who answered yes for the question: Do you feel safe walking alone at night in the area where you live? | 2012

The Legatum Institute adopted surveys from Gallup World Poll in their publication of the Legatum Prosperity Index, which offers a unique insight into how prosperity is forming and changing across the world. The survey is conducted in different time periods across countries between 2007 and 2011.

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>) Last accessed April 2013.

Services

4.2.4 Physicians density

Physicians (per 1,000 people) | 2010

Number of medical doctors (physicians), including generalist and specialist medical practitioners, per 1,000 people.

Source: World Bank, World Development Indicators based on World Health Organization, Global Atlas of the Health Workforce. (<http://data.worldbank.org/>)

5. Labour and Vocational

5.1 Employable Skills

Vocationally trained workforce

5.1.1 Secondary-educated workforce

Percentage of workforce with secondary education (%) | 2010

Percentage of the population aged 25 years and older with secondary education qualifications. The level of educational attainment is based on International Standard Classification of Education (ISCED) Level 3.

Source: UNESCO, *Global Education Digest 2011 and 2012*. (<http://www.uis.unesco.org/Education/Pages/global-education-digest.aspx>)

Technical professions

5.1.2 Technicians and associate professionals

Technicians and associate professionals (%) | 2011

Percentage of technicians and associate professionals out of total employment. The employment by occupation is based on International Standard Classification of Occupation (ISCO) Revision 1988. It includes physical and engineering science associate professionals, life science and health associate professionals, teaching associate professionals, and other associate professionals (finance and sales, social work, artistic, entertainment and sports, religious associate professionals, police inspectors and detectives, administrative, customs, tax and related government associate professionals).

Source: International Labour Organization, *Key Indicators of the Labour Market*, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

Youth employment

5.1.3 Youth employment

Youth employment (% of youth population) | 2012

The proportion of youth (15–24 years old) that is employed out of the total youth population. A high ratio means that a large proportion of a country's population is employed, while a low ratio means that a large share of the population is not involved directly in market-related activities, because they are either unemployed or (more likely) out of the labour force altogether. The ILO estimates are harmonised to account for differences in national data collection and tabulation methodologies.

Source: International Labour Organization, *Key Indicators of the Labour Market*, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

5.2 Labour Productivity

Productivity per employee

5.2.1 Labour productivity per employee

Labour productivity per person employed (constant 2012 US\$) | 2012

Labour productivity estimates are obtained by dividing the output measure (GDP) by the total labour input used to produce that output. GDP is measured in constant 2012 US dollars.

Source: The Conference Board, *Total Economy Database*. (<http://www.conference-board.org/data/economydatabase/>)

Pay and productivity

5.2.2 Relationship of pay to productivity

Average answer to the question: To what extent is pay in your country related to productivity? [1 = not related to worker productivity; 7 = strongly related to worker productivity] | 2012

The World Economic Forum's Executive Opinion Survey (EOS) is conducted on an annual basis to gather information from business leaders on topics for which hard data sources are scarce or non-existent. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, *Executive Opinion Survey 2011–2012*. (<https://wefsurvey.org>)

6. Global Knowledge

6.1 Higher Skills and Competencies

Educated workforce

6.1.1 Tertiary-educated workforce

Percentage of workforce with tertiary education (%) | 2010

Percentage of the population aged 25 years and older with tertiary education qualifications. The level of educational attainment is based on International Standard Classification of Education (ISCED) Level 5–6.

Source: UNESCO, *Global Education Digest 2011 and 2012*. (<http://www.uis.unesco.org/Education/Pages/global-education-digest.aspx>)

Knowledge workers

6.1.2 Legislators, senior officials and managers

Legislators, senior officials and managers (%) | 2011

Percentage of legislators, senior officials and managers out of total employment. The employment by occupation is based on International Standard Classification of Occupation (ISCO) Revision 1988.

Source: International Labour Organization, *Key Indicators of the Labour Market, 7th edition*. (<http://kilm.ilo.org/kilmnet/>)

6.1.3 Professionals

Professionals (%) | 2011

Percentage of professionals out of total employment. The employment by occupation is based on International Standard Classification of Occupation (ISCO) Revision 1988. It includes physical, mathematical and engineering science professionals, life science and health professionals, teaching professionals, and other professionals (business, legal, archivists, librarians, social science, religious professionals and writers and creative or performing artists).

Source: International Labour Organization, *Key Indicators of the Labour Market, 7th edition*. (<http://kilm.ilo.org/kilmnet/>)

6.1.4 Researchers

Researchers per million population, headcounts | 2009

Researchers in R&D are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students (ISCED97 Level 6) engaged in R&D are included.

Source: UNESCO Institute for Statistics, *UIS online database*. (<http://stats.uis.unesco.org>)

6.2 Talent Impact

Innovation

6.2.1 Innovation output

Innovation output sub-index | 2012

The Global Innovation Index (GII) is developed by INSEAD and the World Intellectual Property Organization to capture the richness of innovation in society. Innovation output is one of the two sub-indices in the GII. It is derived from aggregating the two output pillars – knowledge and technology output and creative output. The first pillar covers elements of knowledge creation, impact and diffusion. The second pillar includes creative intangibles, creative goods and services and online creativity.

Source: INSEAD and World Intellectual Property Organization, *The Global Innovation Index 2012*. (<http://www.globalinnovationindex.org/>)

Entrepreneurship

6.2.2 New product entrepreneurial activity

New product entrepreneurial activity (%) | 2012

Percentage of total early-stage entrepreneurs who indicate that their product or service is new to at least some customers.

The Global Entrepreneurship Monitor (GEM) project is an annual assessment of the entrepreneurial activity, aspirations and attitudes of individuals across a wide range of countries.

Source: Global Entrepreneurship Research Association, *Global Entrepreneurship Monitor database*. (<http://www.gemconsortium.org/Data/>)

APPENDIX III

DATA TABLES

How to read the data tables

DATA TABLES

1 1.2.3 Firm-level technology absorption

Average answer to the question: To what extent do businesses in your country absorb new technology? [1 = not at all; 7 = aggressively absorb] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Sweden	6.30	88.41	56	Ukraine	4.76	62.66
2	Iceland	6.26	87.71	57	Lebanon	4.76	62.61
3	Switzerland	6.20	86.64	58	China	4.75	62.49
4	Japan	6.16	86.07	59	Azerbaijan	4.75	62.45
5	Israel	6.16	85.98	60	Morocco	4.70	61.60
6	Finland	6.05	84.23	61	Croatia	4.67	61.19
7	Singapore	6.02	83.71	62	Slovenia	4.66	61.00
8	Qatar	6.00	83.33	63	Peru	4.65	60.86
9	Norway	6.00	83.30	64	Albania	4.64	60.74
10	Korea, Rep.	6.00	83.28	65	Mongolia	4.64	60.63
11	United Arab Emirates	5.96	82.62	66	Trinidad and Tobago	4.63	60.49
12	Austria	5.93	82.17	67	Uruguay	4.62	60.27
13	United States	5.90	81.65	68	Pakistan	4.57	59.58
14	Australia	5.90	81.61	69	Egypt, Arab Rep.	4.56	59.40
15	Germany	5.88	81.27	70	Mali	4.54	59.01
16	New Zealand	5.86	80.94	71	Latvia	4.51	58.50
17	Denmark	5.84	80.71	72	Kazakhstan	4.48	58.00
18	Saudi Arabia	5.82	80.36	73	El Salvador	4.47	57.90
19	Netherlands	5.76	79.29	74	Colombia	4.44	57.40
20	United Kingdom	5.73	78.81	75	Greece	4.44	57.25
21	Luxembourg	5.64	77.33	76	Armenia	4.43	57.10
22	Panama	5.61	76.76	77	Botswana	4.39	56.58
23	Portugal	5.58	76.39	78	Montenegro	4.36	55.92
24	Jordan	5.57	76.15	79	Ecuador (2011)	4.33	55.47
25	Malaysia	5.56	75.92	80	Paraguay	4.33	55.45
26	Canada	5.55	75.91	81	Uganda	4.32	55.41
27	Belgium	5.55	75.88	82	Italy	4.32	55.38
28	Malta	5.53	75.55	83	Bosnia and Herzegovina	4.32	55.36
29	Ireland	5.53	75.52	84	Argentina	4.31	55.24
30	Estonia	5.51	75.08	85	Bangladesh	4.25	54.11
31	France	5.49	74.83	86	Poland	4.23	53.85
32	Senegal	5.48	74.72	87	Romania	4.14	52.31
33	South Africa	5.42	73.61	88	Venezuela, RB	4.12	51.97
34	Turkey	5.30	71.63	89	Burkina Faso	4.09	51.49
35	India	5.24	70.64	90	Iran, Islamic Rep.	4.08	51.37
36	Kuwait	5.23	70.51	91	Nicaragua	4.05	50.79
37	Sri Lanka (2011)	5.22	70.33	92	Georgia (2011)	4.04	50.62
38	Cyprus	5.20	69.98	93	Bulgaria	3.99	49.87
39	Chile	5.19	69.90	94	Vietnam	3.98	49.73
40	Guatemala	5.19	69.87	95	Moldova	3.96	49.29
41	Philippines	5.17	69.49	96	Tanzania	3.92	48.70
42	Brazil	5.15	69.24	97	Macedonia, FYR	3.81	46.85
43	Spain	5.09	68.14	98	Kyrgyz Republic	3.73	45.53
44	Czech Republic	5.08	67.93	99	Bolivia	3.69	44.84
45	Costa Rica	5.07	67.89	100	Ethiopia	3.68	44.62
46	Lithuania	5.01	66.89	101	Russian Federation	3.63	43.89
47	Thailand	4.98	66.32	102	Serbia	3.55	42.57
48	Indonesia	4.95	65.80	103	Algeria	3.16	36.01
49	Dominican Republic	4.90	65.04				
50	Kenya	4.89	64.85				
51	Slovak Republic	4.88	64.66				
52	Cambodia	4.86	64.38				
53	Mexico	4.84	64.01				
54	Hungary	4.84	63.99				
55	Namibia	4.84	63.92				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

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The appendix provides insights into the country rankings under each of the 48 variables that make up the Global Talent Competitiveness Index 2013 (GTCI).

Structure of the data table

Each data table consists of the name of the variable **1**, the technical name and the most frequent year **2**, the ranking **3**, and the source **4**.

1 The first section provides the variable number that explains its position in the overall structure of the GTCI. The first digit refers to the pillar, the second digit refers to the sub-pillar within the pillar and the third digit refers to the position of the variable in the sub-pillar. For instance, variable “1.2.3 Firm-level technology absorption” is positioned in the first pillar (shown by the first digit, 1), the second sub-pillar (denoted by the second digit, 2) and is the third variable within this sub-pillar (shown by the third digit, 3).

2 The second section spells out the technical name of the variable with the most frequent year. For variables derived from surveys delivering qualitative information, the exact technical name is shown as the question asked in the surveys. These apply to all variables taken from the World Economic Forum, Executive Opinion Survey and the Legatum Prosperity Index, for instance.

3 The ranking of the countries within the data table follows their normalised scores. For details about normalisation method, please refer to Technical Notes. There are three parts to the information in the ranking: the rank of the country, the raw value and the normalised score. Due to treatment of outliers, several countries have the same score in the variables 2.1.1 FDI inflow and 3.1.6 International students inflow. For 2.2.4 Female professionals and technical workers, similar scores prevail because of the conceptual framework. For details about the definition, please refer to Sources and Definitions. If countries occupy the same rank in other variables, these countries have the same raw value and hence, their normalised scores are the same. In cases of ties, the countries are sorted alphabetically.

4 The fourth section presents all sources and a link to the data source.

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PILLAR 1:

ENABLERS

1.1.1 Government effectiveness

Government effectiveness index | 2011

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Finland	2.25	100.00	56	Jordan	0.05	34.41
2	Denmark	2.17	97.71	57	Bulgaria	0.01	33.22
3	Singapore	2.16	97.31	58	Philippines	0.00	32.84
4	Sweden	1.96	91.46	59	Brazil	-0.01	32.67
5	New Zealand	1.93	90.54	60	India	-0.03	32.07
6	Switzerland	1.89	89.38	61	Kuwait	-0.04	31.63
7	Canada	1.85	88.13	62	Sri Lanka	-0.08	30.41
8	Netherlands	1.79	86.37	63	Armenia	-0.09	30.35
9	Norway	1.76	85.55	64	El Salvador	-0.11	29.71
10	Australia	1.74	84.85	65	Macedonia, FYR	-0.11	29.69
11	Luxembourg	1.73	84.72	66	Serbia	-0.15	28.59
12	Belgium	1.67	82.68	67	Peru	-0.15	28.43
13	Austria	1.66	82.50	68	Argentina	-0.16	28.18
14	Iceland	1.57	79.70	69	Albania	-0.20	26.98
15	United Kingdom	1.55	79.13	70	Morocco	-0.22	26.40
16	Germany	1.53	78.71	71	Romania	-0.22	26.39
17	Cyprus	1.53	78.58	72	Indonesia	-0.24	25.73
18	Ireland	1.42	75.35	73	Kazakhstan	-0.26	25.06
19	United States	1.41	74.90	74	Vietnam	-0.28	24.61
20	France	1.36	73.65	75	Lebanon	-0.33	23.17
21	Japan	1.35	73.09	76	Russian Federation	-0.40	20.87
22	Korea, Rep	1.23	69.71	77	Ethiopia	-0.40	20.87
23	Estonia	1.20	68.88	78	Bolivia	-0.41	20.55
24	Israel	1.20	68.84	79	Saudi Arabia	-0.43	20.06
25	Chile	1.17	67.94	80	Senegal	-0.44	19.93
26	Malta	1.16	67.68	81	Iran, Islamic Rep	-0.46	19.13
27	Spain	1.02	63.42	82	Uganda	-0.51	17.74
28	Czech Republic	1.02	63.33	83	Burkina Faso	-0.53	17.02
29	Malaysia	1.00	62.76	84	Tanzania	-0.54	16.91
30	Slovenia	0.99	62.34	85	Kenya	-0.54	16.80
31	Portugal	0.97	62.02	86	Ecuador	-0.55	16.56
32	United Arab Emirates	0.95	61.34	87	Dominican Republic	-0.55	16.47
33	Slovak Republic	0.86	58.49	88	Moldova	-0.58	15.51
34	Qatar	0.83	57.82	89	Egypt, Arab Rep	-0.60	14.97
35	Hungary	0.71	53.98	90	Mongolia	-0.62	14.48
36	Latvia	0.68	53.36	91	Kyrgyz Republic	-0.62	14.44
37	Lithuania	0.68	53.27	92	Algeria	-0.66	13.36
38	Poland	0.68	53.11	93	Guatemala	-0.70	12.02
39	Uruguay	0.58	50.13	94	Cambodia	-0.75	10.60
40	Croatia	0.55	49.47	95	Bosnia and Herzegovina	-0.76	10.24
41	Georgia	0.55	49.20	96	Azerbaijan	-0.79	9.41
42	Botswana	0.53	48.89	97	Pakistan	-0.82	8.53
43	Greece	0.48	47.20	98	Ukraine	-0.83	8.24
44	Italy	0.45	46.26	99	Mali	-0.83	8.21
45	Turkey	0.41	45.14	100	Paraguay	-0.83	8.12
46	South Africa	0.37	43.94	101	Bangladesh	-0.85	7.41
47	Costa Rica	0.35	43.40	102	Nicaragua	-0.90	6.20
48	Mexico	0.32	42.60	103	Venezuela, RB	-1.10	0.00
49	Trinidad and Tobago	0.31	42.20				
50	Colombia	0.24	40.21				
51	China	0.12	36.49				
52	Thailand	0.10	35.99				
53	Montenegro	0.10	35.89				
54	Panama	0.10	35.88				
55	Namibia	0.06	34.75				

Source: World Bank, The Worldwide Governance Indicators, 2012 Update. (<http://info.worldbank.org/governance/wgi/index.asp>)

1.1.2 Political stability

Political stability and absence of violence index | 2011

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Finland	1.38	100.00	56	Brazil	-0.04	65.25
2	New Zealand	1.35	99.20	57	Greece	-0.06	64.53
3	Norway	1.35	99.19	58	Armenia	-0.10	63.79
4	Luxembourg	1.33	98.75	59	Panama	-0.11	63.33
5	Switzerland	1.29	97.78	60	Moldova	-0.13	63.02
6	Sweden	1.26	97.10	61	Ukraine	-0.15	62.53
7	Iceland	1.22	96.12	62	Kazakhstan	-0.17	61.93
8	Qatar	1.21	95.80	63	Albania	-0.27	59.54
9	Singapore	1.21	95.78	64	Saudi Arabia	-0.30	58.77
10	Austria	1.19	95.26	65	Senegal	-0.31	58.61
11	Netherlands	1.12	93.63	66	Serbia	-0.33	57.94
12	Czech Republic	1.12	93.53	67	Nicaragua	-0.38	56.79
13	Denmark	1.11	93.30	68	Jordan	-0.42	55.87
14	Poland	1.09	92.85	69	Cambodia	-0.44	55.33
15	Canada	1.04	91.62	70	Macedonia, FYR	-0.45	55.03
16	Botswana	1.04	91.58	71	Morocco	-0.47	54.67
17	Ireland	1.00	90.57	72	Bolivia	-0.50	53.78
18	Malta	1.00	90.52	73	Burkina Faso	-0.54	52.85
19	Japan	0.97	89.98	74	Sri Lanka	-0.54	52.83
20	Slovak Republic	0.97	89.79	75	Azerbaijan	-0.57	52.25
21	United Arab Emirates	0.96	89.59	76	Peru	-0.69	49.22
22	Uruguay	0.94	89.11	77	Mexico	-0.70	49.05
23	Namibia	0.89	87.95	78	China	-0.70	49.00
24	Belgium	0.88	87.74	79	Mali	-0.71	48.72
25	Australia	0.87	87.43	80	Paraguay	-0.72	48.46
26	Germany	0.86	87.31	81	Guatemala	-0.73	48.34
27	Slovenia	0.84	86.83	82	Ecuador	-0.73	48.28
28	Hungary	0.75	84.49	83	Georgia	-0.75	47.74
29	Portugal	0.70	83.30	84	Indonesia	-0.82	46.02
30	Lithuania	0.63	81.49	85	Russian Federation	-0.88	44.67
31	France	0.61	81.12	86	Bosnia and Herzegovina	-0.90	43.99
32	Costa Rica	0.60	80.90	87	Turkey	-0.93	43.40
33	Estonia	0.59	80.60	88	Thailand	-1.02	41.12
34	Italy	0.59	80.49	89	Kyrgyz Republic	-1.05	40.44
35	Chile	0.56	79.80	90	Uganda	-1.10	39.21
36	Mongolia	0.55	79.69	91	India	-1.20	36.68
37	Cyprus	0.54	79.35	92	Colombia	-1.25	35.38
38	United States	0.54	79.30	93	Egypt, Arab Rep.	-1.29	34.59
39	Croatia	0.54	79.29	94	Israel	-1.30	34.32
40	Montenegro	0.52	78.84	95	Venezuela, RB	-1.30	34.22
41	United Kingdom	0.37	75.29	96	Kenya	-1.31	34.08
42	Kuwait	0.33	74.29	97	Algeria	-1.35	32.97
43	Bulgaria	0.30	73.58	98	Philippines	-1.39	32.16
44	Latvia	0.29	73.31	99	Iran, Islamic Rep.	-1.45	30.46
45	Korea, Rep.	0.23	71.83	100	Bangladesh	-1.50	29.40
46	Argentina	0.20	70.97	101	Lebanon	-1.55	28.22
47	Vietnam	0.17	70.27	102	Ethiopia	-1.63	26.08
48	Malaysia	0.16	69.93	103	Pakistan	-2.70	0.00
49	Trinidad and Tobago	0.15	69.88				
50	Spain	0.13	69.37				
51	Romania	0.12	69.14				
52	El Salvador	0.12	68.97				
53	Dominican Republic	0.08	67.97				
54	South Africa	0.02	66.64				
55	Tanzania	-0.01	65.99				

Source: World Bank, The Worldwide Governance Indicators, 2012 Update. (<http://info.worldbank.org/governance/wgi/index.asp>)

1.1.3 Starting a foreign business

Ease of establishment index | 2010

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Slovak Republic	92.10	100.00	56	Indonesia	52.60	44.37
2	Romania	89.50	96.34	57	Sri Lanka	47.90	37.75
3	Poland	85.00	90.00	58	Uganda	47.40	37.04
3	United Kingdom	85.00	90.00	59	Senegal	45.00	33.66
5	Albania	84.20	88.87	60	Burkina Faso	44.70	33.24
5	Georgia	84.20	88.87	60	Cambodia	44.70	33.24
5	Serbia	84.20	88.87	62	Mali	42.50	30.14
8	Canada	81.60	85.21	62	Venezuela, RB	42.50	30.14
8	Croatia	81.60	85.21	64	Saudi Arabia	35.00	19.58
8	Czech Republic	81.60	85.21	65	Ethiopia	21.10	0.00
8	Japan	81.60	85.21	n/a	Algeria	n/a	n/a
12	Ukraine	80.00	82.96	n/a	Australia	n/a	n/a
12	United States	80.00	82.96	n/a	Belgium	n/a	n/a
14	Armenia	78.90	81.41	n/a	Botswana	n/a	n/a
14	Bulgaria	78.90	81.41	n/a	Cyprus	n/a	n/a
14	Montenegro	78.90	81.41	n/a	Denmark	n/a	n/a
14	Singapore	78.90	81.41	n/a	Dominican Republic	n/a	n/a
14	South Africa	78.90	81.41	n/a	El Salvador	n/a	n/a
19	France	77.50	79.44	n/a	Estonia	n/a	n/a
20	India	76.30	77.75	n/a	Finland	n/a	n/a
20	Macedonia, FYR	76.30	77.75	n/a	Germany	n/a	n/a
22	Austria	73.70	74.08	n/a	Hungary	n/a	n/a
22	Costa Rica	73.70	74.08	n/a	Iceland	n/a	n/a
22	Kyrgyz Republic	73.70	74.08	n/a	Iran, Islamic Rep	n/a	n/a
25	Peru	72.50	72.39	n/a	Israel	n/a	n/a
26	Azerbaijan	71.60	71.13	n/a	Italy	n/a	n/a
27	Korea, Rep	71.10	70.42	n/a	Jordan	n/a	n/a
27	Spain	71.10	70.42	n/a	Kuwait	n/a	n/a
29	Ireland	70.00	68.87	n/a	Latvia	n/a	n/a
29	Moldova	70.00	68.87	n/a	Lebanon	n/a	n/a
31	Colombia	68.40	66.62	n/a	Lithuania	n/a	n/a
31	Greece	68.40	66.62	n/a	Luxembourg	n/a	n/a
31	Russian Federation	68.40	66.62	n/a	Malta	n/a	n/a
34	Bosnia and Herzegovina	65.80	62.96	n/a	Mongolia	n/a	n/a
34	Kazakhstan	65.80	62.96	n/a	Namibia	n/a	n/a
34	Mexico	65.80	62.96	n/a	Netherlands	n/a	n/a
34	Turkey	65.80	62.96	n/a	New Zealand	n/a	n/a
38	Argentina	65.00	61.83	n/a	Norway	n/a	n/a
39	Pakistan	64.70	61.41	n/a	Panama	n/a	n/a
40	China	63.70	60.00	n/a	Paraguay	n/a	n/a
41	Bolivia	63.20	59.30	n/a	Portugal	n/a	n/a
41	Chile	63.20	59.30	n/a	Qatar	n/a	n/a
41	Egypt, Arab Rep	63.20	59.30	n/a	Slovenia	n/a	n/a
44	Brazil	62.50	58.31	n/a	Sweden	n/a	n/a
44	Tanzania	62.50	58.31	n/a	Switzerland	n/a	n/a
46	Malaysia	60.50	55.49	n/a	Trinidad and Tobago	n/a	n/a
46	Thailand	60.50	55.49	n/a	United Arab Emirates	n/a	n/a
48	Guatemala	57.90	51.83	n/a	Uruguay	n/a	n/a
48	Kenya	57.90	51.83				
48	Nicaragua	57.90	51.83				
48	Philippines	57.90	51.83				
48	Vietnam	57.90	51.83				
53	Bangladesh	55.30	48.17				
53	Ecuador	55.30	48.17				
53	Morocco	55.30	48.17				

Source: World Bank, Investing Across Borders 2010.
(<http://iab.worldbank.org/>)

1.2.1 Intensity of local competition

Average answer to the question: How would you assess the intensity of competition in the local markets in your country? [1 = limited in most industries; 7 = intense in most industries] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Netherlands	6.07	84.56	56	Israel	4.91	65.23
2	Japan	6.05	84.13	57	Italy	4.90	64.97
3	Belgium	5.96	82.70	58	Finland	4.87	64.52
4	United Kingdom	5.96	82.64	59	Latvia	4.86	64.33
5	Australia	5.85	80.86	60	Cambodia	4.81	63.47
6	Austria	5.83	80.50	61	Paraguay	4.80	63.41
7	Germany	5.79	79.77	62	Botswana	4.80	63.33
8	Malta	5.76	79.39	63	Mexico	4.76	62.73
9	Korea, Rep.	5.75	79.09	64	Uganda	4.73	62.12
10	Qatar	5.74	78.93	65	Colombia	4.72	61.94
11	Czech Republic	5.71	78.50	66	Kuwait	4.70	61.59
12	Saudi Arabia	5.71	78.45	67	Bangladesh	4.66	60.97
13	United Arab Emirates	5.69	78.24	68	Iceland	4.64	60.63
14	Turkey	5.69	78.09	69	Pakistan	4.62	60.36
15	United States	5.65	77.44	70	Mongolia	4.61	60.09
16	Canada	5.63	77.12	71	Trinidad and Tobago	4.56	59.37
17	Switzerland	5.59	76.45	72	Namibia	4.54	58.94
18	Singapore	5.54	75.73	73	Greece	4.42	57.08
19	Sweden	5.53	75.58	74	Indonesia	4.42	56.99
20	Spain	5.52	75.27	75	Uruguay	4.36	56.05
21	New Zealand	5.51	75.12	76	Bulgaria	4.33	55.45
22	Estonia	5.50	75.03	77	Romania	4.30	55.07
23	Sri Lanka (2011)	5.50	74.93	78	Ecuador (2011)	4.29	54.88
24	Slovak Republic	5.48	74.63	79	Ukraine	4.28	54.67
25	France	5.47	74.57	80	Burkina Faso	4.26	54.31
26	Denmark	5.42	73.73	81	Iran, Islamic Rep.	4.26	54.26
27	Poland	5.42	73.61	82	Moldova	4.23	53.81
28	Jordan	5.39	73.25	83	Tanzania	4.21	53.51
29	Norway	5.39	73.14	84	Mali	4.19	53.22
30	India	5.38	72.95	85	Kazakhstan	4.13	52.09
31	Lebanon	5.37	72.91	86	Montenegro	4.09	51.52
32	Malaysia	5.36	72.71	87	Argentina	4.07	51.22
33	China	5.30	71.71	88	Macedonia, FYR	4.05	50.90
34	Hungary	5.27	71.23	89	Croatia	4.04	50.74
35	Chile	5.26	71.01	90	Egypt, Arab Rep.	4.02	50.40
36	Ireland	5.23	70.42	91	Kyrgyz Republic	4.01	50.22
37	Slovenia	5.20	70.00	92	Russian Federation	3.96	49.40
38	Cyprus	5.15	69.14	93	Georgia (2011)	3.87	47.81
39	Vietnam	5.15	69.14	94	Albania	3.86	47.62
40	Brazil	5.14	69.01	95	Nicaragua	3.86	47.61
41	Guatemala	5.11	68.52	96	Armenia	3.85	47.47
42	Lithuania	5.10	68.34	97	Azerbaijan	3.82	47.07
43	Peru	5.09	68.25	98	Bolivia	3.71	45.09
44	Philippines	5.09	68.23	99	Serbia	3.61	43.58
45	South Africa	5.07	67.77	100	Bosnia and Herzegovina	3.60	43.36
46	Senegal	5.06	67.60	101	Ethiopia	3.59	43.20
47	Thailand	5.03	67.16	102	Venezuela, RB.	3.27	37.82
48	Panama	5.01	66.91	103	Algeria	3.15	35.75
49	Dominican Republic	5.00	66.69				
50	Morocco	4.99	66.58				
51	Luxembourg	4.99	66.53				
52	Costa Rica	4.96	65.92				
53	Portugal	4.94	65.61				
54	Kenya	4.93	65.53				
55	El Salvador	4.92	65.41				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

1.2.2 Venture capital availability

Average answer to the question: In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital? [1 = very difficult; 7 = very easy] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Qatar	4.68	61.40	56	Ecuador (2011)	2.61	26.85
2	Israel	4.45	57.52	57	Denmark	2.61	26.79
3	Singapore	4.39	56.45	58	Paraguay	2.56	26.00
4	Sweden	4.38	56.26	59	Turkey	2.51	25.22
5	Norway	4.33	55.57	60	Uganda	2.50	25.02
6	United Arab Emirates	4.14	52.39	61	Spain	2.50	24.96
7	United States	4.10	51.75	62	Romania	2.50	24.92
8	Malaysia	4.03	50.56	63	Uruguay	2.49	24.82
9	Luxembourg	3.92	48.73	64	Tanzania	2.44	24.07
10	Finland	3.91	48.55	65	Namibia	2.42	23.75
11	Netherlands	3.78	46.31	66	Czech Republic	2.41	23.50
12	United Kingdom	3.77	46.12	67	Russian Federation	2.40	23.33
13	Panama	3.69	44.83	68	Lithuania	2.38	23.06
14	Saudi Arabia	3.69	44.82	69	Trinidad and Tobago	2.38	23.05
15	Switzerland	3.63	43.82	70	Ireland	2.38	22.93
16	Canada	3.63	43.77	71	Armenia	2.37	22.82
17	Indonesia	3.56	42.73	72	Poland	2.36	22.70
18	China	3.53	42.20	73	Macedonia, FYR	2.35	22.48
19	Belgium	3.53	42.15	74	Mali	2.33	22.16
20	New Zealand	3.53	42.11	75	El Salvador	2.29	21.57
21	India	3.40	39.96	76	Vietnam	2.29	21.51
22	Australia	3.34	38.93	77	Portugal	2.28	21.27
23	Montenegro	3.29	38.24	78	Costa Rica	2.24	20.70
24	Bolivia	3.28	38.00	79	Georgia (2011)	2.23	20.56
25	Chile	3.21	36.79	80	Kazakhstan	2.23	20.49
26	Kenya	3.18	36.36	81	Ukraine	2.20	20.06
27	Estonia	3.16	35.98	82	Sri Lanka (2011)	2.20	19.96
28	Germany	3.16	35.98	83	Venezuela, RB	2.19	19.88
29	Malta	3.11	35.13	84	Korea, Rep	2.19	19.81
30	South Africa	3.05	34.24	85	Dominican Republic	2.18	19.72
31	Morocco	3.02	33.70	86	Croatia	2.14	19.00
32	Austria	3.01	33.42	87	Slovenia	2.12	18.66
33	Egypt, Arab Rep.	3.00	33.38	88	Senegal	2.10	18.42
34	Kuwait	2.97	32.90	89	Hungary	2.10	18.31
35	Japan	2.96	32.66	90	Moldova	2.07	17.79
36	Latvia	2.95	32.42	91	Ethiopia	2.07	17.78
37	Cambodia	2.94	32.40	92	Italy	2.03	17.09
38	Cyprus	2.94	32.31	93	Bangladesh	2.01	16.84
39	Peru	2.93	32.17	94	Serbia	1.93	15.58
40	Botswana	2.92	32.01	95	Bosnia and Herzegovina	1.93	15.50
41	Jordan	2.91	31.83	96	Iran, Islamic Rep	1.90	14.98
42	Thailand	2.90	31.60	97	Albania	1.84	14.08
43	Brazil	2.82	30.36	98	Kyrgyz Republic	1.84	13.98
44	Colombia	2.82	30.31	99	Greece	1.83	13.77
45	Pakistan	2.80	29.99	100	Argentina	1.82	13.71
46	France	2.77	29.46	101	Burkina Faso	1.82	13.67
47	Bulgaria	2.77	29.42	102	Algeria	1.78	12.98
48	Azerbaijan	2.76	29.40	103	Mongolia	1.73	12.12
49	Slovak Republic	2.76	29.36				
50	Nicaragua	2.73	28.77				
51	Philippines	2.72	28.74				
52	Lebanon	2.72	28.68				
53	Guatemala	2.67	27.78				
54	Iceland	2.65	27.47				
55	Mexico	2.62	27.05				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

1.2.3 Firm-level technology absorption

Average answer to the question: To what extent do businesses in your country absorb new technology? [1 = not at all; 7 = aggressively absorb] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Sweden	6.30	88.41	56	Ukraine	4.76	62.66
2	Iceland	6.26	87.71	57	Lebanon	4.76	62.61
3	Switzerland	6.20	86.64	58	China	4.75	62.49
4	Japan	6.16	86.07	59	Azerbaijan	4.75	62.45
5	Israel	6.16	85.98	60	Morocco	4.70	61.60
6	Finland	6.05	84.23	61	Croatia	4.67	61.19
7	Singapore	6.02	83.71	62	Slovenia	4.66	61.00
8	Qatar	6.00	83.33	63	Peru	4.65	60.86
9	Norway	6.00	83.30	64	Albania	4.64	60.74
10	Korea, Rep	6.00	83.28	65	Mongolia	4.64	60.63
11	United Arab Emirates	5.96	82.62	66	Trinidad and Tobago	4.63	60.49
12	Austria	5.93	82.17	67	Uruguay	4.62	60.27
13	United States	5.90	81.65	68	Pakistan	4.57	59.58
14	Australia	5.90	81.61	69	Egypt, Arab Rep	4.56	59.40
15	Germany	5.88	81.27	70	Mali	4.54	59.01
16	New Zealand	5.86	80.94	71	Latvia	4.51	58.50
17	Denmark	5.84	80.71	72	Kazakhstan	4.48	58.00
18	Saudi Arabia	5.82	80.36	73	El Salvador	4.47	57.90
19	Netherlands	5.76	79.29	74	Colombia	4.44	57.40
20	United Kingdom	5.73	78.81	75	Greece	4.44	57.25
21	Luxembourg	5.64	77.33	76	Armenia	4.43	57.10
22	Panama	5.61	76.76	77	Botswana	4.39	56.58
23	Portugal	5.58	76.39	78	Montenegro	4.36	55.92
24	Jordan	5.57	76.15	79	Ecuador (2011)	4.33	55.47
25	Malaysia	5.56	75.92	80	Paraguay	4.33	55.45
26	Canada	5.55	75.91	81	Uganda	4.32	55.41
27	Belgium	5.55	75.88	82	Italy	4.32	55.38
28	Malta	5.53	75.55	83	Bosnia and Herzegovina	4.32	55.36
29	Ireland	5.53	75.52	84	Argentina	4.31	55.24
30	Estonia	5.51	75.08	85	Bangladesh	4.25	54.11
31	France	5.49	74.83	86	Poland	4.23	53.85
32	Senegal	5.48	74.72	87	Romania	4.14	52.31
33	South Africa	5.42	73.61	88	Venezuela, RB	4.12	51.97
34	Turkey	5.30	71.63	89	Burkina Faso	4.09	51.49
35	India	5.24	70.64	90	Iran, Islamic Rep	4.08	51.37
36	Kuwait	5.23	70.51	91	Nicaragua	4.05	50.79
37	Sri Lanka (2011)	5.22	70.33	92	Georgia (2011)	4.04	50.62
38	Cyprus	5.20	69.98	93	Bulgaria	3.99	49.87
39	Chile	5.19	69.90	94	Vietnam	3.98	49.73
40	Guatemala	5.19	69.87	95	Moldova	3.96	49.29
41	Philippines	5.17	69.49	96	Tanzania	3.92	48.70
42	Brazil	5.15	69.24	97	Macedonia, FYR	3.81	46.85
43	Spain	5.09	68.14	98	Kyrgyz Republic	3.73	45.53
44	Czech Republic	5.08	67.93	99	Bolivia	3.69	44.84
45	Costa Rica	5.07	67.89	100	Ethiopia	3.68	44.62
46	Lithuania	5.01	66.89	101	Russian Federation	3.63	43.89
47	Thailand	4.98	66.32	102	Serbia	3.55	42.57
48	Indonesia	4.95	65.80	103	Algeria	3.16	36.01
49	Dominican Republic	4.90	65.04				
50	Kenya	4.89	64.85				
51	Slovak Republic	4.88	64.66				
52	Cambodia	4.86	64.38				
53	Mexico	4.84	64.01				
54	Hungary	4.84	63.99				
55	Namibia	4.84	63.92				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

1.2.4 R&D expenditure

Gross expenditure on R&D (% of GDP) | 2010

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Israel	4.40	100.00	56	Pakistan (2009)	0.46	10.12
2	Finland	3.88	88.11	57	Jordan (2008)	0.43	9.43
3	Korea, Rep.	3.74	84.88	58	Tanzania (2007)	0.43	9.43
4	Sweden	3.40	77.14	59	Uruguay (2009)	0.43	9.42
5	Japan (2009)	3.36	76.19	60	Kenya (2007)	0.42	9.02
6	Denmark	3.06	69.39	61	Uganda (2009)	0.41	8.91
7	Switzerland (2008)	2.99	67.82	62	Mexico (2009)	0.40	8.53
8	United States (2009)	2.90	65.67	63	Chile (2008)	0.37	8.07
9	Germany	2.82	63.88	64	Senegal (2008)	0.37	7.92
10	Austria (2011)	2.75	62.32	65	Armenia (2009)	0.27	5.66
11	Iceland (2008)	2.64	59.88	66	Ecuador (2008)	0.26	5.43
12	Singapore (2009)	2.43	54.96	67	Azerbaijan (2009)	0.25	5.21
13	Australia (2008)	2.37	53.72	68	Mali (2007)	0.25	5.19
14	France	2.25	50.95	69	Ethiopia	0.24	5.06
15	Slovenia	2.11	47.61	70	Mongolia (2009)	0.24	5.04
16	Belgium	1.99	44.89	71	Kazakhstan (2009)	0.23	4.74
17	Netherlands	1.83	41.31	72	Macedonia, FYR (2008)	0.23	4.65
18	Canada	1.80	40.59	73	Thailand (2007)	0.21	4.39
19	Ireland	1.79	40.45	74	Egypt, Arab Rep. (2009)	0.21	4.33
20	United Kingdom	1.76	39.76	75	Burkina Faso (2009)	0.20	4.09
21	China (2009)	1.70	38.38	76	Panama	0.19	3.93
22	Norway	1.69	38.22	77	Vietnam (2002)	0.19	3.91
23	Luxembourg	1.63	36.81	78	Georgia (2005)	0.18	3.54
24	Estonia	1.62	36.58	79	Kyrgyz Republic (2009)	0.16	3.14
25	Portugal	1.59	35.85	80	Bolivia (2009)	0.16	3.09
26	Czech Republic	1.56	35.22	81	Colombia	0.16	3.05
27	Spain	1.39	31.20	82	Albania (2008)	0.15	3.00
28	New Zealand (2009)	1.30	29.23	83	Peru (2004)	0.15	2.91
29	Italy	1.26	28.24	84	Sri Lanka (2008)	0.11	2.12
30	Brazil	1.16	26.01	85	Kuwait (2009)	0.11	2.07
31	Hungary	1.16	26.00	86	Philippines (2007)	0.11	2.01
32	Russian Federation	1.16	25.97	87	Saudi Arabia (2009)	0.08	1.41
33	Montenegro (2007)	1.15	25.75	88	Indonesia (2009)	0.08	1.41
34	South Africa (2008)	0.93	20.75	89	El Salvador (2009)	0.08	1.27
35	Serbia (2009)	0.92	20.50	90	Algeria (2005)	0.07	1.03
36	Ukraine (2009)	0.86	19.07	91	Paraguay (2008)	0.06	0.87
37	Turkey	0.84	18.77	92	Guatemala (2009)	0.06	0.77
38	Lithuania	0.80	17.74	93	Trinidad and Tobago (2009)	0.05	0.71
39	Iran, Islamic Rep. (2008)	0.79	17.51	94	Cambodia (2002)	0.05	0.64
40	India (2007)	0.76	16.81	95	Nicaragua (2002)	0.05	0.54
41	Poland	0.74	16.30	96	Bosnia and Herzegovina (2009)	0.02	0.00
42	Croatia	0.73	16.18	n/a	Bangladesh	n/a	n/a
43	Morocco (2006)	0.64	14.02	n/a	Dominican Republic	n/a	n/a
44	Malaysia (2006)	0.63	14.00	n/a	Lebanon	n/a	n/a
45	Slovak Republic	0.63	13.97	n/a	Namibia	n/a	n/a
46	Malta	0.63	13.81	n/a	Qatar	n/a	n/a
47	Latvia	0.60	13.31	n/a	United Arab Emirates	n/a	n/a
48	Greece (2007)	0.60	13.26	n/a	Venezuela, RB	n/a	n/a
49	Bulgaria	0.60	13.11				
50	Argentina (2009)	0.60	13.10				
51	Costa Rica (2009)	0.54	11.87				
52	Moldova (2009)	0.53	11.51				
53	Botswana (2005)	0.52	11.29				
54	Cyprus	0.50	10.82				
55	Romania	0.47	10.24				

Source: UNESCO Institute for Statistics, UIS online database.
(<http://stats.uis.unesco.org>)

1.2.5 ICT access

ICT access index | 2011

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Switzerland	8.89	100.00	56	Panama	5.16	48.55
2	Luxembourg	8.87	99.72	57	Turkey	5.12	48.00
3	Iceland	8.81	98.90	58	Ukraine	4.86	44.41
4	Germany	8.66	96.83	59	Bosnia and Herzegovina	4.67	41.79
5	Sweden	8.50	94.62	60	Jordan	4.64	41.38
6	United Kingdom	8.47	94.21	61	Azerbaijan	4.63	41.24
7	Singapore	8.38	92.97	62	Georgia	4.61	40.97
8	Denmark	8.37	92.83	63	Morocco	4.49	39.31
9	Netherlands	8.34	92.41	64	Iran, Islamic Rep.	4.47	39.03
10	Korea, Rep.	8.30	91.86	65	Egypt, Arab Rep.	4.18	35.03
11	Norway	8.28	91.59	66	Colombia	4.17	34.90
12	France	7.92	86.62	67	Ecuador	4.16	34.76
13	Malta	7.90	86.34	68	China	4.12	34.21
14	Austria	7.88	86.07	69	Mexico	4.08	33.66
15	Japan	7.81	85.10	70	Venezuela, RB.	4.01	32.69
16	Finland	7.74	84.14	71	Vietnam	4.00	32.55
17	Belgium	7.72	83.86	72	Peru	3.87	30.76
18	Australia	7.66	83.03	73	South Africa	3.79	29.66
19	Ireland	7.64	82.76	74	Thailand	3.78	29.52
20	New Zealand	7.61	82.34	75	Mongolia	3.76	29.24
21	Canada	7.54	81.38	76	El Salvador	3.72	28.69
22	United States	7.50	80.83	77	Albania	3.59	26.90
23	Israel	7.34	78.62	78	Paraguay	3.55	26.34
24	Slovenia	7.29	77.93	79	Algeria	3.53	26.07
25	Estonia	7.20	76.69	80	Botswana	3.50	25.66
26	Spain	7.12	75.59	81	Dominican Republic	3.37	23.86
27	Italy	7.11	75.45	81	Indonesia	3.37	23.86
28	Portugal	6.94	73.10	83	Philippines	3.32	23.17
29	Qatar	6.90	72.55	84	Sri Lanka	3.30	22.90
30	United Arab Emirates	6.89	72.41	85	Bolivia	3.23	21.93
31	Russian Federation	6.69	69.66	86	Namibia	3.03	19.17
32	Croatia	6.67	69.38	87	Nicaragua	2.83	16.41
33	Saudi Arabia	6.63	68.83	88	Cambodia	2.53	12.28
34	Lithuania	6.60	68.41	89	India	2.48	11.59
35	Greece	6.56	67.86	90	Pakistan	2.46	11.31
36	Czech Republic	6.53	67.45	91	Senegal	2.36	9.93
37	Hungary	6.48	66.76	92	Kenya	2.34	9.66
38	Cyprus	6.46	66.48	93	Mali	2.19	7.59
38	Poland	6.46	66.48	94	Uganda	1.91	3.72
40	Serbia	6.37	65.24	95	Tanzania	1.85	2.90
41	Slovak Republic	6.32	64.55	96	Burkina Faso	1.82	2.48
42	Uruguay	6.15	62.21	97	Ethiopia	1.64	0.00
43	Latvia	6.13	61.93	n/a	Armenia	n/a	n/a
44	Bulgaria	5.97	59.72	n/a	Bangladesh	n/a	n/a
44	Kazakhstan	5.97	59.72	n/a	Guatemala	n/a	n/a
46	Malaysia	5.85	58.07	n/a	Kuwait	n/a	n/a
47	Romania	5.75	56.69	n/a	Kyrgyz Republic	n/a	n/a
48	Macedonia, FYR	5.73	56.41	n/a	Montenegro	n/a	n/a
49	Moldova	5.69	55.86				
50	Argentina	5.66	55.45				
51	Trinidad and Tobago	5.59	54.48				
52	Lebanon	5.44	52.41				
53	Chile	5.42	52.14				
54	Brazil	5.35	51.17				
55	Costa Rica	5.28	50.21				

Source: International Telecommunication Union, Measuring the Information Society 2012, ICT Development Index 2010–2011. (<http://www.itu.int/ITU-D/ict/publications/idi/>)

1.2.6 Ease of doing business

Ease of doing business index | 2013

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Singapore	1.00	100.00	56	Romania	0.46	46.10
2	New Zealand	0.99	99.10	57	Italy	0.45	45.10
3	United States	0.98	98.10	58	Mongolia	0.44	44.20
4	Denmark	0.97	97.10	59	Greece	0.43	43.20
5	Norway	0.96	96.10	60	Sri Lanka	0.42	42.20
6	United Kingdom	0.95	95.10	61	Kuwait	0.41	41.20
7	Korea, Rep	0.94	94.20	62	Moldova	0.40	40.20
8	Georgia	0.93	93.20	63	Croatia	0.39	39.30
9	Australia	0.92	92.20	64	Albania	0.38	38.30
10	Finland	0.91	91.20	65	Serbia	0.37	37.30
11	Malaysia	0.90	90.20	66	Namibia	0.36	36.30
12	Sweden	0.89	89.30	67	Uruguay	0.35	35.30
13	Iceland	0.88	88.30	68	China	0.34	34.40
14	Ireland	0.87	87.30	69	Guatemala	0.33	33.40
15	Canada	0.86	86.30	70	Morocco	0.32	32.40
16	Thailand	0.85	85.30	71	Vietnam	0.31	31.40
17	Germany	0.84	84.40	72	Malta	0.30	30.40
18	Estonia	0.83	83.40	73	Paraguay	0.30	29.50
19	Saudi Arabia	0.82	82.40	74	Jordan	0.29	28.50
20	Macedonia, FYR	0.81	81.40	75	Pakistan	0.28	27.50
21	Japan	0.80	80.40	76	Egypt, Arab Rep	0.27	26.50
22	Latvia	0.80	79.50	77	Costa Rica	0.26	25.50
23	United Arab Emirates	0.79	78.50	78	Russian Federation	0.25	24.60
24	Lithuania	0.78	77.50	79	El Salvador	0.24	23.60
25	Switzerland	0.77	76.50	80	Lebanon	0.23	22.60
26	Austria	0.76	75.50	81	Dominican Republic	0.22	21.60
27	Portugal	0.75	74.60	82	Nicaragua	0.21	20.60
28	Netherlands	0.74	73.60	83	Uganda	0.20	19.70
29	Armenia	0.73	72.60	84	Kenya	0.19	18.70
30	Belgium	0.72	71.60	85	Argentina	0.18	17.70
31	France	0.71	70.60	86	Bosnia and Herzegovina	0.17	16.70
32	Slovenia	0.70	69.70	87	Ethiopia	0.16	15.70
33	Cyprus	0.69	68.70	88	Indonesia	0.15	14.80
34	Chile	0.68	67.70	89	Bangladesh	0.14	13.80
35	Israel	0.67	66.70	90	Brazil	0.13	12.80
36	South Africa	0.66	65.70	91	India	0.12	11.80
37	Qatar	0.65	64.80	92	Cambodia	0.11	10.80
38	Peru	0.64	63.80	93	Tanzania	0.10	9.90
39	Spain	0.63	62.80	94	Ukraine	0.09	8.90
40	Colombia	0.62	61.80	95	Philippines	0.08	7.90
41	Slovak Republic	0.61	60.80	96	Ecuador	0.07	6.90
42	Mexico	0.60	59.90	97	Iran, Islamic Rep	0.06	5.90
43	Kazakhstan	0.59	58.90	98	Mali	0.05	5.00
44	Montenegro	0.58	57.90	99	Algeria	0.04	4.00
45	Hungary	0.57	56.90	100	Burkina Faso	0.03	3.00
46	Poland	0.56	55.90	101	Bolivia	0.02	2.00
47	Luxembourg	0.55	55.00	102	Senegal	0.01	1.00
48	Botswana	0.54	54.00	103	Venezuela, RB	0.00	0.00
49	Panama	0.53	53.00				
50	Czech Republic	0.52	52.00				
51	Bulgaria	0.51	51.00				
52	Azerbaijan	0.50	50.00				
53	Trinidad and Tobago	0.49	49.10				
54	Kyrgyz Republic	0.48	48.10				
55	Turkey	0.47	47.10				

Source: World Bank, Ease of Doing Business Index 2013, Doing Business 2013. (<http://www.doingbusiness.org/>)

1.3.1 Labour market flexibility

Labour market flexibility index | 2010

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	United States	9.06	100.00	56	Austria	6.33	49.94
2	New Zealand	8.51	89.95	57	Dominican Republic	6.31	49.55
3	United Arab Emirates	8.50	89.72	58	Uruguay	6.20	47.57
4	Canada	8.49	89.65	59	Cyprus	6.17	47.08
5	Jordan	8.41	88.09	60	Ukraine	6.08	45.44
6	Japan	8.30	86.20	61	South Africa	6.07	45.23
7	United Kingdom	8.24	85.07	62	Russian Federation	6.05	44.89
8	Switzerland	8.19	84.13	63	Philippines	6.02	44.23
9	Montenegro	8.01	80.78	64	Estonia	5.96	43.26
10	India	8.00	80.71	65	Albania	5.93	42.57
11	Saudi Arabia	7.96	79.96	66	Colombia	5.88	41.77
12	Ireland	7.93	79.43	67	Tanzania	5.84	40.99
13	Australia	7.90	78.70	68	France	5.83	40.77
14	Malaysia	7.87	78.21	69	Chile	5.79	40.08
15	Macedonia, FYR	7.85	77.78	70	Serbia	5.70	38.45
16	Georgia	7.80	76.94	71	Pakistan	5.68	38.11
17	Bulgaria	7.74	75.88	72	Finland	5.63	37.10
18	Singapore	7.72	75.52	73	Thailand	5.63	37.04
19	Iceland	7.72	75.46	74	Moldova	5.59	36.48
20	Uganda	7.71	75.35	75	China	5.57	35.99
21	Qatar	7.69	74.95	76	Luxembourg	5.55	35.66
22	Namibia	7.69	74.92	77	Mexico	5.53	35.29
23	Czech Republic	7.67	74.57	78	Slovenia	5.42	33.23
24	Burkina Faso	7.66	74.30	79	Vietnam	5.40	32.98
25	Lithuania	7.65	74.12	80	Panama	5.40	32.88
26	Ethiopia	7.59	73.05	81	Germany	5.35	32.01
27	Kenya	7.52	71.85	82	Argentina	5.27	30.46
28	Cambodia	7.51	71.72	83	Mali	5.21	29.49
29	Denmark	7.46	70.80	84	Israel	5.19	29.07
30	Poland	7.42	70.05	85	Algeria	5.17	28.64
31	Belgium	7.38	69.30	86	Egypt, Arab Rep.	4.90	23.68
32	Trinidad and Tobago	7.38	69.20	87	Turkey	4.76	21.24
33	Peru	7.36	68.82	88	Spain	4.72	20.40
34	Slovak Republic	7.33	68.26	89	Portugal	4.67	19.55
35	Hungary	7.32	68.06	90	Indonesia	4.66	19.39
36	Mongolia	7.23	66.58	91	Korea, Rep.	4.58	17.93
37	Kazakhstan	7.14	64.81	92	Guatemala	4.57	17.71
38	Botswana	7.09	63.92	93	Paraguay	4.56	17.51
39	Romania	6.93	61.01	94	Senegal	4.55	17.31
40	Kuwait	6.93	60.93	95	Bolivia	4.54	17.20
41	Azerbaijan	6.86	59.78	96	Brazil	4.47	15.75
42	Latvia	6.82	58.92	97	Iran, Islamic Rep.	4.37	14.06
43	Malta	6.76	57.94	98	Greece	4.36	13.74
44	Nicaragua	6.73	57.34	99	Norway	4.34	13.36
45	Netherlands	6.72	57.15	100	Ecuador	4.21	11.01
46	Kyrgyz Republic	6.63	55.46	101	Morocco	4.12	9.50
47	Armenia	6.61	55.09	102	Venezuela, RB.	3.61	0.00
48	Bangladesh	6.58	54.50	n/a	Lebanon	n/a	n/a
49	Costa Rica	6.55	53.97				
50	Italy	6.48	52.67				
51	Sri Lanka	6.44	52.04				
52	Sweden	6.43	51.84				
53	Bosnia and Herzegovina	6.43	51.72				
54	Croatia	6.40	51.25				
55	El Salvador	6.38	50.91				

Source: Fraser Institute, Economic Freedom of the World: 2012 Annual Report. (<http://www.freetheworld.com/>)

1.3.2 Reliance on professional management

Average answer to the question: In your country, who holds senior management positions?
[1 = usually relatives or friends without regard to merit; 7 = mostly professional managers
chosen for merit and qualifications] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	New Zealand	6.30	88.28	56	Portugal	4.14	52.28
2	Finland	6.28	88.06	57	Guatemala	4.12	51.99
3	Netherlands	6.13	85.53	58	Colombia	4.12	51.98
4	Norway	6.11	85.18	59	Bosnia and Herzegovina	4.06	51.01
5	Sweden	6.05	84.25	60	Montenegro	4.01	50.24
6	Switzerland	6.04	84.05	61	Slovenia	4.01	50.24
7	Canada	6.00	83.30	62	Kazakhstan	3.98	49.62
8	Denmark	5.99	83.14	63	Malta	3.96	49.34
9	United Kingdom	5.97	82.80	64	Jordan	3.95	49.12
10	Australia	5.93	82.17	65	Hungary	3.93	48.84
11	Singapore	5.90	81.68	66	Armenia	3.93	48.76
12	Ireland	5.87	81.14	67	Georgia (2011)	3.92	48.66
13	South Africa	5.60	76.71	68	Lebanon	3.92	48.59
14	Germany	5.56	75.98	69	Uganda	3.91	48.45
15	Qatar	5.55	75.78	70	Senegal	3.90	48.36
16	Japan	5.50	74.94	71	Uruguay	3.84	47.37
17	Austria	5.45	74.17	72	Morocco	3.84	47.33
18	United States	5.43	73.85	73	Moldova	3.84	47.26
19	Belgium	5.43	73.77	74	Kuwait	3.81	46.87
20	Luxembourg	5.40	73.31	75	Pakistan	3.81	46.82
21	Iceland	5.33	72.09	76	Azerbaijan	3.78	46.40
22	Malaysia	5.32	71.99	77	Greece	3.78	46.29
23	Estonia	5.21	70.20	78	Ecuador (2011)	3.71	45.24
24	United Arab Emirates	5.20	69.93	79	Bulgaria	3.70	44.99
25	Israel	5.19	69.83	80	Vietnam	3.69	44.86
26	Botswana	5.16	69.31	81	Russian Federation	3.62	43.72
27	France	5.01	66.82	82	Croatia	3.60	43.41
28	Sri Lanka (2011)	4.98	66.31	83	Mongolia	3.60	43.30
29	Saudi Arabia	4.98	66.29	84	Italy	3.56	42.72
30	Philippines	4.92	65.30	85	Bolivia	3.56	42.70
31	Brazil	4.89	64.79	86	Panama	3.55	42.53
32	Korea, Rep	4.89	64.77	87	El Salvador	3.55	42.48
33	Chile	4.87	64.42	88	Ethiopia	3.55	42.42
34	Spain	4.68	61.33	89	Bangladesh	3.51	41.90
35	Costa Rica	4.64	60.67	90	Paraguay	3.51	41.85
36	India	4.58	59.67	91	Cyprus	3.51	41.83
37	Peru	4.58	59.65	92	Iran, Islamic Rep	3.51	41.79
38	China	4.55	59.09	93	Romania	3.50	41.64
39	Czech Republic	4.49	58.11	94	Burkina Faso	3.49	41.50
40	Indonesia	4.45	57.53	95	Nicaragua	3.49	41.45
41	Argentina	4.43	57.15	96	Kyrgyz Republic	3.46	41.05
42	Lithuania	4.42	57.08	97	Dominican Republic	3.44	40.61
43	Cambodia	4.36	56.07	98	Ukraine	3.42	40.39
44	Latvia	4.34	55.61	99	Macedonia, FYR	3.36	39.31
45	Turkey	4.29	54.81	100	Egypt, Arab Rep	3.29	38.11
46	Kenya	4.28	54.64	101	Serbia	3.27	37.89
47	Trinidad and Tobago	4.26	54.35	102	Mali	3.27	37.81
48	Mexico	4.25	54.24	103	Algeria	2.28	21.31
49	Slovak Republic	4.20	53.26				
50	Thailand	4.19	53.25				
51	Albania	4.18	53.08				
52	Poland	4.18	52.99				
53	Venezuela, RB	4.17	52.90				
54	Namibia	4.17	52.81				
55	Tanzania	4.14	52.34				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

PILLAR 2:

ATTRACT

2.1.1 FDI inflow

FDI inflows (% of GDP) | 2011

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Mongolia	55.17	100.00	56	Azerbaijan	2.31	18.57
1	Luxembourg	29.86	100.00	57	Sweden	2.26	18.25
1	Singapore	25.15	100.00	58	United Kingdom	2.24	18.07
1	Belgium	17.38	100.00	59	Indonesia	2.23	18.02
1	Nicaragua	13.34	100.00	60	Slovak Republic	2.23	17.98
6	Montenegro	12.27	92.11	61	United Arab Emirates	2.13	17.27
7	Kyrgyz Republic	12.17	91.35	62	Guatemala	2.08	16.91
8	Panama	9.06	68.41	63	New Zealand	2.07	16.84
9	Albania	8.05	60.93	64	Netherlands	2.04	16.60
10	Lebanon	7.75	58.75	65	Turkey	2.04	16.57
11	Chile	7.39	56.08	66	Slovenia	2.02	16.42
12	Kazakhstan	7.23	54.92	67	Senegal	1.98	16.17
13	Iceland	7.19	54.59	68	Spain	1.95	15.96
14	Namibia	6.96	52.92	69	China	1.76	14.49
15	Cambodia	6.94	52.79	70	Mali	1.72	14.22
16	Georgia	6.77	51.48	71	Mexico	1.70	14.07
17	Vietnam	6.16	46.98	72	El Salvador	1.69	14.03
18	Ireland	6.03	46.00	73	Venezuela, RB	1.69	14.00
19	Malta	6.02	45.94	74	India	1.62	13.52
20	Latvia	5.53	42.33	75	Argentina	1.62	13.47
21	Serbia	5.31	40.76	76	United States	1.50	12.62
22	Costa Rica	5.18	39.75	77	France	1.47	12.40
23	Armenia	5.06	38.86	78	Romania	1.43	12.10
24	Jordan	4.83	37.17	79	South Africa	1.42	12.04
25	Uganda	4.82	37.12	80	Algeria	1.38	11.73
26	Israel	4.68	36.06	81	Paraguay	1.35	11.53
27	Uruguay	4.59	35.42	82	Italy	1.33	11.33
28	Tanzania	4.58	35.35	83	Estonia	1.16	10.08
29	Peru	4.56	35.17	84	Germany	1.13	9.88
30	Denmark	4.47	34.49	85	Cyprus	1.11	9.72
31	Ukraine	4.37	33.78	86	Bangladesh	1.05	9.27
32	Portugal	4.33	33.52	87	Kenya	0.98	8.80
33	Malaysia	4.29	33.22	88	Iran, Islamic Rep.	0.88	8.05
34	Dominican Republic	4.16	32.22	89	Ecuador	0.84	7.74
35	Macedonia, FYR	4.15	32.17	90	Norway	0.75	7.06
36	Colombia	3.97	30.85	91	Ethiopia	0.68	6.58
37	Moldova	3.92	30.43	92	Pakistan	0.63	6.22
38	Bolivia	3.51	27.43	93	Greece	0.61	6.04
39	Bulgaria	3.48	27.25	94	Philippines	0.56	5.68
40	Austria	3.38	26.45	95	Sri Lanka	0.51	5.28
41	Hungary	3.36	26.32	96	Korea, Rep.	0.42	4.62
42	Botswana	3.35	26.26	97	Kuwait	0.23	3.20
43	Saudi Arabia	2.95	23.30	98	Burkina Faso	0.08	2.10
44	Poland	2.95	23.28	99	Finland	0.02	1.68
45	Russian Federation	2.87	22.73	100	Japan	-0.03	1.31
46	Lithuania	2.85	22.55	101	Switzerland	-0.03	1.31
47	Thailand	2.77	21.98	102	Qatar	-0.05	1.17
48	Brazil	2.76	21.91	103	Egypt, Arab Rep.	-0.21	0.00
49	Australia	2.71	21.55				
50	Trinidad and Tobago	2.60	20.74				
51	Morocco	2.51	20.09				
52	Czech Republic	2.51	20.06				
53	Bosnia and Herzegovina	2.38	19.14				
54	Canada	2.36	18.94				
55	Croatia	2.34	18.80				

Source: United Nations Conference on Trade and Development (UNCTAD) Division on Investment and Enterprise, UNCTAD STAT. (<http://unctadstat.unctad.org/>)

2.1.2 Qualified labour inflow

Average answer to the question: Does your country retain and attract talented people?
[1 = no, the best and brightest normally leave to pursue opportunities in other countries;
7 = yes, there are many opportunities for talented people within the country] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Switzerland	6.29	88.09	56	Senegal	3.38	39.74
2	Singapore	5.72	78.61	57	Turkey	3.38	39.63
3	Qatar	5.67	77.89	58	Bolivia	3.37	39.49
4	United Kingdom	5.62	77.08	59	Estonia	3.36	39.31
5	United States	5.58	76.37	60	Namibia	3.32	38.66
6	United Arab Emirates	5.51	75.12	61	Uruguay	3.31	38.56
7	Canada	5.49	74.76	62	Spain	3.31	38.52
8	Norway	5.37	72.79	63	Slovenia	3.31	38.48
9	Netherlands	5.27	71.09	64	Czech Republic	3.31	38.42
10	Sweden	5.16	69.35	65	Armenia	3.20	36.66
11	Finland	5.07	67.88	66	Colombia	3.20	36.59
12	Saudi Arabia	5.05	67.46	67	Portugal	3.18	36.36
13	Chile	4.96	66.00	68	Ecuador (2011)	3.18	36.26
14	Luxembourg	4.92	65.34	69	Tanzania	3.15	35.75
15	Korea, Rep	4.81	63.55	70	Latvia	3.13	35.51
16	Belgium	4.75	62.46	71	Albania	3.10	35.01
17	Costa Rica	4.75	62.45	72	Uganda	3.08	34.62
18	Malaysia	4.73	62.20	73	Vietnam	3.08	34.61
19	Germany	4.67	61.23	74	Nicaragua	3.05	34.13
20	Ireland	4.60	60.04	75	Mali	3.03	33.80
21	Iceland	4.59	59.84	76	Georgia (2011)	2.99	33.16
22	Brazil	4.58	59.63	77	Paraguay	2.97	32.88
23	Panama	4.49	58.14	78	Poland	2.89	31.53
24	India	4.47	57.75	79	Iran, Islamic Rep	2.88	31.30
25	Australia	4.44	57.25	80	Mongolia	2.81	30.18
26	Austria	4.41	56.84	81	Russian Federation	2.80	30.07
27	Denmark	4.27	54.42	82	Bangladesh	2.77	29.48
28	Cambodia	4.15	52.44	83	Burkina Faso	2.76	29.38
29	Thailand	4.14	52.27	84	Italy	2.76	29.33
30	Malta	4.13	52.15	85	Lithuania	2.68	28.04
31	Israel	4.12	52.01	86	Ethiopia	2.67	27.87
32	China	4.11	51.90	87	Lebanon	2.51	25.09
33	Japan	4.10	51.66	88	Slovak Republic	2.47	24.42
34	Indonesia	4.00	49.93	89	Greece	2.42	23.64
35	Peru	3.94	49.05	90	El Salvador	2.38	22.92
36	Botswana	3.85	47.42	91	Croatia	2.36	22.73
37	Kuwait	3.82	47.08	92	Bulgaria	2.35	22.57
38	Sri Lanka (2011)	3.81	46.83	93	Hungary	2.31	21.91
39	South Africa	3.79	46.43	94	Ukraine	2.28	21.31
40	France	3.75	45.78	95	Egypt, Arab Rep	2.24	20.66
41	Guatemala	3.75	45.76	96	Macedonia, FYR	2.11	18.44
42	Jordan	3.66	44.39	97	Romania	2.07	17.80
43	Mexico	3.64	43.96	98	Moldova	2.07	17.79
44	Morocco	3.61	43.46	99	Venezuela, RB	2.05	17.48
45	Trinidad and Tobago	3.59	43.11	100	Kyrgyz Republic	1.95	15.84
46	Cyprus	3.58	42.99	101	Bosnia and Herzegovina	1.92	15.35
47	New Zealand	3.58	42.95	102	Serbia	1.86	14.34
48	Dominican Republic	3.57	42.83	103	Algeria	1.54	9.00
49	Montenegro	3.55	42.53				
50	Pakistan	3.50	41.74				
51	Kenya	3.43	40.42				
52	Argentina	3.42	40.26				
53	Azerbaijan	3.41	40.23				
54	Philippines	3.40	40.06				
55	Kazakhstan	3.40	39.97				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

2.1.3 Prevalence of foreign ownership

Average answer to the question: How prevalent is foreign ownership of companies in your country?
[1 = very rare; 7 = highly prevalent] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Luxembourg	6.45	90.88	56	Jordan	4.58	59.73
2	Slovak Republic	6.10	84.97	57	Brazil	4.53	58.88
3	Singapore	6.09	84.84	58	Paraguay	4.47	57.80
4	United Kingdom	6.07	84.54	59	India	4.46	57.61
5	New Zealand	5.97	82.80	60	Portugal	4.44	57.29
6	Ireland	5.83	80.51	61	Bosnia and Herzegovina	4.43	57.18
7	Australia	5.83	80.51	62	Colombia	4.42	57.05
8	Panama	5.82	80.37	63	Lithuania	4.42	57.00
9	Canada	5.73	78.79	64	Japan	4.42	56.93
10	Belgium	5.72	78.66	65	Korea, Rep.	4.40	56.67
11	Uruguay	5.72	78.64	66	Greece	4.37	56.16
12	Chile	5.67	77.85	67	Kenya	4.36	56.05
13	Switzerland	5.63	77.16	68	Cambodia	4.36	56.02
14	Hungary	5.59	76.57	69	Tanzania	4.34	55.61
15	Czech Republic	5.59	76.42	70	Armenia	4.30	54.92
16	France	5.55	75.90	71	Azerbaijan	4.29	54.81
17	Costa Rica	5.53	75.45	72	China	4.28	54.62
18	Netherlands	5.52	75.30	73	Nicaragua	4.26	54.38
19	Sweden	5.50	75.04	74	Turkey	4.21	53.47
20	Mexico	5.50	74.96	75	Kazakhstan	4.13	52.16
21	Estonia	5.41	73.50	76	Albania	4.13	52.15
22	Finland	5.38	72.96	77	Burkina Faso	4.09	51.51
23	Norway	5.33	72.22	78	Romania	4.08	51.37
24	South Africa	5.32	72.06	79	Bulgaria	4.07	51.23
25	Uganda	5.32	71.98	80	Croatia	4.05	50.76
26	United Arab Emirates	5.31	71.82	81	Egypt, Arab Rep.	4.04	50.68
27	Peru	5.30	71.71	82	Vietnam	4.02	50.39
28	Botswana	5.29	71.49	83	Mali	4.01	50.11
29	Israel	5.28	71.35	84	Ecuador (2011)	3.99	49.91
30	Denmark	5.24	70.74	85	Bangladesh	3.97	49.53
31	Senegal	5.24	70.65	86	Italy	3.97	49.49
32	Germany	5.14	69.04	87	Pakistan	3.94	48.98
33	Mongolia	5.14	69.03	88	Moldova	3.94	48.97
34	Spain	5.10	68.37	89	Georgia (2011)	3.93	48.88
35	Austria	5.10	68.29	90	Lebanon	3.88	47.97
36	Sri Lanka (2011)	5.09	68.16	91	Macedonia, FYR	3.85	47.47
37	Morocco	5.08	67.95	92	Serbia	3.80	46.71
38	Namibia	5.05	67.56	93	Ukraine	3.62	43.62
39	United States	5.05	67.48	94	Kyrgyz Republic	3.56	42.60
40	Malaysia	5.04	67.35	95	Venezuela, RB	3.53	42.15
41	Dominican Republic	5.00	66.72	96	Bolivia	3.51	41.86
42	Argentina	4.92	65.37	97	Slovenia	3.45	40.77
43	Latvia	4.92	65.34	98	Russian Federation	3.40	40.00
44	Guatemala	4.90	65.01	99	Ethiopia	3.29	38.17
45	El Salvador	4.87	64.42	100	Algeria	3.27	37.83
46	Qatar	4.86	64.41	101	Kuwait	3.13	35.43
47	Thailand	4.83	63.90	102	Iceland	3.06	34.41
48	Philippines	4.81	63.47	103	Iran, Islamic Rep.	2.24	20.65
49	Cyprus	4.74	62.25				
50	Malta	4.66	61.01				
51	Poland	4.66	60.95				
52	Trinidad and Tobago	4.62	60.33				
53	Indonesia	4.62	60.26				
54	Saudi Arabia	4.61	60.24				
55	Montenegro	4.61	60.09				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

2.2.1 Tolerance of minorities

Percentage of respondents who answered yes for the question: Is the area where you live a good place or not a good place to live for racial and ethnic minorities? | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Canada	92.00	100.00	56	Peru	67.10	72.93
2	New Zealand	90.60	98.48	57	United Arab Emirates	67.00	72.83
3	Australia	89.80	97.61	58	Indonesia	66.20	71.96
4	Bangladesh	89.70	97.50	59	Hungary	65.20	70.87
5	United Kingdom	89.20	96.96	60	Croatia	64.50	70.11
6	Ireland	88.90	96.63	60	Trinidad and Tobago	64.50	70.11
7	Sweden	88.00	95.65	62	Slovak Republic	64.00	69.57
8	Iceland	87.90	95.54	63	Iran, Islamic Rep	63.40	68.91
9	Germany	87.60	95.22	64	Macedonia, FYR	62.40	67.83
10	Denmark	87.40	95.00	65	Kenya	62.10	67.50
11	Norway	86.20	93.70	66	Bolivia	61.60	66.96
12	Mali	85.70	93.15	67	Morocco	61.50	66.85
13	Senegal	85.10	92.50	67	Vietnam	61.50	66.85
14	Luxembourg	84.60	91.96	69	Latvia	61.30	66.63
15	Netherlands	84.30	91.63	70	Japan	60.70	65.98
16	Brazil	84.00	91.30	70	South Africa	60.70	65.98
17	United States	83.60	90.87	72	Azerbaijan	59.90	65.11
18	Burkina Faso	83.10	90.33	73	Lithuania	59.00	64.13
19	Kazakhstan	83.00	90.22	73	Uganda	59.00	64.13
20	Uruguay	82.60	89.78	75	El Salvador	57.70	62.72
21	Portugal	82.00	89.13	76	Russian Federation	57.50	62.50
22	France	81.90	89.02	76	Ukraine	57.50	62.50
23	India	80.90	87.93	78	Armenia	57.40	62.39
24	Spain	79.70	86.63	79	Mexico	57.00	61.96
25	Costa Rica	79.60	86.52	80	Dominican Republic	56.20	61.09
26	Georgia	79.10	85.98	81	Estonia	55.80	60.65
26	Sri Lanka	79.10	85.98	82	Philippines	55.00	59.78
28	Argentina	77.80	84.57	83	Cambodia	54.70	59.46
29	Singapore	77.70	84.46	84	Czech Republic	54.50	59.24
30	Belgium	77.20	83.91	85	Poland	54.20	58.91
31	Nicaragua	76.30	82.93	86	Turkey	52.50	57.07
32	Namibia	75.90	82.50	87	China	52.30	56.85
33	Bulgaria	75.10	81.63	88	Mongolia	51.90	56.41
34	Malaysia	73.90	80.33	89	Albania	51.20	55.65
35	Kuwait	73.80	80.22	90	Israel	50.10	54.46
36	Paraguay	72.80	79.13	91	Tanzania	49.10	53.37
37	Pakistan	72.70	79.02	92	Moldova	47.90	52.07
38	Austria	72.30	78.59	93	Ethiopia	47.60	51.74
39	Finland	71.90	78.15	94	Bosnia and Herzegovina	46.20	50.22
40	Panama	71.70	77.93	95	Greece	43.40	47.17
41	Botswana	71.50	77.72	96	Lebanon	43.00	46.74
42	Slovenia	71.40	77.61	97	Saudi Arabia	37.60	40.87
42	Switzerland	71.40	77.61	98	Jordan	29.30	31.85
44	Kyrgyz Republic	71.30	77.50	99	Thailand	27.10	29.46
45	Cyprus	71.20	77.39	100	Egypt, Arab Rep	22.00	23.91
46	Italy	71.00	77.17	101	Algeria	21.90	23.80
47	Korea, Rep	70.70	76.85	102	Serbia	0.00	0.00
48	Malta	70.30	76.41	n/a	Qatar	n/a	n/a
49	Guatemala	70.20	76.30				
50	Montenegro	70.10	76.20				
51	Ecuador	69.80	75.87				
52	Colombia	69.50	75.54				
53	Venezuela, RB	68.80	74.78				
54	Chile	68.40	74.35				
55	Romania	67.80	73.70				

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>)
Last accessed April 2013.

2.2.2 Tolerance of immigrants

Percentage of respondents who answered yes for the question: Is the area where you live a good place or not a good place to live for immigrants? | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	New Zealand	93.70	100.00	56	Panama	63.60	67.88
2	Canada	90.80	96.91	57	Philippines	63.40	67.66
3	Australia	90.60	96.69	57	Sri Lanka	63.40	67.66
4	Sweden	89.30	95.30	59	Lebanon	62.40	66.60
5	Denmark	88.90	94.88	59	Slovak Republic	62.40	66.60
6	Norway	88.80	94.77	61	Armenia	61.90	66.06
7	Ireland	88.50	94.45	62	Bulgaria	61.70	65.85
8	Iceland	88.40	94.34	63	Georgia	58.80	62.75
9	Uruguay	88.00	93.92	64	Dominican Republic	58.60	62.54
10	United Arab Emirates	86.80	92.64	65	El Salvador	58.50	62.43
11	Netherlands	86.20	92.00	66	Russian Federation	58.10	62.01
12	Portugal	85.90	91.68	67	Poland	57.90	61.79
13	Spain	84.60	90.29	68	Czech Republic	57.80	61.69
14	Paraguay	84.40	90.07	69	Namibia	57.60	61.47
15	Luxembourg	84.00	89.65	70	Bosnia and Herzegovina	57.40	61.26
16	Germany	83.90	89.54	70	South Africa	57.40	61.26
17	United States	83.50	89.11	70	Vietnam	57.40	61.26
18	Argentina	82.60	88.15	73	Tanzania	57.20	61.05
19	United Kingdom	82.10	87.62	74	Ukraine	57.00	60.83
20	Saudi Arabia	80.40	85.81	75	Kyrgyz Republic	55.60	59.34
21	Brazil	80.00	85.38	76	Croatia	55.30	59.02
22	Bangladesh	79.80	85.17	76	Slovenia	55.30	59.02
23	Burkina Faso	79.00	84.31	78	Iran, Islamic Rep	55.10	58.80
24	Mali	78.60	83.88	79	Romania	53.10	56.67
25	Kazakhstan	78.30	83.56	80	Mexico	53.00	56.56
26	France	77.10	82.28	81	Lithuania	50.30	53.68
27	Belgium	76.70	81.86	82	Moldova	50.20	53.58
28	Nicaragua	75.70	80.79	83	Ethiopia	49.80	53.15
29	Senegal	75.30	80.36	84	Mongolia	49.50	52.83
30	Kuwait	74.30	79.30	85	Algeria	49.10	52.40
31	Switzerland	74.10	79.08	85	Guatemala	49.10	52.40
32	Finland	73.30	78.23	87	Pakistan	48.70	51.97
33	Botswana	73.20	78.12	88	Turkey	47.90	51.12
34	Costa Rica	72.40	77.27	89	Greece	46.60	49.73
35	Malta	72.00	76.84	90	Albania	45.00	48.03
36	Colombia	70.70	75.45	91	Estonia	43.10	46.00
37	Austria	70.50	75.24	92	India	41.50	44.29
38	Chile	68.60	73.21	93	Jordan	39.10	41.73
39	Morocco	68.50	73.11	94	China	38.90	41.52
40	Bolivia	68.40	73.00	95	Israel	38.50	41.09
41	Azerbaijan	68.20	72.79	96	Indonesia	38.30	40.88
42	Montenegro	68.10	72.68	97	Latvia	38.00	40.55
43	Venezuela, RB	67.90	72.47	98	Cambodia	32.50	34.69
44	Hungary	67.30	71.82	99	Egypt, Arab Rep	26.50	28.28
45	Trinidad and Tobago	67.10	71.61	100	Thailand	20.50	21.88
46	Peru	67.00	71.50	101	Malaysia	18.40	19.64
47	Italy	66.90	71.40	102	Serbia	0.00	0.00
48	Ecuador	66.30	70.76	n/a	Qatar	n/a	n/a
49	Macedonia, FYR	66.00	70.44				
50	Singapore	65.90	70.33				
51	Uganda	65.80	70.22				
52	Japan	65.30	69.69				
53	Kenya	64.40	68.73				
54	Cyprus	64.10	68.41				
55	Korea, Rep	63.70	67.98				

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>)
Last accessed April 2013.

2.2.3 Social mobility

Average answer to the question: To what extent do individuals in your country have the opportunity to improve their economic situation through their personal efforts regardless of the socioeconomic status of their parents? [1 = little opportunity exists to improve one's economic situation; 7 = significant opportunity exists to improve one's economic situation] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Finland	6.46	91.01	56	Namibia	4.16	52.65
2	Switzerland	6.29	88.11	57	Mexico	4.14	52.35
3	New Zealand	6.28	87.98	58	Indonesia	4.12	52.01
4	Denmark	6.17	86.17	59	Pakistan	4.11	51.84
5	Canada	6.13	85.43	60	South Africa	4.11	51.84
6	Iceland	6.11	85.08	61	Morocco	4.11	51.80
7	Norway	6.08	84.63	62	Iran, Islamic Rep.	4.09	51.50
8	Austria	6.07	84.45	63	Peru	4.09	51.44
9	Australia	5.94	82.35	64	Poland	4.06	51.02
10	Netherlands	5.93	82.21	65	Armenia	4.04	50.62
11	Qatar	5.88	81.36	66	Russian Federation	4.03	50.51
12	United Arab Emirates	5.87	81.19	67	Senegal	3.94	49.05
13	Belgium	5.84	80.71	68	Paraguay	3.92	48.64
14	Luxembourg	5.83	80.56	69	Bangladesh	3.90	48.37
15	Singapore	5.82	80.27	70	Korea, Rep.	3.89	48.23
16	Japan	5.64	77.38	71	Uganda	3.87	47.84
17	Ireland	5.60	76.69	72	Bolivia	3.86	47.71
18	Germany	5.54	75.59	73	Egypt, Arab Rep.	3.86	47.60
19	United States	5.53	75.57	74	Cambodia	3.86	47.60
20	United Kingdom	5.47	74.53	75	Azerbaijan	3.82	47.02
21	Estonia	5.46	74.28	76	Greece	3.74	45.74
22	Saudi Arabia	5.43	73.88	77	Italy	3.73	45.51
23	Sweden	5.35	72.54	78	Vietnam	3.65	44.13
24	Malaysia	5.08	67.97	79	Kyrgyz Republic	3.64	44.02
25	Costa Rica	4.98	66.26	80	Macedonia, FYR	3.63	43.90
26	Cyprus	4.80	63.30	81	Croatia	3.62	43.66
27	Panama	4.74	62.37	82	Argentina	3.59	43.17
28	Czech Republic	4.74	62.36	83	Kenya	3.59	43.15
29	Malta	4.74	62.26	84	Bulgaria	3.53	42.12
30	Spain	4.72	62.03	85	Colombia	3.52	42.03
31	Slovenia	4.72	62.02	86	Nicaragua	3.49	41.58
32	Botswana	4.69	61.48	87	Dominican Republic	3.47	41.13
33	Brazil	4.65	60.89	88	Tanzania	3.42	40.37
34	Latvia	4.64	60.66	89	Burkina Faso	3.41	40.24
35	India	4.64	60.65	90	Moldova	3.38	39.63
36	Guatemala	4.62	60.40	91	Hungary	3.29	38.20
37	Chile	4.59	59.90	92	Mali	3.29	38.10
38	Portugal	4.58	59.70	93	Venezuela, RB	3.13	35.53
39	Uruguay	4.58	59.67	94	Serbia	3.06	34.33
40	Lithuania	4.57	59.55	95	Romania	3.02	33.67
41	Slovak Republic	4.57	59.48	96	Algeria	3.00	33.33
42	Israel	4.57	59.43	97	Ukraine	2.88	31.38
43	Kuwait	4.51	58.56	98	El Salvador	2.68	27.98
44	Turkey	4.48	57.97	99	Bosnia and Herzegovina	1.99	16.58
45	France	4.44	57.30	n/a	Albania	n/a	n/a
46	Thailand	4.42	57.08	n/a	Ecuador	n/a	n/a
47	Lebanon	4.38	56.30	n/a	Georgia	n/a	n/a
48	Philippines	4.37	56.09	n/a	Sri Lanka	n/a	n/a
49	Jordan	4.36	55.99				
50	Mongolia	4.35	55.84				
51	Montenegro	4.35	55.83				
52	Trinidad and Tobago	4.35	55.77				
53	China	4.28	54.59				
54	Ethiopia	4.23	53.86				
55	Kazakhstan	4.22	53.61				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

2.2.4 Female professionals and technical workers

Ratio of female professionals and technical workers over male value | 2011

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Lithuania	2.04	100.00	56	Spain	0.93	91.60
1	Kazakhstan (2008)	2.02	100.00	57	United Kingdom	0.93	91.58
1	Moldova (2008)	1.98	100.00	58	Norway	0.92	90.82
1	Latvia	1.86	100.00	59	Czech Republic	0.92	90.40
1	Russian Federation (2008)	1.80	100.00	60	Netherlands	0.90	88.82
1	Estonia	1.79	100.00	61	Sri Lanka (2008)	0.89	87.61
1	Ukraine (2008)	1.77	100.00	62	France	0.88	86.42
1	Kyrgyz Republic (2006)	1.67	100.00	63	Austria	0.88	86.14
1	Bulgaria	1.65	100.00	64	Singapore	0.88	85.83
1	Philippines (2008)	1.64	100.00	65	Luxembourg	0.87	85.06
1	Georgia (2007)	1.62	100.00	66	Chile (2002)	0.86	84.00
1	Armenia (2008)	1.49	100.00	67	Switzerland	0.86	83.97
1	Poland	1.46	100.00	68	Italy	0.85	83.03
1	Iceland	1.45	100.00	69	Peru (2008)	0.84	81.35
1	Slovak Republic	1.37	100.00	70	Indonesia (2008)	0.81	78.53
1	Serbia (2010)	1.35	100.00	71	Costa Rica	0.74	69.50
1	Slovenia	1.34	100.00	72	Malaysia (2010)	0.72	67.76
1	Hungary	1.33	100.00	73	Mexico (2008)	0.70	65.99
1	Thailand	1.33	100.00	74	Korea, Rep. (2008)	0.69	64.68
1	United States (2008)	1.31	100.00	75	Bolivia (2007)	0.68	63.07
1	Canada (2008)	1.30	100.00	76	Malta	0.63	57.64
1	Romania	1.27	100.00	77	Tanzania (2006)	0.61	55.57
1	New Zealand (2008)	1.25	100.00	78	Turkey (2010)	0.57	50.13
1	Botswana (2006)	1.24	100.00	79	Morocco (2008)	0.55	48.58
1	Montenegro	1.24	100.00	80	Algeria (2004)	0.55	47.69
1	Panama	1.21	100.00	81	Uganda (2003)	0.54	46.81
1	Mongolia (2008)	1.20	100.00	82	Kuwait (2005)	0.52	44.32
1	Argentina (2006)	1.18	100.00	83	Egypt, Arab Rep. (2007)	0.51	44.10
1	Azerbaijan (2008)	1.17	100.00	84	Iran, Islamic Rep. (2008)	0.50	42.41
1	Australia (2008)	1.16	100.00	85	Ethiopia (2006)	0.49	41.75
1	Trinidad and Tobago (2005)	1.14	100.00	86	Cambodia (2008)	0.47	39.09
1	Uruguay (2007)	1.13	100.00	87	Saudi Arabia (2008)	0.37	27.54
1	Ireland	1.11	100.00	88	Burkina Faso (2006)	0.33	22.58
1	Namibia (2004)	1.10	100.00	89	Qatar	0.31	21.00
1	South Africa	1.10	100.00	90	India (2010)	0.31	20.84
1	Brazil (2007)	1.09	100.00	91	Pakistan (2008)	0.28	17.48
1	Finland	1.09	100.00	92	United Arab Emirates (2008)	0.28	16.93
1	Israel (2008)	1.09	100.00	93	Bangladesh (2003)	0.13	0.00
1	Sweden	1.09	100.00	n/a	Albania	n/a	n/a
1	China (2005)	1.07	100.00	n/a	Bosnia and Herzegovina	n/a	n/a
1	Croatia	1.07	100.00	n/a	Colombia	n/a	n/a
1	Denmark	1.05	100.00	n/a	Guatemala	n/a	n/a
1	Nicaragua (2006)	1.05	100.00	n/a	Japan	n/a	n/a
1	Vietnam (2004)	1.05	100.00	n/a	Jordan	n/a	n/a
1	Dominican Republic (2007)	1.04	100.00	n/a	Kenya	n/a	n/a
1	Portugal	1.04	100.00	n/a	Mali	n/a	n/a
1	Paraguay (2008)	1.02	100.00	n/a	Senegal	n/a	n/a
1	Macedonia, FYR	1.01	100.00	n/a	Venezuela, RB	n/a	n/a
49	Greece	1.00	99.87				
50	Cyprus	0.99	99.18				
51	Germany	0.99	98.90				
52	El Salvador (2010)	0.98	97.55				
53	Ecuador (2006)	0.97	97.11				
54	Belgium	0.95	93.72				
55	Lebanon (2007)	0.93	92.27				

Source: International Labour Organization, Key Indicators of the Labour Market, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

2.2.5 Female parliamentarians

Ratio of female parliamentarians over male value | 2011

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Sweden	0.81	100.00	56	France	0.23	28.83
2	Finland	0.74	91.44	57	Greece	0.23	28.46
3	South Africa	0.73	90.69	58	Indonesia	0.22	27.53
4	Netherlands	0.69	84.91	59	Kazakhstan	0.22	26.79
5	Nicaragua	0.67	83.17	60	United Arab Emirates	0.21	26.24
6	Iceland	0.66	81.45	61	Morocco	0.20	25.34
7	Norway	0.66	81.11	61	Venezuela, RB	0.20	25.34
8	Denmark	0.64	79.43	63	United States	0.20	24.98
9	Costa Rica	0.63	77.77	64	Azerbaijan	0.19	23.56
10	Belgium	0.61	75.82	64	Slovak Republic	0.19	23.56
11	Argentina	0.60	73.91	66	Thailand	0.19	23.21
12	Spain	0.56	69.59	67	Albania	0.19	23.04
12	Tanzania	0.56	69.59	68	Burkina Faso	0.18	22.35
14	Uganda	0.54	66.62	69	Ireland	0.18	22.00
15	Germany	0.49	60.66	70	Korea, Rep	0.17	21.32
16	Ecuador	0.48	59.02	71	Chile	0.17	20.47
17	New Zealand	0.47	58.75	71	Turkey	0.17	20.47
17	Slovenia	0.47	58.75	73	Russian Federation	0.16	19.47
19	Macedonia, FYR	0.45	55.32	74	Guatemala	0.15	18.98
20	Portugal	0.40	49.80	75	Paraguay	0.14	17.67
21	Trinidad and Tobago	0.40	49.55	76	Montenegro	0.14	17.35
22	Switzerland	0.40	49.31	77	Colombia	0.14	17.03
23	Austria	0.39	47.87	77	Uruguay	0.14	17.03
24	Ethiopia	0.39	47.63	79	Romania	0.13	15.60
25	Mexico	0.36	43.92	80	India	0.12	15.29
26	Bolivia	0.34	42.12	81	Japan	0.12	14.98
27	Luxembourg	0.33	41.24	81	Jordan	0.12	14.98
28	Canada	0.33	40.80	83	Cyprus	0.12	14.82
29	Australia	0.33	40.58	84	Malaysia	0.12	14.36
30	Namibia	0.32	39.93	85	Mali	0.11	14.05
30	Vietnam	0.32	39.93	86	Kenya	0.11	13.44
32	Croatia	0.31	38.64	87	Hungary	0.10	11.94
33	Poland	0.31	38.43	88	Malta	0.10	11.79
34	Kyrgyz Republic	0.30	37.58	89	Brazil	0.09	11.64
35	Latvia	0.30	36.95	90	Panama	0.09	11.49
36	Philippines	0.30	36.75	91	Armenia	0.09	11.34
37	Senegal	0.29	36.33	92	Algeria	0.09	10.76
38	Pakistan	0.29	35.92	92	Ukraine	0.09	10.76
39	United Kingdom	0.29	35.51	94	Botswana	0.09	10.61
40	Singapore	0.29	35.30	95	Kuwait	0.08	10.32
41	Czech Republic	0.28	34.89	96	Georgia	0.07	8.74
41	Serbia	0.28	34.89	97	Sri Lanka	0.06	7.62
43	Italy	0.28	34.08	98	Mongolia	0.04	5.02
44	Peru	0.27	33.88	99	Lebanon	0.03	3.96
45	Bosnia and Herzegovina	0.27	33.68	100	Iran, Islamic Rep	0.03	3.56
46	China	0.27	33.48	101	Egypt, Arab Rep	0.02	2.52
47	Bulgaria	0.26	32.49	102	Qatar	0.00	0.00
47	Dominican Republic	0.26	32.49	102	Saudi Arabia	0.00	0.00
49	Cambodia	0.25	31.51				
50	Israel	0.25	30.93				
51	Estonia	0.25	30.54				
51	Moldova	0.25	30.54				
53	Bangladesh	0.25	30.35				
54	Lithuania	0.24	29.21				
55	El Salvador	0.23	29.02				

Source: World Bank, World Development Indicators based on Inter-Parliamentary Union (IPU). (<http://data.worldbank.org/>)

PILLAR 3:

GROW

3.1.1 Pupil-teacher ratio

Pupil-teacher ratio, secondary | 2010

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Armenia	6.67	100.00	56	Singapore (2009)	14.91	76.57
2	Portugal	7.35	98.07	57	Costa Rica (2011)	14.92	76.54
3	Georgia (2009)	7.57	97.44	58	China (2011)	15.15	75.88
4	Kuwait (2011)	7.82	96.73	59	Kyrgyz Republic	15.21	75.73
5	Greece (2007)	7.88	96.54	60	Albania (2011)	15.24	75.62
6	Croatia	8.15	95.79	61	Peru (2011)	16.50	72.07
7	Latvia (2011)	8.33	95.27	62	Brazil	16.66	71.59
8	Russian Federation (2009)	8.47	94.89	63	Korea, Rep.	17.60	68.94
9	Luxembourg	8.50	94.80	64	Mexico (2011)	17.68	68.71
10	Lithuania (2011)	8.56	94.61	65	Jordan (2003)	17.88	68.14
11	Kazakhstan (2012)	8.60	94.50	66	Uganda (2009)	17.91	68.05
12	Estonia	8.76	94.05	67	Bolivia (2007)	18.17	67.32
13	Azerbaijan (2007)	9.00	93.38	68	Vietnam	18.55	66.23
14	Slovenia (2009)	9.18	92.85	69	Morocco (2004)	18.73	65.73
15	Malta	9.20	92.79	70	Thailand (2011)	19.91	62.37
16	Lebanon (2011)	9.31	92.50	71	Algeria (2004)	20.85	59.70
17	Serbia (2011)	9.33	92.42	72	Chile	21.87	56.81
18	Sweden	9.71	91.35	73	El Salvador (2011)	24.35	49.76
19	Cyprus	9.76	91.22	74	Namibia (2007)	24.62	48.97
20	Israel (2009)	9.76	91.20	75	Mali (2011)	24.72	48.70
21	Finland (2009)	9.89	90.85	76	South Africa (2009)	25.05	47.77
22	Moldova (2011)	9.90	90.82	77	India	25.33	46.97
23	Austria	9.97	90.61	78	Colombia (2011)	25.58	46.25
24	Italy (2007)	10.10	90.24	79	Tanzania (2012)	26.39	43.94
25	Qatar (2011)	10.13	90.17	80	Burkina Faso (2011)	26.49	43.67
26	Hungary	10.20	89.97	81	Senegal (2011)	27.35	41.22
27	Poland	10.39	89.41	82	Bangladesh	28.33	38.43
28	Belgium (2002)	10.57	88.90	83	Dominican Republic (2011)	28.72	37.32
29	Spain	10.80	88.24	84	Cambodia (2007)	28.92	36.76
30	Argentina (2008)	10.90	87.97	85	Kenya (2009)	29.68	34.61
31	Ecuador (2011)	10.94	87.86	86	Nicaragua	30.83	31.33
32	Czech Republic	10.98	87.75	87	Philippines (2009)	34.81	20.01
33	Uruguay	11.32	86.78	88	Ethiopia (2011)	40.33	4.33
33	Saudi Arabia (2009)	11.32	86.78	89	Pakistan (2004)	41.86	0.00
35	Paraguay (2004)	11.84	85.31	n/a	Australia	n/a	n/a
36	Japan	11.89	85.17	n/a	Bosnia and Herzegovina	n/a	n/a
37	Macedonia, FYR	11.91	85.09	n/a	Canada	n/a	n/a
38	Slovak Republic	12.03	84.75	n/a	Denmark	n/a	n/a
39	United Arab Emirates (2011)	12.05	84.70	n/a	Iceland	n/a	n/a
40	Bulgaria	12.08	84.61	n/a	Iran, Islamic Rep.	n/a	n/a
41	Indonesia	12.18	84.34	n/a	Ireland	n/a	n/a
42	Romania	12.48	83.49	n/a	Montenegro	n/a	n/a
43	France	12.68	82.91	n/a	Norway	n/a	n/a
44	Germany	12.91	82.27	n/a	Sri Lanka	n/a	n/a
45	Egypt, Arab Rep.	13.52	80.53	n/a	Switzerland	n/a	n/a
46	Trinidad and Tobago (2008)	13.52	80.51	n/a	Turkey	n/a	n/a
47	Malaysia	13.72	79.94	n/a	Ukraine	n/a	n/a
48	Netherlands	13.73	79.93	n/a	Venezuela, RB	n/a	n/a
49	United States	13.76	79.84				
50	Botswana (2007)	13.88	79.51				
51	Guatemala	13.98	79.21				
52	United Kingdom (2008)	14.27	78.40				
53	Mongolia	14.49	77.76				
54	New Zealand	14.50	77.74				
55	Panama (2011)	14.69	77.21				

Source: UNESCO Institute for Statistics, UIS online database.
(<http://stats.uis.unesco.org>)

3.1.2 Technical/vocational enrolment

Technical/vocational enrolment (%) | 2011

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Netherlands (2010)	47.33	100.00	56	Singapore (2009)	11.57	24.44
2	Belgium (2010)	39.90	84.29	57	Moldova	11.56	24.42
3	Czech Republic	39.55	83.57	58	Mali	11.50	24.29
4	Austria	39.34	83.12	59	Lithuania	11.43	24.15
5	Serbia	37.76	79.78	60	Iran, Islamic Rep.	11.07	23.39
6	Croatia (2010)	36.94	78.05	61	Tanzania (2012)	11.04	23.32
7	Italy (2010)	36.94	78.04	62	Paraguay (2010)	10.12	21.38
8	Slovenia	35.84	75.71	63	Kyrgyz Republic	8.86	18.72
9	Bosnia and Herzegovina	35.72	75.47	64	Ukraine	8.82	18.63
10	Slovak Republic	34.89	73.72	65	Algeria	8.33	17.60
11	Switzerland	34.24	72.34	66	Ethiopia	8.18	17.28
12	Montenegro (2012)	34.07	71.99	67	Argentina (2010)	7.74	16.34
13	Romania (2010)	33.36	70.49	68	Kazakhstan (2012)	6.70	14.15
14	Australia (2010)	32.83	69.36	69	Cyprus (2010)	6.65	14.06
15	Sweden	32.43	68.51	70	Uganda (2009)	6.50	13.74
16	Finland	31.71	67.00	71	Malaysia (2010)	6.20	13.10
17	Luxembourg (2010)	30.25	63.91	72	Morocco (2012)	6.09	12.86
18	Norway (2010)	30.11	63.61	73	Brazil	6.05	12.79
19	Bulgaria (2010)	30.10	63.59	74	Sri Lanka	5.86	12.38
20	Macedonia, FYR (2010)	29.33	61.98	75	South Africa (2009)	5.74	12.13
21	Poland (2010)	28.65	60.53	76	Colombia	5.62	11.87
22	Guatemala (2010)	27.59	58.28	77	Venezuela, RB	5.27	11.13
23	Denmark (2010)	26.17	55.29	78	Albania	5.26	11.12
24	Portugal (2010)	25.41	53.69	79	Botswana (2008)	4.88	10.32
25	Latvia	24.58	51.93	80	Bolivia (2003)	4.73	9.99
26	Chile	23.72	50.11	81	Senegal	4.50	9.50
27	Ecuador	21.80	46.06	82	Dominican Republic	4.38	9.25
28	Turkey (2010)	21.78	46.01	83	Burkina Faso (2012)	4.05	8.55
29	Iceland (2010)	21.44	45.30	84	Pakistan	3.92	8.28
30	China	20.83	44.01	85	Saudi Arabia (2008)	3.58	7.57
31	Germany (2010)	20.32	42.93	86	Jordan (2010)	3.36	7.09
32	France	20.00	42.26	87	Bangladesh	3.15	6.66
33	Estonia (2010)	19.60	41.41	88	Cambodia (2008)	2.28	4.81
34	Israel (2010)	18.75	39.61	89	Armenia (2010)	2.00	4.22
35	Indonesia	17.99	38.00	90	Nicaragua (2010)	1.48	3.12
36	Egypt, Arab Rep. (2010)	17.56	37.11	91	Georgia (2009)	1.45	3.07
37	Spain	17.45	36.87	92	United Arab Emirates	0.94	1.98
38	Azerbaijan	17.38	36.73	93	Trinidad and Tobago (2004)	0.85	1.79
39	Lebanon	17.16	36.25	94	Qatar	0.83	1.76
40	Panama	16.20	34.22	95	India (2008)	0.81	1.72
41	Russian Federation (2009)	16.19	34.21	96	Kenya (2009)	0.00	0.00
42	Ireland	15.97	33.73	96	Kuwait	0.00	0.00
43	Mexico	15.93	33.66	96	Peru	0.00	0.00
44	Hungary	15.79	33.35	n/a	Canada	n/a	n/a
45	Greece (2010)	15.59	32.94	n/a	Namibia	n/a	n/a
46	El Salvador	15.53	32.82	n/a	Philippines	n/a	n/a
47	New Zealand (2010)	15.48	32.71	n/a	United States	n/a	n/a
48	Thailand (2012)	15.44	32.63	n/a	Vietnam	n/a	n/a
49	Uruguay (2010)	15.29	32.31				
50	Costa Rica	15.16	32.04				
51	Malta (2010)	15.03	31.75				
52	United Kingdom (2010)	13.23	27.96				
53	Korea, Rep. (2010)	11.80	24.93				
54	Japan (2010)	11.78	24.88				
55	Mongolia	11.62	24.54				

Source: UNESCO Institute for Statistics, UIS online database.
(<http://stats.uis.unesco.org>)

3.1.3 Tertiary enrolment

School enrolment, tertiary (% gross) | 2010

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Korea, Rep.	103.11	100.00	56	Malaysia	42.28	38.71
2	United States	94.81	91.63	57	Kyrgyz Republic (2011)	41.35	37.77
3	Finland	93.68	90.50	58	Saudi Arabia (2011)	41.18	37.60
4	Slovenia	89.58	86.37	59	Ecuador (2008)	39.84	36.25
5	Greece (2007)	89.38	86.16	60	Moldova (2011)	39.45	35.86
6	New Zealand	82.56	79.29	61	Bolivia (2007)	38.65	35.05
7	Ukraine (2011)	81.70	78.43	62	Macedonia, FYR	38.62	35.02
8	Australia	79.92	76.63	63	Bosnia and Herzegovina (2011)	38.09	34.49
9	Iceland	78.56	75.26	64	Jordan (2011)	37.82	34.21
10	Spain	78.15	74.85	65	Malta	35.31	31.69
11	Venezuela, RB (2009)	78.13	74.83	66	Paraguay	34.56	30.93
12	Russian Federation (2009)	75.89	72.57	67	Dominican Republic (2004)	34.00	30.37
13	Argentina	74.80	71.48	68	Egypt, Arab Rep.	32.37	28.72
14	Denmark (2009)	74.40	71.07	69	Algeria (2011)	32.09	28.44
15	Norway	74.36	71.03	70	Georgia (2011)	30.02	26.36
16	Sweden	73.77	70.43	71	Philippines (2009)	28.23	24.55
17	Poland	72.35	69.01	72	Mexico	28.03	24.35
18	Belgium	70.59	67.23	73	China (2011)	26.79	23.10
19	Lithuania (2011)	69.49	66.12	74	Brazil (2005)	25.63	21.93
20	Austria	68.19	64.82	75	El Salvador (2011)	24.58	20.87
21	Ireland	66.17	62.78	76	Vietnam (2011)	24.38	20.68
22	Chile	66.12	62.73	77	Indonesia	23.12	19.40
23	Portugal	65.49	62.09	78	Kuwait (2004)	21.86	18.14
24	Netherlands	65.41	62.01	79	Azerbaijan (2011)	19.65	15.91
25	Italy	64.98	61.59	80	Nicaragua (2003)	17.97	14.22
26	Estonia	64.27	60.87	81	India	17.87	14.11
27	Czech Republic	63.54	60.13	82	Guatemala (2007)	17.83	14.07
28	Uruguay	63.20	59.79	83	Sri Lanka	15.46	11.68
29	Israel (2009)	62.48	59.06	84	Cambodia (2011)	14.50	10.72
30	Hungary	60.65	57.22	85	Morocco (2009)	13.22	9.42
31	Canada (2002)	59.99	56.55	86	Qatar (2011)	11.61	7.80
32	United Kingdom	59.75	56.31	87	Trinidad and Tobago (2005)	11.52	7.71
33	Japan	59.74	56.30	88	Bangladesh (2009)	10.59	6.78
34	Romania	58.84	55.39	89	Luxembourg (2008)	10.53	6.72
35	Lebanon (2011)	57.65	54.20	90	Uganda (2011)	9.15	5.33
36	Latvia (2011)	57.38	53.92	91	Namibia (2008)	8.96	5.13
37	Mongolia (2011)	57.16	53.70	92	Pakistan (2011)	8.32	4.49
38	Bulgaria	56.86	53.40	93	Senegal	7.92	4.09
39	France	56.69	53.23	94	Ethiopia (2011)	7.64	3.80
40	Turkey	55.42	51.95	95	Botswana (2006)	7.44	3.60
41	Slovak Republic	54.84	51.37	96	Mali (2011)	6.10	2.25
42	Switzerland	54.82	51.34	97	Kenya (2009)	4.03	0.17
43	Croatia	54.13	50.65	98	Tanzania (2012)	3.92	0.06
44	Serbia (2011)	50.37	46.86	99	Burkina Faso (2011)	3.86	0.00
45	Armenia (2011)	48.94	45.42	n/a	Germany	n/a	n/a
46	Iran, Islamic Rep. (2011)	48.58	45.06	n/a	Singapore	n/a	n/a
47	Cyprus	48.31	44.79	n/a	South Africa	n/a	n/a
48	Thailand (2011)	47.70	44.17	n/a	United Arab Emirates	n/a	n/a
49	Montenegro	47.64	44.11				
50	Panama	45.75	42.20				
51	Albania (2011)	43.91	40.35				
52	Kazakhstan (2012)	43.19	39.62				
53	Peru	42.99	39.42				
53	Costa Rica (2011)	42.98	39.42				
55	Colombia (2011)	42.90	39.33				

Source: UNESCO Institute for Statistics, UIS online database.
(<http://stats.uis.unesco.org>)

3.1.4 Reading, math and science scores

PISA average scales in reading, mathematics, and science | 2009

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	China	576.84	100.00	56	Colombia	398.59	29.25
2	Finland	543.49	86.76	57	Kazakhstan	398.56	29.23
3	Singapore	543.20	86.65	58	Argentina	395.72	28.11
4	Korea, Rep.	541.16	85.84	59	Azerbaijan	388.56	25.27
5	Japan	529.43	81.18	60	Indonesia	385.19	23.93
6	Canada	526.58	80.05	61	Albania	384.32	23.58
7	New Zealand	524.06	79.05	62	Georgia (2010)	375.50	20.08
8	Australia	518.84	76.98	63	Qatar	373.09	19.13
9	Netherlands	518.82	76.97	64	Panama	368.79	17.42
10	Switzerland	517.01	76.25	65	Peru	368.05	17.13
11	Estonia	513.63	74.91	66	India (2010)	336.02	4.41
12	Germany	510.16	73.53	67	Kyrgyz Republic	324.91	0.00
13	Belgium	509.26	73.18	n/a	Algeria	n/a	n/a
14	Poland	501.12	69.94	n/a	Armenia	n/a	n/a
15	Iceland	500.85	69.84	n/a	Bangladesh	n/a	n/a
16	Norway	500.35	69.64	n/a	Bolivia	n/a	n/a
17	United Kingdom	500.10	69.54	n/a	Bosnia and Herzegovina	n/a	n/a
18	Denmark	499.18	69.17	n/a	Botswana	n/a	n/a
19	Slovenia	498.77	69.01	n/a	Burkina Faso	n/a	n/a
20	Ireland	496.92	68.28	n/a	Cambodia	n/a	n/a
21	France	496.88	68.26	n/a	Cyprus	n/a	n/a
22	United States	496.41	68.07	n/a	Dominican Republic	n/a	n/a
23	Hungary	495.66	67.78	n/a	Ecuador	n/a	n/a
24	Sweden	495.60	67.75	n/a	Egypt, Arab Rep.	n/a	n/a
25	Czech Republic	490.50	65.73	n/a	El Salvador	n/a	n/a
26	Portugal	489.72	65.42	n/a	Ethiopia	n/a	n/a
27	Slovak Republic	488.13	64.79	n/a	Guatemala	n/a	n/a
28	Austria	486.84	64.28	n/a	Iran, Islamic Rep.	n/a	n/a
29	Latvia	486.60	64.18	n/a	Kenya	n/a	n/a
30	Italy	485.93	63.91	n/a	Kuwait	n/a	n/a
31	Spain	484.26	63.25	n/a	Lebanon	n/a	n/a
32	Luxembourg	481.72	62.24	n/a	Macedonia, FYR	n/a	n/a
33	Lithuania	478.82	61.09	n/a	Mali	n/a	n/a
34	Croatia	474.02	59.19	n/a	Mongolia	n/a	n/a
35	Greece	473.00	58.78	n/a	Morocco	n/a	n/a
36	Russian Federation	468.50	57.00	n/a	Namibia	n/a	n/a
37	United Arab Emirates	459.48	53.42	n/a	Nicaragua	n/a	n/a
38	Israel	458.57	53.05	n/a	Pakistan	n/a	n/a
39	Malta (2010)	455.43	51.81	n/a	Paraguay	n/a	n/a
40	Turkey	454.52	51.45	n/a	Philippines	n/a	n/a
41	Serbia	442.39	46.63	n/a	Saudi Arabia	n/a	n/a
42	Chile	439.30	45.41	n/a	Senegal	n/a	n/a
43	Bulgaria	432.15	42.57	n/a	South Africa	n/a	n/a
44	Costa Rica (2010)	427.50	40.72	n/a	Sri Lanka	n/a	n/a
45	Uruguay	426.58	40.36	n/a	Tanzania	n/a	n/a
46	Romania	426.57	40.35	n/a	Uganda	n/a	n/a
47	Thailand	421.75	38.44	n/a	Ukraine	n/a	n/a
48	Mexico	419.89	37.70	n/a	Vietnam	n/a	n/a
49	Trinidad and Tobago	413.56	35.19				
50	Malaysia (2010)	413.43	35.14				
50	Venezuela, RB (2010)	413.43	35.14				
52	Montenegro	403.78	31.31				
53	Jordan	402.35	30.74				
54	Brazil	400.99	30.20				
55	Moldova (2010)	399.47	29.60				

Source: OECD Programme for International Student Assessment (PISA) 2009 and 2010. (www.pisa.oecd.org/)

3.1.5 QS university ranking

QS university ranking, average score top 3 | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	United Kingdom	99.01	100.00	55	Peru	10.24	5.46
2	United States	98.88	99.85	57	Estonia	7.92	2.98
3	Canada	86.21	86.36	58	Croatia	6.92	1.91
4	Australia	84.03	84.04	58	Qatar	6.92	1.91
5	Switzerland	82.84	82.78	58	Slovenia	6.92	1.91
6	Japan	81.69	81.55	61	Bangladesh	5.12	0.00
7	Germany	74.93	74.35	61	Bulgaria	5.12	0.00
8	China	74.86	74.28	61	Kuwait	5.12	0.00
9	France	74.14	73.50	61	Serbia	5.12	0.00
10	Korea, Rep.	73.58	72.92	61	Sri Lanka	5.12	0.00
11	Netherlands	70.41	69.54	n/a	Albania	n/a	n/a
12	Denmark	68.02	66.99	n/a	Algeria	n/a	n/a
13	Sweden	66.10	64.95	n/a	Armenia	n/a	n/a
14	Belgium	61.97	60.55	n/a	Bolivia	n/a	n/a
15	Ireland	60.18	58.64	n/a	Bosnia and Herzegovina	n/a	n/a
16	New Zealand	58.41	56.76	n/a	Botswana	n/a	n/a
17	Finland	55.03	53.15	n/a	Burkina Faso	n/a	n/a
18	Singapore	54.98	53.10	n/a	Cambodia	n/a	n/a
19	Norway	53.47	51.50	n/a	Costa Rica	n/a	n/a
20	Israel	51.08	48.95	n/a	Cyprus	n/a	n/a
21	Spain	50.55	48.38	n/a	Dominican Republic	n/a	n/a
22	Italy	46.75	44.33	n/a	Ecuador	n/a	n/a
23	Brazil	46.48	44.05	n/a	El Salvador	n/a	n/a
24	Russian Federation	45.93	43.47	n/a	Ethiopia	n/a	n/a
25	Austria	45.18	42.67	n/a	Georgia	n/a	n/a
26	India	44.78	42.23	n/a	Guatemala	n/a	n/a
27	Saudi Arabia	44.40	41.83	n/a	Iceland	n/a	n/a
28	Malaysia	44.25	41.67	n/a	Kenya	n/a	n/a
29	Argentina	39.90	37.04	n/a	Kyrgyz Republic	n/a	n/a
30	South Africa	39.59	36.71	n/a	Latvia	n/a	n/a
31	Chile	37.12	34.07	n/a	Luxembourg	n/a	n/a
32	Mexico	36.88	33.83	n/a	Macedonia, FYR	n/a	n/a
33	Thailand	35.37	32.21	n/a	Mali	n/a	n/a
34	United Arab Emirates	28.84	25.26	n/a	Malta	n/a	n/a
35	Indonesia	27.63	23.97	n/a	Moldova	n/a	n/a
36	Colombia	27.62	23.96	n/a	Mongolia	n/a	n/a
37	Portugal	27.51	23.84	n/a	Montenegro	n/a	n/a
38	Kazakhstan	26.69	22.97	n/a	Morocco	n/a	n/a
39	Philippines	25.53	21.74	n/a	Namibia	n/a	n/a
40	Poland	25.50	21.70	n/a	Nicaragua	n/a	n/a
41	Czech Republic	25.33	21.52	n/a	Panama	n/a	n/a
42	Turkey	24.77	20.92	n/a	Paraguay	n/a	n/a
43	Lebanon	21.99	17.97	n/a	Senegal	n/a	n/a
44	Greece	20.97	16.87	n/a	Slovak Republic	n/a	n/a
45	Egypt, Arab Rep.	20.78	16.68	n/a	Tanzania	n/a	n/a
46	Hungary	19.96	15.81	n/a	Trinidad and Tobago	n/a	n/a
47	Venezuela, RB.	18.96	14.74	n/a	Uganda	n/a	n/a
48	Lithuania	18.17	13.89	n/a	Vietnam	n/a	n/a
48	Ukraine	18.17	13.89				
50	Azerbaijan	15.37	10.91				
50	Pakistan	15.37	10.91				
50	Romania	15.37	10.91				
53	Uruguay	14.05	9.51				
54	Iran, Islamic Rep.	12.04	7.37				
55	Jordan	10.24	5.46				

Source: Quacquarelli Symonds Ltd (QS), QS World University Ranking 2012/2013, Top Universities. (<http://www.topuniversities.com/university-rankings/world-universityrankings/2012>)

3.1.6 International students inflow

Tertiary inbound mobility ratio (%) | 2010

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Luxembourg	41.41	100.00	56	Costa Rica (2004)	1.43	6.60
1	Qatar (2011)	40.31	100.00	57	Russian Federation (2009)	1.39	6.39
1	United Arab Emirates (2011)	38.19	100.00	58	Kazakhstan (2012)	1.38	6.34
1	Cyprus	31.93	100.00	59	Romania	1.35	6.19
1	Singapore (2012)	21.74	100.00	60	Moldova (2011)	1.25	5.75
6	Australia	21.25	97.72	61	Albania (2011)	1.10	5.05
7	Austria	19.59	90.11	62	Uruguay (1999)	0.95	4.36
8	United Kingdom	15.73	72.33	63	Poland	0.85	3.93
9	Switzerland	15.36	70.64	64	Thailand (2011)	0.81	3.71
10	Lebanon (2011)	15.30	70.36	65	Turkey	0.73	3.37
11	New Zealand	14.23	65.43	66	Tanzania (2004)	0.64	2.94
12	France	11.58	53.24	67	Mongolia (2011)	0.61	2.79
13	Namibia (2008)	10.17	46.76	68	Croatia	0.56	2.57
14	Jordan (2011)	9.93	45.67	69	Algeria (2011)	0.55	2.53
15	Belgium	8.11	37.31	70	Mali (2011)	0.53	2.42
16	Czech Republic	8.00	36.79	71	Bolivia (1998)	0.50	2.30
17	Denmark	7.54	34.66	72	Bangladesh (2009)	0.00	0.00
18	Norway	7.00	32.21	72	Brazil (2011)	0.00	0.00
19	Ireland	6.95	31.97	72	Cambodia (2006)	0.00	0.00
20	Sweden	6.93	31.87	72	Chile (2011)	0.00	0.00
21	Kyrgyz Republic (2009)	6.87	31.62	72	China (2011)	0.00	0.00
22	Malaysia	6.10	28.05	72	El Salvador (2011)	0.00	0.00
23	Trinidad and Tobago (2004)	5.78	26.60	72	India (2006)	0.00	0.00
24	Uganda (2011)	5.19	23.88	72	Indonesia	0.00	0.00
25	Iceland	4.92	22.65	72	Iran, Islamic Rep. (2011)	0.00	0.00
26	Bosnia and Herzegovina (2011)	4.82	22.19	72	Malta	0.00	0.00
27	Finland	4.64	21.36	72	Mexico (2002)	0.00	0.00
28	Senegal (1999)	4.42	20.32	72	Pakistan (2003)	0.00	0.00
29	Netherlands	4.30	19.76	72	Philippines (2008)	0.00	0.00
30	Greece	4.18	19.23	72	Sri Lanka (2011)	0.00	0.00
31	Botswana (2005)	4.16	19.14	72	Venezuela, RB (2008)	0.00	0.00
32	Hungary	4.01	18.45	72	Vietnam	0.00	0.00
33	Canada (2002)	3.95	18.17	n/a	Argentina	n/a	n/a
34	Japan	3.69	16.97	n/a	Colombia	n/a	n/a
35	Serbia (2011)	3.61	16.59	n/a	Dominican Republic	n/a	n/a
36	Burkina Faso (2011)	3.59	16.49	n/a	Ecuador	n/a	n/a
37	Italy	3.53	16.23	n/a	Ethiopia	n/a	n/a
38	Bulgaria	3.50	16.11	n/a	Germany	n/a	n/a
39	Saudi Arabia (2011)	3.42	15.73	n/a	Guatemala	n/a	n/a
40	Slovak Republic	3.39	15.58	n/a	Israel	n/a	n/a
41	United States	3.35	15.42	n/a	Kenya	n/a	n/a
42	Armenia (2011)	2.99	13.76	n/a	Kuwait	n/a	n/a
43	Spain	2.98	13.71	n/a	Montenegro	n/a	n/a
44	Portugal	2.88	13.23	n/a	Nicaragua	n/a	n/a
45	Azerbaijan (2011)	2.80	12.89	n/a	Panama	n/a	n/a
46	Macedonia, FYR (2009)	2.19	10.09	n/a	Paraguay	n/a	n/a
47	Latvia (2011)	1.91	8.76	n/a	Peru	n/a	n/a
48	Morocco (2009)	1.89	8.70	n/a	South Africa	n/a	n/a
49	Egypt, Arab Rep.	1.85	8.52				
50	Korea, Rep.	1.81	8.33				
51	Estonia	1.78	8.20				
52	Slovenia	1.68	7.74				
53	Lithuania (2011)	1.61	7.38				
54	Georgia (2011)	1.55	7.11				
55	Ukraine (2011)	1.51	6.95				

Source: UNESCO Institute for Statistics, UIS online database.
(<http://stats.uis.unesco.org>)

3.2.1 Quality of management schools

Average answer to the question: How would you assess the quality of management or business schools in your country? [1 = poor; 7 = excellent – among the best in the world] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	United Kingdom	6.06	84.32	56	Latvia	4.23	53.80
2	Belgium	6.02	83.61	57	China	4.22	53.62
3	Switzerland	6.01	83.54	58	Indonesia	4.18	53.07
4	Spain	5.79	79.83	59	Pakistan	4.18	52.99
5	Canada	5.74	79.03	60	Venezuela, RB	4.17	52.86
6	Singapore	5.72	78.62	61	Colombia	4.15	52.48
7	Qatar	5.68	77.95	62	Japan	4.10	51.73
8	France	5.63	77.21	63	Hungary	4.08	51.34
9	Netherlands	5.62	77.01	64	Panama	4.08	51.29
10	Finland	5.55	75.86	65	Poland	3.97	49.52
11	Sweden	5.42	73.63	66	Croatia	3.93	48.86
12	United States	5.40	73.28	67	Dominican Republic	3.92	48.64
13	Lebanon	5.39	73.18	68	Uganda	3.90	48.28
14	Chile	5.39	73.10	69	Bangladesh	3.87	47.91
15	South Africa	5.28	71.34	70	Botswana	3.87	47.90
16	Australia	5.27	71.20	71	Iran, Islamic Rep.	3.85	47.53
17	Iceland	5.25	70.82	72	Ecuador (2011)	3.84	47.36
18	Costa Rica	5.22	70.27	73	Czech Republic	3.82	47.07
19	New Zealand	5.21	70.21	74	Cambodia	3.78	46.32
20	Portugal	5.15	69.14	74	Turkey	3.78	46.32
21	Ireland	5.14	68.96	76	Nicaragua	3.77	46.15
22	Norway	5.09	68.23	77	El Salvador	3.76	45.98
23	Denmark	5.08	68.07	78	Bulgaria	3.75	45.76
24	Malaysia	5.02	66.99	79	Kuwait	3.72	45.37
25	United Arab Emirates	5.00	66.62	80	Kazakhstan	3.69	44.85
26	Malta	4.99	66.56	81	Greece	3.68	44.60
27	Cyprus	4.96	66.08	82	Burkina Faso	3.67	44.57
28	Germany	4.95	65.75	83	Macedonia, FYR	3.66	44.36
29	India	4.93	65.43	84	Ethiopia	3.63	43.81
30	Argentina	4.89	64.82	85	Georgia (2011)	3.57	42.90
31	Italy	4.83	63.81	86	Slovak Republic	3.57	42.83
32	Trinidad and Tobago	4.80	63.26	87	Romania	3.53	42.21
33	Austria	4.79	63.16	88	Russian Federation	3.46	41.01
34	Sri Lanka (2011)	4.77	62.90	89	Serbia	3.46	40.98
35	Philippines	4.70	61.66	90	Ukraine	3.44	40.64
36	Israel	4.69	61.48	91	Tanzania	3.42	40.35
37	Senegal	4.67	61.20	92	Bolivia	3.38	39.66
38	Korea, Rep.	4.65	60.86	93	Moldova	3.35	39.17
39	Guatemala	4.61	60.12	94	Mali	3.34	38.95
40	Saudi Arabia	4.57	59.43	95	Azerbaijan	3.28	38.05
41	Morocco	4.52	58.74	96	Paraguay	3.27	37.84
42	Estonia	4.49	58.22	97	Vietnam	3.23	37.10
43	Peru	4.46	57.66	98	Armenia	3.19	36.42
44	Bosnia and Herzegovina	4.44	57.40	99	Namibia	3.12	35.34
45	Mexico	4.44	57.37	100	Algeria	3.03	33.78
46	Brazil	4.42	57.08	101	Mongolia	2.99	33.13
47	Uruguay	4.36	55.95	102	Egypt, Arab Rep.	2.75	29.22
48	Jordan	4.34	55.74	103	Kyrgyz Republic	2.68	27.93
49	Kenya	4.34	55.67				
50	Lithuania	4.33	55.48				
51	Montenegro	4.31	55.11				
52	Luxembourg	4.31	55.09				
53	Albania	4.30	54.92				
54	Thailand	4.28	54.61				
55	Slovenia	4.25	54.23				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.2.2 Extent of staff training

Average answer to the question: To what extent do companies in your country invest in training and employee development? [1 = hardly at all; 7 = to a great extent] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Switzerland	5.64	77.39	56	Cambodia	3.89	48.11
2	Finland	5.39	73.22	57	Morocco	3.88	48.00
3	Singapore	5.33	72.13	58	Dominican Republic	3.87	47.87
4	Luxembourg	5.30	71.59	59	Tanzania	3.85	47.48
5	Japan	5.28	71.26	60	Argentina	3.85	47.44
6	Sweden	5.21	70.10	61	Sri Lanka (2011)	3.82	46.96
7	Malaysia	5.20	69.93	62	El Salvador	3.81	46.86
8	Netherlands	5.18	69.72	63	Peru	3.80	46.64
9	Norway	5.16	69.32	64	Cyprus	3.79	46.51
10	Denmark	5.12	68.72	65	Uruguay	3.78	46.41
11	Qatar	5.04	67.27	66	Jordan	3.76	46.04
12	Austria	5.03	67.19	67	Russian Federation	3.74	45.73
13	Germany	5.03	67.16	68	Ecuador (2011)	3.73	45.46
14	United Kingdom	4.97	66.10	69	Slovenia	3.70	45.06
15	United States	4.95	65.88	70	Kuwait	3.69	44.90
16	Ireland	4.91	65.11	71	Slovak Republic	3.66	44.41
17	United Arab Emirates	4.86	64.37	72	Nicaragua	3.65	44.11
18	New Zealand	4.84	63.92	73	Armenia	3.64	43.97
19	Belgium	4.83	63.83	74	Colombia	3.64	43.96
20	Iceland	4.75	62.50	75	Uganda	3.64	43.95
21	Canada	4.70	61.69	76	Georgia (2011)	3.63	43.81
22	South Africa	4.64	60.68	77	Lebanon	3.62	43.70
23	Israel	4.64	60.59	78	Bolivia	3.60	43.37
24	Australia	4.61	60.18	79	Venezuela, RB	3.59	43.24
25	Costa Rica	4.60	59.96	80	Spain	3.58	42.94
26	Philippines	4.55	59.21	81	Ukraine	3.56	42.72
27	Brazil	4.40	56.65	82	Paraguay	3.54	42.40
28	Saudi Arabia	4.37	56.13	83	Bosnia and Herzegovina	3.51	41.86
29	Albania	4.36	56.03	84	Hungary	3.45	40.87
30	Chile	4.33	55.47	85	Romania	3.45	40.82
31	Indonesia	4.32	55.33	86	Pakistan	3.45	40.76
31	Guatemala	4.31	55.23	87	Greece	3.35	39.09
33	France	4.28	54.63	88	Vietnam	3.31	38.47
34	Korea, Rep.	4.26	54.34	89	Bulgaria	3.25	37.55
35	Panama	4.25	54.10	90	Moldova	3.21	36.88
36	China	4.21	53.43	91	Italy	3.18	36.30
37	Estonia	4.19	53.13	92	Croatia	3.16	36.08
38	Czech Republic	4.16	52.62	93	Macedonia, FYR	3.10	35.05
39	Thailand	4.15	52.53	94	Kyrgyz Republic	3.07	34.44
40	Malta	4.13	52.12	95	Egypt, Arab Rep.	3.06	34.40
41	Montenegro	4.12	52.07	96	Ethiopia	3.06	34.29
42	Latvia	4.11	51.86	97	Mali	3.06	34.27
43	India	4.11	51.85	98	Iran, Islamic Rep.	3.03	33.80
44	Namibia	4.08	51.35	99	Senegal	3.02	33.75
45	Azerbaijan	4.08	51.31	100	Bangladesh	3.02	33.66
46	Poland	4.03	50.49	101	Burkina Faso	2.94	32.41
47	Mongolia	4.02	50.41	102	Serbia	2.92	31.93
48	Turkey	3.99	49.80	103	Algeria	2.57	26.18
49	Lithuania	3.98	49.62				
50	Mexico	3.97	49.43				
51	Botswana	3.95	49.16				
52	Kenya	3.94	49.04				
53	Trinidad and Tobago	3.94	48.93				
54	Kazakhstan	3.93	48.81				
55	Portugal	3.91	48.53				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.3.1 Use of virtual social networks

Average answer to the question: How widely used are virtual social networks (e.g., Facebook, Twitter, LinkedIn) for professional and personal communication in your country?
[1 = not used at all; 7 = used widely] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Iceland	6.61	93.56	56	Trinidad and Tobago	5.52	75.26
2	United Kingdom	6.59	93.23	57	Albania	5.48	74.64
3	Netherlands	6.45	90.76	58	Latvia	5.46	74.37
4	Malta	6.43	90.45	59	Armenia	5.44	73.93
5	Sweden	6.41	90.10	60	Slovenia	5.43	73.89
6	Norway	6.38	89.74	61	Senegal	5.43	73.88
7	Estonia	6.36	89.39	62	Turkey	5.42	73.70
8	Finland	6.35	89.14	63	Thailand	5.41	73.51
9	Canada	6.33	88.80	64	Romania	5.41	73.48
10	Qatar	6.27	87.82	65	Japan	5.40	73.28
11	New Zealand	6.24	87.40	66	Colombia	5.37	72.80
12	Switzerland	6.24	87.28	67	Hungary	5.36	72.67
13	United States	6.21	86.87	68	Guatemala	5.35	72.46
14	Australia	6.19	86.48	69	Mexico	5.34	72.27
15	Singapore	6.19	86.44	70	Bulgaria	5.30	71.59
16	Belgium	6.16	85.96	71	Moldova	5.28	71.34
17	Austria	6.16	85.96	72	Mongolia	5.27	71.15
18	United Arab Emirates	6.15	85.84	73	South Africa	5.25	70.90
19	Luxembourg	6.11	85.17	74	Greece	5.24	70.69
20	France	6.07	84.54	75	Algeria	5.24	70.64
21	Panama	6.06	84.31	76	Kenya	5.23	70.52
22	Lithuania	6.05	84.10	77	Croatia	5.23	70.47
22	Philippines	6.05	84.10	78	Ukraine	5.18	69.69
24	Denmark	6.03	83.89	79	India	5.14	69.00
25	Malaysia	6.03	83.79	80	Peru	5.11	68.58
26	Chile	6.00	83.42	81	Russian Federation	5.11	68.42
27	Ireland	5.99	83.13	82	Botswana	4.96	65.98
28	Korea, Rep.	5.98	82.94	83	Kyrgyz Republic	4.94	65.70
29	Israel	5.97	82.89	84	Namibia	4.94	65.66
30	Czech Republic	5.97	82.85	85	Paraguay	4.91	65.22
31	Jordan	5.92	82.05	86	Cambodia	4.89	64.83
32	Egypt, Arab Rep.	5.92	81.99	87	China	4.87	64.48
33	Portugal	5.90	81.75	88	Sri Lanka (2011)	4.84	64.03
34	Montenegro	5.90	81.70	89	Ecuador (2011)	4.82	63.70
35	Azerbaijan	5.89	81.58	90	Pakistan	4.80	63.33
36	Macedonia, FYR	5.84	80.65	91	Kazakhstan	4.77	62.89
37	Costa Rica	5.82	80.31	92	Vietnam	4.75	62.46
38	Venezuela, RB.	5.77	79.58	93	Poland	4.73	62.24
39	Morocco	5.77	79.53	94	Bangladesh	4.49	58.10
40	Germany	5.77	79.49	95	Nicaragua	4.41	56.81
41	Brazil	5.77	79.44	96	Mali	4.35	55.83
42	Argentina	5.77	79.42	97	Uganda	4.34	55.69
43	Cyprus	5.73	78.82	98	Tanzania	4.24	54.06
44	Indonesia	5.71	78.54	99	Serbia	4.23	53.82
45	Slovak Republic	5.70	78.27	100	Burkina Faso	4.12	52.07
46	Kuwait	5.68	78.03	101	Bolivia	3.93	48.77
47	Uruguay	5.66	77.74	102	Ethiopia	3.37	39.52
48	El Salvador	5.64	77.34	103	Iran, Islamic Rep.	3.11	35.13
49	Dominican Republic	5.63	77.18				
50	Spain	5.62	76.96				
51	Georgia (2011)	5.61	76.84				
52	Italy	5.57	76.09				
53	Lebanon	5.56	75.94				
54	Bosnia and Herzegovina	5.55	75.90				
55	Saudi Arabia	5.54	75.72				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.3.2 State of cluster development

Average answer to the question: In your country's economy, how prevalent are well-developed and deep clusters? [1 = nonexistent; 7 = widespread in many fields] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Italy	5.30	71.70	56	Egypt, Arab Rep.	3.67	44.52
2	Singapore	5.25	70.77	57	Armenia	3.64	44.06
3	United Arab Emirates	5.23	70.55	58	Botswana	3.62	43.59
4	Japan	5.18	69.73	58	Malta	3.62	43.59
5	Finland	5.16	69.30	60	Peru	3.61	43.54
6	Qatar	5.14	69.06	61	Dominican Republic	3.58	43.08
7	Germany	5.14	68.98	62	Slovenia	3.56	42.73
8	Switzerland	5.09	68.11	63	Estonia	3.51	41.85
9	United Kingdom	5.07	67.86	64	Uruguay	3.48	41.26
10	United States	5.03	67.19	65	Ecuador (2011)	3.46	40.99
11	Malaysia	4.98	66.40	66	Bolivia	3.45	40.84
12	Sweden	4.96	66.00	67	Trinidad and Tobago	3.44	40.73
13	Netherlands	4.90	64.99	68	Iran, Islamic Rep.	3.43	40.46
14	Canada	4.85	64.22	69	El Salvador	3.42	40.34
15	Norway	4.83	63.84	70	Bulgaria	3.42	40.28
16	Austria	4.78	62.98	71	Namibia	3.39	39.81
17	Belgium	4.64	60.59	72	Senegal	3.37	39.46
18	Saudi Arabia	4.62	60.30	73	Macedonia, FYR	3.36	39.28
19	Korea, Rep.	4.61	60.09	74	Argentina	3.32	38.61
20	China	4.58	59.68	75	Croatia	3.31	38.58
21	Ireland	4.57	59.43	76	Tanzania	3.31	38.51
22	Luxembourg	4.54	58.94	77	Poland	3.25	37.43
23	Denmark	4.52	58.59	78	Latvia	3.23	37.14
24	Chile	4.51	58.50	79	Kuwait	3.22	36.96
25	Brazil	4.51	58.42	80	Nicaragua	3.18	36.40
26	India	4.50	58.35	81	Hungary	3.18	36.37
27	France	4.49	58.13	82	Ethiopia	3.17	36.10
28	Sri Lanka (2011)	4.34	55.67	83	Romania	3.12	35.33
29	Indonesia	4.25	54.20	84	Lebanon	3.11	35.09
30	Thailand	4.25	54.12	85	Kazakhstan	3.09	34.88
31	Mexico	4.24	54.07	86	Uganda	3.07	34.49
32	Vietnam	4.24	54.05	87	Mali	3.05	34.22
33	Australia	4.24	53.93	88	Russian Federation	3.05	34.16
34	Philippines	4.14	52.31	89	Georgia (2011)	3.03	33.82
35	Iceland	4.10	51.67	89	Lithuania	3.03	33.82
36	Spain	4.09	51.50	91	Paraguay	2.96	32.74
37	Turkey	4.07	51.15	92	Mongolia	2.94	32.29
38	Guatemala	4.07	51.11	93	Montenegro	2.86	31.06
39	Cyprus	4.06	51.00	94	Greece	2.86	30.99
40	Jordan	4.05	50.86	95	Ukraine	2.85	30.89
41	South Africa	4.05	50.83	96	Venezuela, RB	2.85	30.83
42	Cambodia	4.04	50.60	97	Serbia	2.70	28.37
43	Czech Republic	4.03	50.44	98	Bosnia and Herzegovina	2.58	26.33
44	Morocco	3.99	49.91	99	Burkina Faso	2.49	24.79
45	Costa Rica	3.95	49.16	100	Algeria	2.37	22.79
46	Portugal	3.94	48.99	101	Moldova	2.35	22.56
47	Bangladesh	3.93	48.80	102	Kyrgyz Republic	2.33	22.16
48	Israel	3.87	47.79	103	Albania	2.03	17.19
49	Colombia	3.85	47.58				
50	Pakistan	3.83	47.18				
51	New Zealand	3.77	46.13				
52	Kenya	3.76	45.98				
52	Panama	3.76	45.98				
54	Slovak Republic	3.75	45.84				
55	Azerbaijan	3.71	45.16				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.3.3 Quality of scientific research institutions

Average answer to the question: How would you assess the quality of scientific research institutions in your country? [1 = very poor; 7 = the best in their field internationally] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Israel	6.35	89.12	56	Uruguay	3.69	44.85
2	Switzerland	6.34	88.92	57	Malta	3.68	44.65
3	United Kingdom	6.18	86.29	58	Ukraine	3.68	44.62
4	Belgium	5.94	82.39	59	Azerbaijan	3.65	44.20
5	Qatar	5.77	79.53	60	Mali	3.62	43.71
6	Australia	5.76	79.29	61	Serbia	3.62	43.63
6	United States	5.76	79.29	62	Cambodia	3.60	43.34
8	Netherlands	5.74	78.99	63	Russian Federation	3.58	43.00
9	Sweden	5.64	77.38	63	Tanzania	3.58	43.00
10	Germany	5.61	76.90	65	Bosnia and Herzegovina	3.57	42.86
11	Japan	5.60	76.66	66	Botswana	3.57	42.76
12	Singapore	5.57	76.16	67	Bulgaria	3.53	42.13
13	Finland	5.53	75.44	68	Jordan	3.51	41.81
14	Ireland	5.48	74.73	69	Pakistan	3.51	41.76
15	France	5.46	74.37	70	Romania	3.43	40.42
16	Canada	5.45	74.19	71	Colombia	3.41	40.17
17	New Zealand	5.41	73.54	72	Uganda	3.41	40.08
18	Denmark	5.32	72.01	73	Vietnam	3.40	40.07
19	Hungary	5.13	68.84	74	Turkey	3.40	40.04
20	Austria	5.09	68.09	75	Slovak Republic	3.39	39.81
21	Portugal	5.04	67.37	76	Namibia	3.37	39.46
22	Iceland	5.02	66.92	77	Greece	3.33	38.82
23	Korea, Rep.	4.94	65.60	78	Bolivia	3.31	38.49
24	Estonia	4.91	65.14	79	Trinidad and Tobago	3.23	37.09
25	Czech Republic	4.89	64.86	80	Ethiopia	3.22	36.96
26	Norway	4.87	64.57	81	Macedonia, FYR	3.22	36.94
27	Malaysia	4.86	64.39	82	Philippines	3.17	36.19
28	Slovenia	4.80	63.30	83	Kuwait	3.16	35.93
29	Luxembourg	4.77	62.81	84	Morocco	3.15	35.85
30	Lithuania	4.65	60.89	85	Mongolia	3.15	35.84
31	Costa Rica	4.64	60.70	86	Guatemala	3.14	35.71
32	South Africa	4.62	60.40	87	Kazakhstan	3.02	33.73
33	United Arab Emirates	4.62	60.38	88	Ecuador (2011)	2.98	32.98
34	Spain	4.55	59.20	89	Armenia	2.97	32.79
35	Saudi Arabia	4.49	58.20	90	Egypt, Arab Rep.	2.87	31.12
36	India	4.45	57.42	91	Peru	2.79	29.80
37	Iran, Islamic Rep.	4.25	54.13	92	Venezuela, RB	2.78	29.65
38	Chile	4.20	53.26	93	Nicaragua	2.66	27.61
39	Italy	4.19	53.18	94	Georgia (2011)	2.57	26.20
40	China	4.18	53.06	95	Dominican Republic	2.56	25.98
41	Poland	4.14	52.36	96	Bangladesh	2.55	25.81
42	Brazil	4.12	51.93	97	Lebanon	2.52	25.25
43	Argentina	4.08	51.30	98	Moldova	2.44	24.00
44	Croatia	4.06	50.97	99	Albania	2.41	23.53
45	Mexico	4.03	50.58	100	El Salvador	2.27	21.10
46	Kenya	4.03	50.50	101	Kyrgyz Republic	2.11	18.55
47	Cyprus	4.02	50.41	102	Algeria	2.10	18.33
48	Panama	3.97	49.53	103	Paraguay	2.03	17.18
49	Montenegro	3.92	48.66				
50	Senegal	3.90	48.36				
51	Indonesia	3.88	47.95				
52	Sri Lanka (2011)	3.85	47.55				
53	Latvia	3.77	46.25				
54	Burkina Faso	3.74	45.67				
55	Thailand	3.74	45.62				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

3.3.4 Voicing concern to officials

Percentage of respondents who answered yes for the question:
Have you voiced your opinion to a public official in the past month? | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Slovenia	42.40	100.00	56	Korea, Rep.	17.30	40.80
2	Denmark	38.50	90.80	57	Moldova	17.20	40.57
3	Switzerland	36.00	84.91	58	Botswana	17.00	40.09
4	Colombia	34.40	81.13	58	India	17.00	40.09
4	Germany	34.40	81.13	58	Latvia	17.00	40.09
6	Philippines	33.90	79.95	61	Azerbaijan	16.90	39.86
7	Sweden	33.50	79.01	62	Peru	16.80	39.62
8	Luxembourg	32.40	76.42	63	United Arab Emirates	16.60	39.15
9	Austria	32.00	75.47	64	Ethiopia	16.40	38.68
10	Norway	31.50	74.29	65	Bulgaria	16.30	38.44
11	United States	30.40	71.70	65	Hungary	16.30	38.44
12	Thailand	30.10	70.99	67	Estonia	16.20	38.21
13	Uganda	29.60	69.81	68	Cambodia	15.40	36.32
14	Ireland	29.50	69.58	68	South Africa	15.40	36.32
15	Chile	28.50	67.22	70	Romania	15.20	35.85
16	Pakistan	28.30	66.75	71	Slovak Republic	14.90	35.14
17	Costa Rica	28.10	66.27	72	Albania	14.70	34.67
18	Panama	28.00	66.04	73	Italy	14.40	33.96
19	Cyprus	26.20	61.79	73	Ukraine	14.40	33.96
20	United Kingdom	25.50	60.14	75	Ecuador	13.70	32.31
21	Bolivia	25.10	59.20	76	Kyrgyz Republic	13.60	32.08
21	Finland	25.10	59.20	77	Malaysia	13.40	31.60
21	Iceland	25.10	59.20	78	Montenegro	13.30	31.37
24	Netherlands	24.60	58.02	79	Nicaragua	13.10	30.90
24	Portugal	24.60	58.02	80	Trinidad and Tobago	12.60	29.72
26	Mongolia	24.20	57.08	81	Turkey	12.30	29.01
26	Sri Lanka	24.20	57.08	82	Burkina Faso	12.20	28.77
28	Guatemala	23.90	56.37	82	Russian Federation	12.20	28.77
29	Senegal	23.50	55.42	84	Macedonia, FYR	11.90	28.07
30	Kuwait	23.30	54.95	85	Kazakhstan	11.50	27.12
31	Czech Republic	23.00	54.25	86	Lithuania	11.20	26.42
31	Uruguay	23.00	54.25	87	Bangladesh	10.80	25.47
33	Namibia	22.90	54.01	88	Argentina	10.50	24.76
34	France	22.60	53.30	89	Indonesia	10.20	24.06
35	Belgium	22.50	53.07	90	Armenia	9.80	23.11
35	Saudi Arabia	22.50	53.07	91	Algeria	9.60	22.64
37	Spain	22.20	52.36	92	Morocco	8.70	20.52
37	Tanzania	22.20	52.36	93	Bosnia and Herzegovina	8.60	20.28
39	Georgia	21.80	51.42	94	Lebanon	7.60	17.92
39	Malta	21.80	51.42	95	Vietnam	7.50	17.69
41	Canada	21.20	50.00	96	Jordan	6.70	15.80
42	Paraguay	20.80	49.06	97	Poland	6.60	15.57
43	Australia	20.50	48.35	98	Greece	6.10	14.39
44	Israel	20.20	47.64	99	Singapore	5.90	13.92
45	Japan	20.00	47.17	100	China	5.40	12.74
46	Dominican Republic	19.90	46.93	101	Egypt, Arab Rep.	3.90	9.20
47	Mali	19.80	46.70	102	Serbia	0.00	0.00
48	Venezuela, RB	19.40	45.75	n/a	Qatar	n/a	n/a
49	Mexico	19.10	45.05				
50	Croatia	19.00	44.81				
51	Iran, Islamic Rep.	18.90	44.58				
52	Kenya	18.60	43.87				
53	New Zealand	18.50	43.63				
54	Brazil	17.80	41.98				
55	El Salvador	17.40	41.04				

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>)
Last accessed April 2013.

PILLAR 4:

RETAIN

4.1.1 Pension system

Share of workforce contributing to pension system | 2005

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Czech Republic (2007)	0.95	100.00	56	Venezuela, RB (2009)	0.34	34.67
2	Japan	0.95	99.98	57	China (2010)	0.34	34.32
2	Switzerland	0.95	99.98	58	Mongolia (2008)	0.33	34.26
4	Estonia (2004)	0.94	99.00	59	Armenia (2008)	0.32	32.80
5	Austria	0.94	98.20	60	Georgia (2004)	0.29	29.73
6	Norway	0.93	97.67	61	Colombia (2010)	0.28	28.18
7	United Kingdom	0.93	97.64	62	Mexico (2009)	0.27	27.80
8	Denmark (2007)	0.93	97.31	63	Dominican Republic (2010)	0.27	27.22
9	United States	0.92	96.57	64	Ecuador (2007)	0.26	26.76
10	Portugal	0.92	96.40	65	Philippines (2007)	0.25	25.28
11	Hungary (2008)	0.92	96.39	66	Bosnia and Herzegovina (2009)	0.25	24.77
12	Latvia (2009)	0.92	96.10	67	Sri Lanka (2006)	0.24	24.31
13	Belgium	0.91	95.78	68	Morocco (2007)	0.24	23.98
14	Australia	0.91	95.02	69	El Salvador (2010)	0.23	23.01
14	Netherlands	0.91	95.02	70	Thailand (2006)	0.23	22.89
16	Italy	0.90	94.33	71	Nicaragua (2008)	0.22	21.80
17	Finland	0.90	93.96	72	Peru (2009)	0.22	21.72
18	Ireland	0.89	93.07	73	Guatemala (2008)	0.20	20.22
19	Sweden	0.89	93.01	74	Vietnam (2008)	0.19	19.20
20	Slovenia (2008)	0.87	91.53	75	Paraguay (2004)	0.12	11.91
21	Canada (2009)	0.87	91.46	76	Bolivia (2009)	0.12	11.70
22	France	0.87	91.40	77	Indonesia (2010)	0.11	10.40
23	Germany	0.87	90.95	78	India (2006)	0.10	9.63
24	Iceland	0.87	90.81	79	Uganda (2004)	0.10	9.62
25	Greece	0.86	89.99	80	Namibia (2008)	0.10	8.87
26	Lithuania (2009)	0.83	86.71	81	Botswana (2006)	0.09	8.28
27	Poland (2008)	0.81	85.13	82	Mali (2010)	0.08	7.13
28	Korea, Rep. (2006)	0.80	83.74	83	Kenya (2006)	0.08	6.68
29	Slovak Republic (2003)	0.79	82.47	84	South Africa (2010)	0.07	5.80
30	Bulgaria (2008)	0.79	82.23	85	Senegal (2003)	0.05	4.17
31	Uruguay (2009)	0.78	82.02	86	Qatar (2008)	0.04	3.34
32	Croatia (2010)	0.76	79.42	87	Tanzania (2006)	0.04	3.26
33	Trinidad and Tobago (2009)	0.71	74.19	88	Pakistan (2008)	0.04	2.83
34	Spain	0.69	72.38	89	Bangladesh (2004)	0.03	1.38
35	Romania (2008)	0.68	70.85	90	Burkina Faso (2004)	0.01	0.00
36	Russian Federation (2007)	0.67	69.65	n/a	Cambodia	n/a	n/a
37	Kazakhstan (2009)	0.62	65.04	n/a	Cyprus	n/a	n/a
38	Ukraine (2010)	0.62	64.68	n/a	Ethiopia	n/a	n/a
39	Singapore (2009)	0.62	64.61	n/a	Iran, Islamic Rep.	n/a	n/a
40	Brazil (2010)	0.59	61.66	n/a	Israel	n/a	n/a
41	Turkey (2008)	0.59	60.94	n/a	Kuwait	n/a	n/a
42	Costa Rica (2010)	0.59	60.89	n/a	Luxembourg	n/a	n/a
43	Chile (2010)	0.58	59.94	n/a	Malta	n/a	n/a
44	Moldova (2009)	0.57	58.89	n/a	Montenegro	n/a	n/a
45	Egypt, Arab Rep. (2009)	0.55	57.19	n/a	New Zealand	n/a	n/a
46	Macedonia, FYR (2009)	0.52	54.21	n/a	Panama	n/a	n/a
47	Malaysia (2008)	0.49	50.72	n/a	Saudi Arabia	n/a	n/a
48	Argentina (2010)	0.47	48.66	n/a	United Arab Emirates	n/a	n/a
49	Serbia (2007)	0.45	46.49				
50	Kyrgyz Republic (2008)	0.40	41.58				
51	Jordan (2006)	0.38	39.48				
52	Albania (2008)	0.38	38.93				
53	Algeria (2002)	0.37	37.69				
54	Azerbaijan (2007)	0.35	36.29				
55	Lebanon (2003)	0.35	35.38				

Source: World Bank, International patterns of pension provision II: a worldwide overview of facts and figures. (<http://web.worldbank.org/wbsite/external/topics/extsocialprotection/extpensions/>)

4.1.2 Extent and effect of taxation

Average answer to the question: What impact does the level of taxes in your country have on incentives to work or invest? [1 = significantly limits incentives to work and invest; 7 = has no impact on incentives to work or invest] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	United Arab Emirates	6.16	85.93	56	Bulgaria	3.39	39.91
2	Qatar	5.75	79.08	57	Jordan	3.36	39.39
3	Kuwait	5.47	74.44	58	Nicaragua	3.35	39.19
4	Singapore	5.46	74.32	59	Egypt, Arab Rep.	3.34	39.08
5	Switzerland	5.23	70.51	60	Moldova	3.34	39.07
6	Saudi Arabia	5.08	68.03	61	Kenya	3.32	38.73
7	Paraguay	4.80	63.32	62	Burkina Faso	3.32	38.64
8	Luxembourg	4.78	63.03	63	Kyrgyz Republic	3.30	38.37
9	Botswana	4.75	62.49	64	Tanzania	3.29	38.10
10	Malaysia	4.75	62.42	65	Poland	3.26	37.72
11	Cyprus	4.62	60.37	66	Austria	3.22	37.04
12	New Zealand	4.57	59.58	67	Finland	3.20	36.71
13	Estonia	4.53	58.79	68	Algeria	3.18	36.39
14	Chile	4.26	54.30	69	Uganda	3.17	36.19
15	Lebanon	4.23	53.76	70	Australia	3.16	35.94
16	Montenegro	4.16	52.68	71	Sweden	3.13	35.51
17	Macedonia, FYR	4.14	52.32	72	Czech Republic	3.11	35.23
18	Canada	4.09	51.45	73	Mali	3.09	34.79
19	Netherlands	4.08	51.32	74	Latvia	3.08	34.62
20	Indonesia	4.06	50.96	75	Korea, Rep.	3.08	34.59
21	South Africa	4.04	50.67	76	Bosnia and Herzegovina	3.07	34.56
22	Bangladesh	4.03	50.44	77	Uruguay	3.06	34.30
23	Panama	4.01	50.18	78	Spain	3.04	33.94
24	Cambodia	3.99	49.90	79	Venezuela, RB	3.03	33.84
25	Mongolia	3.98	49.65	80	Japan	3.03	33.81
26	Georgia (2011)	3.93	48.91	81	Ecuador (2011)	3.02	33.71
27	Kazakhstan	3.92	48.65	82	Colombia	2.99	33.16
28	Trinidad and Tobago	3.92	48.60	83	Turkey	2.98	32.98
29	China	3.88	48.03	84	Iceland	2.96	32.72
30	Albania	3.88	47.97	85	Russian Federation	2.94	32.27
31	Sri Lanka (2011)	3.83	47.16	86	Serbia	2.92	31.98
32	India	3.83	47.09	87	El Salvador	2.84	30.74
33	Armenia	3.82	47.06	88	Lithuania	2.81	30.18
34	Ireland	3.81	46.91	89	France	2.77	29.45
35	Azerbaijan	3.74	45.64	90	Senegal	2.77	29.43
36	Namibia	3.73	45.44	91	Slovenia	2.75	29.24
37	Malta	3.67	44.44	92	Dominican Republic	2.71	28.47
38	Thailand	3.65	44.08	93	Denmark	2.58	26.40
39	Guatemala	3.64	43.99	94	Hungary	2.51	25.10
40	Philippines	3.61	43.50	95	Portugal	2.42	23.66
41	Norway	3.58	43.08	96	Argentina	2.33	22.16
42	Mexico	3.57	42.81	97	Croatia	2.33	22.14
43	Morocco	3.56	42.67	98	Greece	2.32	22.00
44	Slovak Republic	3.54	42.36	99	Ukraine	2.32	21.94
45	United States	3.53	42.15	100	Belgium	2.29	21.57
46	Ethiopia	3.52	42.03	101	Italy	2.24	20.72
47	Costa Rica	3.50	41.66	102	Romania	2.20	20.04
48	Iran, Islamic Rep.	3.49	41.53	103	Brazil	2.13	18.91
49	Pakistan	3.48	41.36				
50	Israel	3.47	41.23				
51	Germany	3.47	41.21				
52	Bolivia	3.44	40.63				
53	United Kingdom	3.43	40.57				
54	Vietnam	3.41	40.12				
55	Peru	3.40	39.93				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

4.2.1 Environmental performance

Environmental performance index | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Switzerland	76.69	100.00	56	Bolivia	54.57	49.44
2	Latvia	70.37	85.55	57	Tanzania	54.26	48.73
3	Norway	69.92	84.53	58	Botswana	53.74	47.54
4	Luxembourg	69.20	82.88	59	Ethiopia	52.71	45.19
5	Costa Rica	69.03	82.49	60	Dominican Republic	52.44	44.57
6	France	69.00	82.42	61	Paraguay	52.40	44.48
7	Austria	68.92	82.24	62	Indonesia	52.29	44.23
8	Italy	68.90	82.19	63	El Salvador	52.08	43.75
9	Sweden	68.82	82.01	64	Guatemala	51.88	43.29
9	United Kingdom	68.82	82.01	65	United Arab Emirates	50.91	41.07
11	Germany	66.91	77.65	66	Namibia	50.68	40.55
12	Slovak Republic	66.62	76.98	67	Vietnam	50.64	40.46
13	Iceland	66.28	76.21	68	Peru	50.29	39.66
14	New Zealand	66.05	75.68	69	Saudi Arabia	49.97	38.93
15	Albania	65.85	75.22	70	Kenya	49.28	37.35
16	Netherlands	65.65	74.77	71	Mexico	49.11	36.96
17	Lithuania	65.50	74.42	72	Algeria	48.56	35.70
18	Czech Republic	64.79	72.80	73	Malta	48.51	35.59
19	Finland	64.44	72.00	74	Romania	48.34	35.20
20	Croatia	64.16	71.36	75	Armenia	47.48	33.23
21	Denmark	63.61	70.10	76	Lebanon	47.35	32.94
22	Poland	63.47	69.78	77	Trinidad and Tobago	47.04	32.23
23	Japan	63.36	69.53	78	Macedonia, FYR	46.96	32.05
24	Belgium	63.02	68.75	79	Senegal	46.73	31.52
25	Malaysia	62.51	67.59	80	Qatar	46.59	31.20
26	Colombia	62.33	67.18	81	Kyrgyz Republic	46.33	30.61
27	Slovenia	62.25	66.99	82	Ukraine	46.31	30.56
28	Brazil	60.90	63.91	83	Serbia	46.14	30.17
29	Ecuador	60.55	63.11	84	Morocco	45.76	29.30
30	Spain	60.31	62.56	85	Russian Federation	45.43	28.55
31	Greece	60.04	61.94	86	Mongolia	45.37	28.41
32	Thailand	59.98	61.81	87	Moldova	45.21	28.05
33	Nicaragua	59.23	60.09	88	Turkey	44.80	27.11
34	Ireland	58.69	58.86	89	Azerbaijan	43.11	23.25
35	Canada	58.41	58.22	90	Iran, Islamic Rep.	42.73	22.38
36	Panama	57.94	57.14	91	Bangladesh	42.55	21.97
37	Portugal	57.64	56.46	92	China	42.24	21.26
38	Philippines	57.40	55.91	93	Jordan	42.16	21.07
39	Korea, Rep.	57.20	55.45	94	Pakistan	39.56	15.13
40	Cyprus	57.15	55.34	95	Bosnia and Herzegovina	36.76	8.73
41	Hungary	57.12	55.27	96	India	36.23	7.52
42	Uruguay	57.06	55.13	97	Kuwait	35.54	5.94
43	Georgia	56.84	54.63	98	South Africa	34.55	3.68
44	Australia	56.61	54.10	99	Kazakhstan	32.94	0.00
45	United States	56.59	54.06	n/a	Burkina Faso	n/a	n/a
46	Argentina	56.48	53.81	n/a	Mali	n/a	n/a
47	Singapore	56.36	53.53	n/a	Montenegro	n/a	n/a
48	Bulgaria	56.28	53.35	n/a	Uganda	n/a	n/a
49	Estonia	56.09	52.91				
50	Sri Lanka	55.72	52.07				
51	Venezuela, RB	55.62	51.84				
52	Chile	55.34	51.20				
53	Cambodia	55.29	51.09				
54	Egypt, Arab Rep.	55.18	50.83				
55	Israel	54.64	49.60				

Source: Yale University and Columbia University, Environmental Performance Index 2012. (<http://epi.yale.edu/>)

4.2.2 Property stolen

Percentage of respondents who answered yes for the question: Within the past 12 months, have you had money or property stolen from you or another household member? | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Serbia	0.00	100.00	55	Pakistan	12.90	69.43
2	Azerbaijan	1.90	95.50	57	Sri Lanka	13.00	69.19
3	Singapore	2.70	93.60	58	France	13.30	68.48
4	Croatia	3.70	91.23	58	Romania	13.30	68.48
5	Montenegro	3.80	91.00	60	Moldova	14.10	66.59
6	Bosnia and Herzegovina	5.30	87.44	61	Kuwait	14.60	65.40
7	Poland	5.60	86.73	62	Brazil	14.90	64.69
8	Malta	6.00	85.78	62	Greece	14.90	64.69
9	Georgia	6.80	83.89	64	Latvia	15.80	62.56
10	United Arab Emirates	6.90	83.65	65	Chile	15.90	62.32
11	Armenia	7.30	82.70	66	Czech Republic	16.10	61.85
12	Korea, Rep.	7.80	81.52	67	Saudi Arabia	17.00	59.72
13	Jordan	8.00	81.04	68	Philippines	17.20	59.24
13	Lithuania	8.00	81.04	68	Spain	17.20	59.24
15	Indonesia	8.30	80.33	70	Algeria	17.30	59.00
16	Finland	8.40	80.09	70	Guatemala	17.30	59.00
17	Netherlands	8.60	79.62	72	Ecuador	17.50	58.53
18	Egypt, Arab Rep.	8.70	79.38	73	Nicaragua	17.70	58.06
19	Japan	8.90	78.91	74	Hungary	18.00	57.35
20	Panama	9.10	78.44	75	Bangladesh	18.10	57.11
20	Russian Federation	9.10	78.44	76	China	18.20	56.87
22	Austria	9.40	77.73	76	Vietnam	18.20	56.87
22	Luxembourg	9.40	77.73	78	Cambodia	18.30	56.64
24	Iceland	9.50	77.49	79	Costa Rica	18.40	56.40
25	Ukraine	9.60	77.25	80	Dominican Republic	18.70	55.69
26	India	9.70	77.01	81	Venezuela, RB	19.10	54.74
27	Germany	9.90	76.54	82	Argentina	19.40	54.03
28	Lebanon	10.00	76.30	83	Mexico	19.60	53.55
29	Bulgaria	10.40	75.36	84	Morocco	19.90	52.84
29	Burkina Faso	10.40	75.36	85	New Zealand	20.00	52.61
29	Switzerland	10.40	75.36	86	Iran, Islamic Rep.	21.50	49.05
29	Turkey	10.40	75.36	87	El Salvador	21.60	48.82
33	Israel	10.50	75.12	88	Namibia	22.50	46.68
33	Mali	10.50	75.12	89	Trinidad and Tobago	23.10	45.26
35	Ireland	10.80	74.41	90	Ethiopia	24.50	41.94
36	Belgium	10.90	74.17	91	Uruguay	25.30	40.05
36	Italy	10.90	74.17	92	Colombia	25.90	38.63
38	United Kingdom	11.40	72.99	92	Mongolia	25.90	38.63
39	Sweden	11.50	72.75	94	Paraguay	26.10	38.15
40	Albania	11.60	72.51	95	Peru	27.80	34.12
40	Macedonia, FYR	11.60	72.51	96	Bolivia	28.20	33.18
42	Thailand	11.70	72.27	97	Tanzania	29.90	29.15
43	Norway	11.90	71.80	98	South Africa	30.30	28.20
44	Australia	12.10	71.33	99	Kenya	31.10	26.30
44	Kyrgyz Republic	12.10	71.33	100	Botswana	31.70	24.88
46	Kazakhstan	12.20	71.09	101	Senegal	33.70	20.14
47	Portugal	12.30	70.85	102	Uganda	42.20	0.00
47	United States	12.30	70.85	n/a	Qatar	n/a	n/a
49	Cyprus	12.40	70.62				
50	Slovenia	12.50	70.38				
51	Canada	12.60	70.14				
51	Denmark	12.60	70.14				
51	Slovak Republic	12.60	70.14				
54	Malaysia	12.80	69.67				
55	Estonia	12.90	69.43				

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>)
Last accessed April 2013.

4.2.3 Safety at night

Percentage of respondents who answered yes for the question:
Do you feel safe walking alone at night in the area where you live? | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Georgia	93.50	100.00	56	Estonia	61.30	65.56
2	United Arab Emirates	92.30	98.72	57	Tanzania	61.20	65.45
3	Singapore	89.30	95.51	58	Israel	60.50	64.71
4	Kuwait	89.00	95.19	59	Hungary	59.20	63.32
5	Indonesia	88.10	94.22	60	Romania	58.30	62.35
6	Slovenia	85.70	91.66	61	Egypt, Arab Rep.	57.90	61.93
7	Norway	84.50	90.37	62	Korea, Rep.	56.90	60.86
8	Austria	84.40	90.27	63	Iran, Islamic Rep.	56.50	60.43
9	Jordan	82.80	88.56	64	Italy	55.00	58.82
10	Netherlands	82.40	88.13	65	Senegal	54.90	58.72
11	Denmark	82.30	88.02	66	Bulgaria	54.50	58.29
12	China	81.90	87.59	67	Greece	52.90	56.58
13	Bangladesh	81.80	87.49	68	Moldova	52.50	56.15
14	Germany	81.50	87.17	69	Ukraine	52.10	55.72
15	Iceland	81.10	86.74	70	Nicaragua	51.60	55.19
16	Finland	80.80	86.42	71	Latvia	51.50	55.08
16	Montenegro	80.80	86.42	72	Argentina	51.30	54.87
16	Sweden	80.80	86.42	72	Turkey	51.30	54.87
19	Mali	80.40	85.99	74	Ethiopia	50.10	53.58
20	Canada	79.80	85.35	74	Kenya	50.10	53.58
21	Luxembourg	79.30	84.81	76	Uruguay	50.00	53.48
22	Sri Lanka	79.10	84.60	77	Ecuador	49.30	52.73
23	Switzerland	78.80	84.28	78	Algeria	49.00	52.41
24	Saudi Arabia	78.20	83.64	79	Mongolia	48.80	52.19
25	Armenia	77.00	82.35	80	Panama	48.40	51.76
26	Azerbaijan	75.80	81.07	81	Malaysia	48.30	51.66
27	United States	75.70	80.96	82	Chile	47.20	50.48
28	Thailand	74.70	79.89	83	Pakistan	46.50	49.73
29	Vietnam	72.30	77.33	83	Peru	46.50	49.73
30	Ireland	71.70	76.68	85	Bolivia	44.50	47.59
31	Cyprus	71.50	76.47	86	Colombia	44.10	47.17
31	United Kingdom	71.50	76.47	87	Russian Federation	44.00	47.06
33	Belgium	70.80	75.72	88	Mexico	42.60	45.56
34	India	70.60	75.51	89	Lithuania	42.50	45.45
35	Japan	70.50	75.40	90	El Salvador	42.30	45.24
36	Spain	70.00	74.87	91	Guatemala	42.20	45.13
37	Albania	69.70	74.55	92	Trinidad and Tobago	42.00	44.92
38	Lebanon	69.40	74.22	93	Costa Rica	41.90	44.81
38	Morocco	69.40	74.22	94	Uganda	41.70	44.60
40	New Zealand	69.00	73.80	95	Brazil	40.30	43.10
41	Cambodia	68.30	73.05	96	Dominican Republic	38.70	41.39
42	Poland	68.20	72.94	97	South Africa	38.30	40.96
43	Bosnia and Herzegovina	68.00	72.73	98	Paraguay	38.10	40.75
43	Croatia	68.00	72.73	99	Namibia	32.90	35.19
45	Malta	67.40	72.09	100	Venezuela, RB	31.90	34.12
46	France	67.00	71.66	101	Botswana	30.70	32.83
47	Australia	66.00	70.59	102	Serbia	0.00	0.00
47	Macedonia, FYR	66.00	70.59	n/a	Qatar	n/a	n/a
49	Portugal	65.90	70.48				
50	Philippines	63.30	67.70				
51	Czech Republic	62.60	66.95				
51	Kyrgyz Republic	62.60	66.95				
53	Burkina Faso	62.40	66.74				
54	Slovak Republic	62.20	66.52				
55	Kazakhstan	61.60	65.88				

Source: Legatum Institute, Legatum Prosperity Index 2012 based on Gallup World Poll. (<http://www.prosperity.com/>)
Last accessed April 2013.

4.2.4 Physicians density

Physicians (per 1,000 people) | 2010

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Greece	6.17	100.00	56	Canada	1.98	31.94
2	Austria	4.85	78.67	57	Mexico	1.96	31.68
3	Georgia	4.76	77.19	58	United Arab Emirates	1.93	31.21
4	Russian Federation	4.31	69.83	59	Singapore	1.83	29.63
5	Norway	4.16	67.40	60	Kuwait	1.79	28.98
6	Kazakhstan	4.10	66.42	61	Brazil	1.76	28.51
7	Switzerland	4.07	65.95	62	Ecuador	1.69	27.26
8	Spain	3.96	64.12	63	Bosnia and Herzegovina	1.64	26.47
9	Portugal	3.87	62.67	64	El Salvador	1.60	25.78
10	Azerbaijan	3.78	61.28	65	Turkey	1.54	24.84
11	Sweden	3.77	61.08	66	China	1.42	22.84
12	Armenia	3.76	60.95	67	Vietnam	1.22	19.74
13	Uruguay	3.74	60.53	68	Algeria	1.21	19.47
14	Iceland	3.73	60.48	69	Trinidad and Tobago	1.18	18.95
15	Bulgaria	3.73	60.43	70	Albania	1.15	18.59
16	Czech Republic	3.67	59.49	70	Philippines (2004)	1.15	18.59
17	Israel	3.65	59.13	72	Paraguay (2002)	1.11	17.89
18	Lithuania	3.61	58.55	73	Chile	1.03	16.53
19	Germany	3.60	58.34	74	Malaysia	0.94	15.15
20	Lebanon	3.54	57.35	75	Saudi Arabia	0.94	15.12
21	Italy	3.49	56.47	76	Peru	0.92	14.81
22	France	3.45	55.84	77	Iran, Islamic Rep.	0.89	14.32
23	Denmark	3.42	55.46	78	Pakistan	0.81	13.07
24	Estonia	3.33	54.00	79	South Africa (2004)	0.77	12.37
25	Ukraine	3.25	52.57	80	India	0.65	10.41
26	Argentina	3.21	51.99	81	Morocco	0.62	9.94
27	Ireland	3.17	51.39	82	Sri Lanka	0.49	7.86
28	Malta	3.11	50.40	83	Namibia	0.37	5.94
29	Hungary	3.03	49.08	84	Nicaragua (2003)	0.37	5.88
30	Belgium	3.01	48.79	85	Botswana	0.34	5.33
31	Slovak Republic	3.00	48.58	86	Thailand	0.32	5.05
32	Australia	2.99	48.43	87	Bangladesh	0.30	4.66
33	Latvia	2.99	48.38	88	Indonesia	0.29	4.55
34	Finland	2.91	47.04	89	Cambodia	0.23	3.60
35	Netherlands	2.86	46.29	90	Colombia	0.15	2.26
36	Egypt, Arab Rep.	2.83	45.82	91	Kenya (2004)	0.14	2.13
37	Luxembourg	2.77	44.78	92	Uganda	0.12	1.77
38	Mongolia	2.76	44.73	93	Burkina Faso	0.06	0.91
39	Qatar	2.76	44.63	94	Senegal	0.06	0.83
40	United Kingdom	2.74	44.41	95	Mali	0.05	0.67
41	New Zealand	2.74	44.28	96	Ethiopia	0.02	0.23
42	Moldova	2.68	43.33	97	Tanzania	0.01	0.00
43	Macedonia, FYR	2.63	42.52	n/a	Bolivia	n/a	n/a
44	Croatia	2.60	42.10	n/a	Costa Rica	n/a	n/a
45	Cyprus	2.58	41.82	n/a	Dominican Republic	n/a	n/a
46	Slovenia	2.51	40.56	n/a	Guatemala	n/a	n/a
47	Jordan	2.45	39.65	n/a	Panama	n/a	n/a
48	United States	2.42	39.19	n/a	Venezuela, RB	n/a	n/a
49	Kyrgyz Republic	2.30	37.23				
50	Romania	2.27	36.71				
51	Poland	2.16	34.89				
52	Japan	2.14	34.65				
53	Serbia	2.11	34.16				
54	Montenegro	2.10	33.95				
55	Korea, Rep.	2.02	32.73				

Source: World Bank, World Development Indicators based on World Health Organization, Global Atlas of the Health Workforce. (<http://data.worldbank.org/>)

PILLAR 5:

LABOUR & VOCATIONAL

5.1.1 Secondary-educated workforce

Percentage of workforce with secondary education (%) | 2010

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Czech Republic (2011)	70.20	100.00	56	Dominican Republic (2011)	21.40	30.29
2	Slovakia (2006)	67.60	96.29	57	Ecuador	20.60	29.14
3	Kyrgyzstan (2009)	60.90	86.71	57	New Zealand (2011)	20.60	29.14
4	Azerbaijan (2009)	58.80	83.71	59	Indonesia (2009)	20.30	28.71
5	Montenegro (2006)	58.20	82.86	60	Panama	20.10	28.43
6	Poland (2011)	57.10	81.29	61	El Salvador	19.90	28.14
7	Slovenia (2011)	56.20	80.00	62	Singapore (2011)	19.60	27.71
8	Hungary (2011)	55.00	78.29	63	Qatar (2011)	19.00	26.86
9	United Kingdom	52.60	74.86	64	Spain	18.60	26.29
10	Estonia (2011)	51.00	72.57	65	Paraguay (2008)	18.20	25.71
11	Germany	50.80	72.29	66	Lebanon (2007)	17.50	24.71
12	Latvia (2011)	50.60	72.00	67	Pakistan (2009)	16.60	23.43
13	Austria	50.40	71.71	68	Russian Federation	16.50	23.29
14	Bulgaria	48.90	69.57	69	Costa Rica (2011)	16.10	22.71
15	Romania	48.10	68.43	69	Turkey (2009)	16.10	22.71
15	Serbia (2011)	48.10	68.43	71	Bolivia (2009)	15.60	22.00
17	United States	48.00	68.29	72	Sri Lanka (2009)	15.50	21.86
18	South Africa (2011)	45.70	65.00	73	Mexico	14.80	20.86
19	Switzerland	44.10	62.71	74	Saudi Arabia (2004)	14.70	20.71
20	Sweden	43.10	61.29	75	Jordan	14.20	20.00
21	Moldova	42.70	60.71	76	China	13.50	19.00
22	Luxembourg	42.40	60.29	77	Kuwait (2008)	13.40	18.86
23	Denmark (2011)	41.50	59.00	78	Portugal	12.70	17.86
24	Japan	39.90	56.71	78	Trinidad and Tobago (2009)	12.70	17.86
25	Kazakhstan (2007)	39.70	56.43	80	Uruguay	12.50	17.57
26	Norway	38.80	55.14	81	Thailand (2006)	9.60	13.43
27	Finland (2009)	38.00	54.00	82	Algeria (2006)	7.60	10.57
28	France	37.40	53.14	83	Malta (2011)	7.50	10.43
28	Korea, Rep.	37.40	53.14	84	Guatemala (2006)	7.20	10.00
30	Macedonia FYR (2002)	35.60	50.57	85	Ethiopia (2007)	4.50	6.14
31	Georgia (2002)	35.30	50.14	86	Cambodia (2009)	4.20	5.71
32	Philippines (2008)	35.10	49.86	87	Mali (2006)	3.60	4.86
33	Chile	34.70	49.29	88	Uganda	2.50	3.29
34	Malaysia	34.50	49.00	89	Senegal (2006)	1.70	2.14
35	Netherlands	34.30	48.71	90	Tanzania (2002)	0.70	0.71
36	Israel	34.20	48.57	91	Burkina Faso (2007)	0.20	0.00
37	Cyprus	32.90	46.71	n/a	Armenia	n/a	n/a
38	Italy	32.70	46.43	n/a	Bangladesh	n/a	n/a
39	Lithuania (2011)	32.00	45.43	n/a	Botswana	n/a	n/a
39	Peru	32.00	45.43	n/a	Croatia	n/a	n/a
41	Australia (2011)	31.40	44.57	n/a	Egypt, Arab Rep.	n/a	n/a
42	Albania (2011)	31.30	44.43	n/a	India	n/a	n/a
43	Belgium	30.00	42.57	n/a	Mongolia	n/a	n/a
43	Kenya	30.00	42.57	n/a	Morocco	n/a	n/a
45	Argentina (2003)	28.40	40.29	n/a	Namibia	n/a	n/a
46	Iceland (2005)	28.30	40.14	n/a	Nicaragua	n/a	n/a
47	Venezuela (2009)	27.00	38.29	n/a	Ukraine	n/a	n/a
48	Greece	26.80	38.00	n/a	Vietnam	n/a	n/a
49	Brazil	24.60	34.86				
50	United Arab Emirates (2005)	24.50	34.71				
51	Iran, Islamic Rep.	24.00	34.00				
52	Canada (2006)	23.40	33.14				
53	Colombia (2011)	22.10	31.29				
54	Bosnia and Herzegovina	21.90	31.00				
55	Ireland	21.70	30.71				

Source: UNESCO, Global Education Digest 2011 and 2012.
(<http://www.uis.unesco.org/Education/Pages/global-education-digest.aspx>)

5.1.2 Technicians and associate professionals

Technicians and associate professionals (%) | 2011

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Singapore	20.70	100.00	56	Kuwait (2005)	8.10	35.71
2	Germany	20.20	97.45	56	Panama	8.10	35.71
3	France	20.10	96.94	58	Bulgaria	7.90	34.69
4	Czech Republic	19.30	92.86	59	Greece	7.80	34.18
5	Slovak Republic	19.00	91.33	59	Moldova (2008)	7.80	34.18
6	Austria	18.60	89.29	61	Brazil (2007)	7.70	33.67
7	Luxembourg	18.30	87.76	62	Ethiopia (2006)	6.90	29.59
8	Switzerland	18.20	87.24	63	El Salvador (2010)	6.80	29.08
9	Israel (2008)	17.60	84.18	63	Romania	6.80	29.08
10	Italy	17.30	82.65	65	Ecuador (2006)	6.60	28.06
11	Finland	16.80	80.10	65	Kyrgyz Republic (2006)	6.60	28.06
12	Denmark	16.50	78.57	67	Botswana (2006)	6.50	27.55
13	Iceland	16.40	78.06	67	Dominican Republic (2007)	6.50	27.55
13	Norway	16.40	78.06	69	Qatar (2009)	6.20	26.02
13	Sweden	16.40	78.06	70	Uruguay (2007)	6.10	25.51
16	Netherlands	16.20	77.04	71	Georgia (2007)	5.90	24.49
17	Belgium	15.90	75.51	71	Turkey (2010)	5.90	24.49
18	Canada (2008)	15.50	73.47	73	Bolivia (2007)	5.80	23.98
19	Russian Federation (2008)	15.20	71.94	74	Sri Lanka (2008)	5.60	22.96
20	Malaysia (2010)	14.80	69.90	75	Pakistan (2008)	5.30	21.43
21	Montenegro	14.60	68.88	76	Namibia (2004)	5.20	20.92
21	Serbia (2010)	14.60	68.88	77	Iran, Islamic Rep. (2008)	4.80	18.88
23	United Arab Emirates (2008)	14.50	68.37	77	Paraguay (2008)	4.80	18.88
24	Hungary	14.10	66.33	79	Mongolia (2008)	4.60	17.86
24	Malta	14.10	66.33	80	Morocco	4.40	16.84
26	Slovenia	14.00	65.82	81	Azerbaijan (2008)	3.90	14.29
27	Australia (2008)	13.70	64.29	82	Uganda (2009)	3.70	13.27
28	Argentina (2006)	13.50	63.27	83	Bangladesh (2003)	3.40	11.73
28	Costa Rica	13.50	63.27	83	Thailand	3.40	11.73
30	Chile (2002)	13.00	60.71	85	Vietnam (2004)	3.20	10.71
31	Cyprus	12.90	60.20	86	India (2010)	3.00	9.69
31	Estonia	12.90	60.20	87	Philippines	2.60	7.65
33	Croatia	12.50	58.16	88	Cambodia (2008)	2.30	6.12
34	New Zealand (2008)	12.40	57.65	89	Indonesia (2008)	1.90	4.08
35	Latvia	12.00	55.61	90	Tanzania (2006)	1.80	3.57
36	Lithuania	11.60	53.57	91	Burkina Faso (2006)	1.10	0.00
36	Ukraine (2008)	11.60	53.57	n/a	Albania	n/a	n/a
38	United Kingdom	11.50	53.06	n/a	Bosnia and Herzegovina	n/a	n/a
39	Trinidad and Tobago (2005)	11.40	52.55	n/a	China	n/a	n/a
40	Poland	11.10	51.02	n/a	Colombia	n/a	n/a
40	South Africa	11.10	51.02	n/a	Guatemala	n/a	n/a
42	Saudi Arabia (2008)	10.90	50.00	n/a	Japan	n/a	n/a
42	Spain	10.90	50.00	n/a	Jordan	n/a	n/a
44	Korea, Rep. (2008)	10.80	49.49	n/a	Kenya	n/a	n/a
45	Ireland	10.50	47.96	n/a	Mali	n/a	n/a
46	Macedonia, FYR	10.20	46.43	n/a	Senegal	n/a	n/a
47	Lebanon (2007)	9.70	43.88	n/a	United States	n/a	n/a
47	Mexico (2008)	9.70	43.88	n/a	Venezuela, RB	n/a	n/a
49	Armenia (2008)	9.30	41.84				
50	Algeria (2004)	9.10	40.82				
50	Egypt, Arab Rep. (2007)	9.10	40.82				
50	Kazakhstan (2008)	9.10	40.82				
53	Peru (2008)	8.90	39.80				
54	Nicaragua (2006)	8.80	39.29				
54	Portugal	8.80	39.29				

Source: International Labour Organization, Key Indicators of the Labour Market, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

5.1.3 Youth employment

Youth employment (% of youth population) | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Tanzania	74.40	100.00	55	Ukraine	34.40	36.31
2	Burkina Faso	72.40	96.82	57	Singapore	34.10	35.83
3	Ethiopia	70.80	94.27	58	India	33.80	35.35
4	Cambodia	69.70	92.52	58	Mongolia	33.80	35.35
5	Switzerland	62.80	81.53	60	Turkey	33.50	34.87
6	Netherlands	62.50	81.05	61	Kenya	32.80	33.76
7	Qatar	61.60	79.62	62	Chile	32.60	33.44
8	Australia	60.80	78.34	63	Azerbaijan	32.50	33.28
9	Iceland	59.50	76.27	64	Estonia	32.00	32.48
10	Vietnam	58.70	75.00	65	Sri Lanka	30.80	30.57
11	Denmark	57.60	73.25	66	Kuwait	30.40	29.94
12	Guatemala	57.10	72.45	67	France	29.80	28.98
13	Senegal	56.90	72.13	67	Slovenia	29.80	28.98
14	Paraguay	55.80	70.38	69	Morocco	29.40	28.34
15	China	55.60	70.06	70	Latvia	29.10	27.87
16	Canada	55.50	69.90	71	Cyprus	28.40	26.75
17	Uganda	55.30	69.59	72	Ireland	28.10	26.27
18	Austria	55.00	69.11	73	Israel	26.00	22.93
19	Peru	54.60	68.47	74	Belgium	25.90	22.77
20	Brazil	53.90	67.36	75	Poland	25.60	22.29
21	Norway	51.70	63.85	76	Portugal	24.70	20.86
22	Bolivia	51.50	63.54	77	Czech Republic	24.30	20.22
23	Bangladesh	51.10	62.90	78	Korea, Rep.	23.80	19.43
24	New Zealand	50.30	61.62	79	Romania	23.60	19.11
25	Germany	48.30	58.44	80	Iran, Islamic Rep.	22.30	17.04
26	Trinidad and Tobago	46.80	56.05	80	Lebanon	22.30	17.04
27	United Kingdom	46.30	55.25	80	Lithuania	22.30	17.04
28	Thailand	46.10	54.94	83	Georgia	22.20	16.88
29	Ecuador	45.90	54.62	84	Algeria	21.90	16.40
30	Kazakhstan	44.70	52.71	85	Egypt, Arab Rep.	21.60	15.92
31	Malta	44.30	52.07	86	Bulgaria	20.40	14.01
31	Uruguay	44.30	52.07	87	Luxembourg	20.30	13.85
33	Panama	43.90	51.43	88	Jordan	20.00	13.38
34	Finland	43.30	50.48	89	Moldova	19.50	12.58
35	Nicaragua	42.90	49.84	89	Slovak Republic	19.50	12.58
36	El Salvador	42.40	49.04	91	Spain	19.10	11.94
36	Mexico	42.40	49.04	92	Croatia	18.40	10.83
36	United States	42.40	49.04	93	Hungary	18.00	10.19
39	Botswana	41.50	47.61	94	Serbia	17.90	10.03
40	Kyrgyz Republic	41.20	47.13	95	Italy	17.70	9.71
41	Sweden	41.10	46.97	96	Armenia	17.60	9.55
42	Pakistan	41.00	46.82	97	Namibia	15.80	6.69
43	United Arab Emirates	40.30	45.70	98	Macedonia, FYR	14.60	4.78
44	Indonesia	40.00	45.22	99	Greece	14.00	3.82
45	Philippines	39.80	44.90	100	Bosnia and Herzegovina	13.60	3.18
46	Costa Rica	39.30	44.11	101	South Africa	13.00	2.23
46	Dominican Republic	39.30	44.11	102	Saudi Arabia	11.60	0.00
48	Venezuela, RB	38.70	43.15	n/a	Montenegro	n/a	n/a
49	Japan	38.50	42.83				
50	Albania	37.60	41.40				
51	Russian Federation	37.40	41.08				
52	Colombia	36.10	39.01				
53	Mali	35.60	38.22				
54	Malaysia	34.80	36.94				
55	Argentina	34.40	36.31				

Source: International Labour Organization, Key Indicators of the Labour Market, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

5.2.1 Labour productivity per employee

Labour productivity per person employed (constant 2012 US\$) | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Qatar	153432.00	100.00	56	Kazakhstan	28346.27	17.50
2	Luxembourg	113725.00	73.81	57	Serbia	28146.15	17.37
3	United States	108080.10	70.09	58	Bulgaria	27651.75	17.04
4	Norway	106166.70	68.83	59	Peru	26251.06	16.12
5	Ireland	103399.70	67.00	60	South Africa	26167.12	16.06
6	Singapore	100278.40	64.94	61	Romania	25986.96	15.94
7	Belgium	95699.56	61.92	62	Jordan	23843.72	14.53
8	Australia	93667.77	60.58	63	Colombia	23370.24	14.22
9	Austria	90170.20	58.28	64	Algeria	22805.49	13.84
10	Sweden	88995.44	57.50	65	Albania	21564.27	13.03
11	France	86887.54	56.11	66	Azerbaijan	21181.99	12.77
12	Canada	85973.98	55.51	67	Ecuador	21100.27	12.72
13	Iceland	85955.92	55.50	68	Guatemala	20675.09	12.44
14	United Kingdom	84489.16	54.53	69	Brazil	19898.72	11.93
15	Netherlands	84288.39	54.40	70	Thailand	18431.65	10.96
16	Finland	81743.01	52.72	71	China	18324.59	10.89
17	Spain	81359.58	52.46	72	Georgia	18145.38	10.77
18	Switzerland	80299.38	51.76	73	Armenia	17816.78	10.55
19	Germany	79441.02	51.20	74	Ukraine	17637.81	10.44
20	Italy	79329.91	51.13	75	Egypt, Arab Rep.	16840.58	9.91
21	Denmark	78459.32	50.55	76	Sri Lanka	16309.91	9.56
22	Japan	76339.92	49.15	77	Moldova	12789.80	7.24
23	Israel	73059.94	46.99	78	Bolivia	12363.69	6.96
24	United Arab Emirates	72076.70	46.34	79	Morocco	12243.72	6.88
25	Saudi Arabia	69848.70	44.87	80	Indonesia	11904.28	6.65
26	Korea, Rep.	65505.06	42.01	81	India	11048.40	6.09
27	Greece	64812.00	41.55	82	Philippines	10887.00	5.98
28	Trinidad and Tobago	63665.46	40.79	83	Pakistan	9677.34	5.19
29	Malta	62805.59	40.23	84	Vietnam	6815.95	3.30
30	Slovenia	62105.79	39.77	85	Kyrgyz Republic	6483.73	3.08
31	New Zealand	61937.23	39.65	86	Bangladesh	5714.51	2.57
32	Cyprus	60936.01	38.99	87	Cambodia	5096.18	2.16
33	Kuwait	60932.36	38.99	88	Senegal	4016.41	1.45
34	Slovak Republic	58514.41	37.40	89	Kenya	3956.07	1.41
35	Czech Republic	55214.75	35.22	90	Mali	3412.18	1.05
36	Portugal	51262.21	32.61	91	Uganda	3408.24	1.05
37	Croatia	50492.68	32.11	92	Tanzania	2755.37	0.62
38	Poland	50067.60	31.83	93	Burkina Faso	2516.63	0.46
39	Hungary	46371.68	29.39	94	Ethiopia	1815.42	0.00
40	Lithuania	45875.84	29.06	n/a	Botswana	n/a	n/a
41	Estonia	44080.29	27.88	n/a	El Salvador	n/a	n/a
42	Turkey	42383.94	26.76	n/a	Lebanon	n/a	n/a
43	Latvia	39968.74	25.16	n/a	Mongolia	n/a	n/a
44	Argentina	38403.34	24.13	n/a	Montenegro	n/a	n/a
45	Russian Federation	38326.61	24.08	n/a	Namibia	n/a	n/a
46	Iran, Islamic Rep.	38042.17	23.89	n/a	Nicaragua	n/a	n/a
47	Mexico	37180.74	23.33	n/a	Panama	n/a	n/a
48	Malaysia	36854.20	23.11	n/a	Paraguay	n/a	n/a
49	Chile	35811.66	22.42				
50	Macedonia, FYR	34958.00	21.86				
51	Bosnia and Herzegovina	34613.63	21.63				
52	Venezuela, RB	34232.23	21.38				
53	Dominican Republic	32753.82	20.41				
54	Uruguay	31302.77	19.45				
55	Costa Rica	31298.46	19.45				

Source: The Conference Board, Total Economy Database.
(<http://www.conference-board.org/data/economydatabase/>)

5.2.2 Relationship of pay to productivity

Average answer to the question: To what extent is pay in your country related to productivity?
[1 = not related to worker productivity; 7= strongly related to worker productivity] | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Singapore	5.38	73.01	56	Netherlands	3.90	48.40
2	Malaysia	5.34	72.29	57	Botswana	3.89	48.21
3	Switzerland	5.33	72.15	58	Hungary	3.87	47.83
4	Qatar	4.97	66.17	59	Sweden	3.86	47.70
5	United Arab Emirates	4.96	65.93	60	Pakistan	3.86	47.66
6	Estonia	4.95	65.81	61	Cyprus	3.85	47.42
7	Korea, Rep.	4.85	64.20	62	Macedonia, FYR	3.81	46.90
8	Kazakhstan	4.83	63.88	63	Norway	3.81	46.83
9	United States	4.76	62.74	64	Montenegro	3.80	46.69
10	United Kingdom	4.76	62.66	65	Kuwait	3.79	46.58
11	Slovak Republic	4.75	62.58	66	Australia	3.78	46.26
12	Saudi Arabia	4.72	62.02	67	Brazil	3.76	46.07
13	China	4.69	61.57	68	Mexico	3.73	45.57
14	Kyrgyz Republic	4.68	61.33	69	Senegal	3.71	45.11
15	Vietnam	4.66	60.95	70	Romania	3.68	44.71
16	Azerbaijan	4.61	60.15	71	Peru	3.64	44.03
17	Japan	4.58	59.71	72	Belgium	3.64	43.94
18	New Zealand	4.57	59.54	73	Bolivia	3.63	43.75
19	Lithuania	4.55	59.22	74	Ethiopia	3.62	43.73
20	Canada	4.53	58.91	75	Bosnia and Herzegovina	3.58	42.95
21	Ukraine	4.51	58.52	76	Croatia	3.57	42.83
22	Latvia	4.49	58.21	77	Colombia	3.55	42.58
23	Thailand	4.49	58.19	78	Tanzania	3.55	42.53
24	Czech Republic	4.47	57.87	79	Slovenia	3.55	42.44
25	Cambodia	4.44	57.31	80	Bangladesh	3.53	42.15
26	Armenia	4.39	56.58	81	Serbia	3.46	41.00
27	Ireland	4.39	56.57	82	Namibia	3.46	40.96
28	Albania	4.36	56.01	83	Paraguay	3.39	39.89
29	Indonesia	4.36	55.98	84	Nicaragua	3.38	39.71
30	Mongolia	4.35	55.82	85	Egypt, Arab Rep.	3.36	39.25
31	Bulgaria	4.33	55.53	85	Uganda	3.36	39.25
32	Sri Lanka (2011)	4.31	55.23	87	Ecuador (2011)	3.34	39.04
33	Poland	4.31	55.21	88	Mali	3.33	38.88
34	Moldova	4.30	54.99	89	Dominican Republic	3.33	38.78
35	Germany	4.27	54.53	90	El Salvador	3.31	38.58
36	Chile	4.27	54.50	91	Portugal	3.31	38.54
37	India	4.26	54.30	92	Panama	3.24	37.40
38	Israel	4.26	54.26	93	Iran, Islamic Rep.	3.16	35.95
39	Finland	4.23	53.80	94	Trinidad and Tobago	3.09	34.76
40	Turkey	4.20	53.39	95	Burkina Faso	3.04	34.01
41	Morocco	4.20	53.31	96	Italy	3.03	33.90
42	Malta	4.15	52.54	97	Greece	2.97	32.87
43	Denmark	4.10	51.66	98	Spain	2.96	32.60
44	Luxembourg	4.09	51.45	99	South Africa	2.93	32.09
45	Georgia (2011)	4.09	51.43	100	Argentina	2.76	29.34
46	Lebanon	4.06	51.07	101	Venezuela, RB.	2.71	28.57
47	Philippines	4.06	51.00	102	Uruguay	2.48	24.74
48	Iceland	4.05	50.90	103	Algeria	2.38	23.07
49	Guatemala	4.04	50.72				
49	Kenya	4.04	50.72				
51	Jordan	4.03	50.54				
52	Austria	3.99	49.90				
53	Costa Rica	3.96	49.37				
54	Russian Federation	3.95	49.24				
55	France	3.94	49.00				

Source: World Economic Forum, Executive Opinion Survey 2011–2012. (<https://wefsurvey.org>)

PILLAR 6:

GLOBAL KNOWLEDGE

6.1.1 Tertiary-educated workforce

Percentage of workforce with tertiary education (%) | 2010

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Canada	43.90	100.00	56	Lebanon (2007)	15.30	34.85
2	Israel	43.10	98.18	57	Saudi Arabia (2004)	14.90	33.94
3	United States	39.10	89.07	58	Sri Lanka (2009)	14.10	32.12
4	Australia	38.40	87.47	59	Argentina (2003)	13.70	31.21
5	Singapore	38.10	86.79	60	Malta (2011)	13.50	30.75
6	Estonia	35.50	80.87	61	Slovak Republic (2006)	13.20	30.07
7	Korea, Rep.	35.30	80.41	62	Thailand (2006)	12.80	29.16
8	New Zealand	34.80	79.27	63	Portugal	12.70	28.93
9	United Kingdom	33.70	76.77	64	Macedonia, FYR (2002)	12.20	27.79
10	Luxembourg	33.20	75.63	65	Italy	12.10	27.56
11	Switzerland	33.00	75.17	66	Romania	11.90	27.11
12	Ireland	32.20	73.35	67	Ecuador	11.60	26.42
13	Finland	31.60	71.98	68	Brazil	11.30	25.74
14	Cyprus	30.90	70.39	69	Paraguay (2008)	10.40	23.69
15	Denmark (2011)	30.70	69.93	70	Dominican Republic (2011)	10.30	23.46
16	Belgium	30.00	68.34	71	Turkey (2009)	10.10	23.01
17	Japan	29.90	68.11	72	Trinidad and Tobago (2009)	9.60	21.87
18	Norway	29.40	66.97	73	Uruguay	9.40	21.41
19	Lithuania (2011)	29.30	66.74	74	Kuwait (2008)	8.30	18.91
20	Netherlands	28.60	65.15	75	Indonesia (2009)	7.50	17.08
21	Sweden	28.10	64.01	76	El Salvador	6.80	15.49
22	Iceland (2005)	27.60	62.87	77	Pakistan (2009)	6.70	15.26
23	Latvia (2011)	25.90	59.00	78	South Africa (2011)	6.10	13.90
24	Georgia (2002)	25.80	58.77	79	Bosnia and Herzegovina	5.70	12.98
25	Spain	25.70	58.54	80	China	3.60	8.20
26	Kazakhstan (2007)	25.50	58.09	81	Guatemala (2006)	3.40	7.74
27	Azerbaijan (2009)	25.10	57.18	82	Uganda	2.90	6.61
27	Russian Federation	25.10	57.18	83	Mali (2006)	1.90	4.33
29	France	24.40	55.58	84	Albania (2011)	1.50	3.42
30	Germany	24.20	55.13	85	Tanzania (2002)	0.90	2.05
30	Philippines (2008)	24.20	55.13	86	Senegal (2006)	0.80	1.82
32	Bolivia (2009)	22.70	51.71	87	Ethiopia (2007)	0.50	1.14
33	Slovenia (2011)	22.20	50.57	88	Burkina Faso (2007)	0.20	0.46
34	Panama	21.30	48.52	89	Kenya	0.00	0.00
35	Poland (2011)	21.10	48.06	n/a	Algeria	n/a	n/a
36	Peru	20.90	47.61	n/a	Armenia	n/a	n/a
37	Bulgaria	20.70	47.15	n/a	Bangladesh	n/a	n/a
38	Greece	20.00	45.56	n/a	Botswana	n/a	n/a
38	Hungary (2011)	20.00	45.56	n/a	Cambodia	n/a	n/a
40	Colombia (2011)	19.70	44.87	n/a	Croatia	n/a	n/a
41	Costa Rica (2011)	18.80	42.82	n/a	Egypt, Arab Rep.	n/a	n/a
41	Qatar (2011)	18.80	42.82	n/a	India	n/a	n/a
43	Iran, Islamic Rep.	18.50	42.14	n/a	Mongolia	n/a	n/a
44	Chile	18.00	41.00	n/a	Morocco	n/a	n/a
44	United Arab Emirates (2005)	18.00	41.00	n/a	Namibia	n/a	n/a
46	Kyrgyz Republic (2009)	17.90	40.77	n/a	Nicaragua	n/a	n/a
47	Mexico	17.60	40.09	n/a	Ukraine	n/a	n/a
48	Austria	17.50	39.86	n/a	Vietnam	n/a	n/a
49	Moldova	17.00	38.72				
50	Czech Republic (2011)	16.50	37.59				
51	Malaysia	16.40	37.36				
52	Serbia (2011)	16.30	37.13				
53	Jordan	16.20	36.90				
54	Montenegro (2006)	16.10	36.67				
55	Venezuela, RB (2009)	15.90	36.22				

Source: UNESCO, Global Education Digest 2011 and 2012.
(<http://www.uis.unesco.org/Education/Pages/global-education-digest.aspx>)

6.1.2 Legislators, senior officials and managers

Legislators, senior officials and managers (%) | 2011

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Singapore	17.80	100.00	56	Croatia	4.30	24.16
2	United States (2008)	15.20	85.39	57	Greece	4.20	23.60
3	Philippines	14.00	78.65	57	Luxembourg	4.20	23.60
4	New Zealand (2008)	13.70	76.97	57	Mongolia (2008)	4.20	23.60
5	Pakistan (2008)	12.70	71.35	57	Saudi Arabia (2008)	4.20	23.60
6	Lebanon (2007)	11.90	66.85	61	Cyprus	4.10	23.03
7	Australia (2008)	11.10	62.36	62	Bangladesh (2003)	3.90	21.91
8	United Kingdom	10.20	57.30	62	Italy	3.90	21.91
9	Latvia	10.00	56.18	64	Georgia (2007)	3.60	20.22
10	Canada (2008)	9.30	52.25	65	Paraguay (2008)	3.30	18.54
11	Lithuania	9.10	51.12	66	Qatar (2009)	3.10	17.42
12	Estonia	9.00	50.56	67	Dominican Republic (2007)	3.00	16.85
12	Iceland	9.00	50.56	67	Ecuador (2006)	3.00	16.85
14	Malta	8.60	48.31	69	Costa Rica	2.80	15.73
15	South Africa	8.50	47.75	69	Namibia (2004)	2.80	15.73
16	Slovenia	8.30	46.63	71	Denmark	2.70	15.17
16	Sri Lanka (2008)	8.30	46.63	72	Nicaragua (2006)	2.60	14.61
16	Turkey (2010)	8.30	46.63	72	Thailand	2.60	14.61
19	Egypt, Arab Rep. (2007)	8.20	46.07	74	Ethiopia (2006)	2.50	14.04
20	Trinidad and Tobago (2005)	8.00	44.94	75	Iran, Islamic Rep. (2008)	2.40	13.48
21	Israel (2008)	7.80	43.82	76	Korea, Rep. (2008)	2.30	12.92
21	Switzerland	7.80	43.82	76	Kyrgyz Republic (2006)	2.30	12.92
23	Ireland	7.50	42.13	78	Romania	2.10	11.80
23	Malaysia (2010)	7.50	42.13	79	Kuwait (2005)	2.00	11.24
23	Ukraine (2008)	7.50	42.13	79	Mexico (2008)	2.00	11.24
23	United Arab Emirates (2008)	7.50	42.13	81	Bolivia (2007)	1.90	10.67
27	France	7.40	41.57	82	China (2005)	1.70	9.55
28	Netherlands	7.30	41.01	82	Indonesia (2008)	1.70	9.55
29	Belgium	7.20	40.45	84	Azerbaijan (2008)	1.20	6.74
30	Russian Federation (2008)	7.00	39.33	85	El Salvador (2010)	1.00	5.62
31	Moldova (2008)	6.80	38.20	86	Morocco	0.70	3.93
32	Norway	6.50	36.52	86	Peru (2008)	0.70	3.93
33	Bulgaria	6.40	35.96	86	Vietnam (2004)	0.70	3.93
33	Kazakhstan (2008)	6.40	35.96	89	Cambodia (2008)	0.60	3.37
35	Portugal	6.20	34.83	90	Argentina (2006)	0.20	1.12
36	Poland	6.10	34.27	90	Tanzania (2006)	0.20	1.12
37	Algeria (2004)	5.90	33.15	92	Uganda (2003)	0.10	0.56
37	Uruguay (2007)	5.90	33.15	93	Burkina Faso (2006)	0.00	0.00
39	Macedonia, FYR	5.80	32.58	n/a	Albania	n/a	n/a
39	Panama	5.80	32.58	n/a	Bosnia and Herzegovina	n/a	n/a
41	Chile (2002)	5.70	32.02	n/a	Colombia	n/a	n/a
41	Hungary	5.70	32.02	n/a	Guatemala	n/a	n/a
43	Botswana (2006)	5.60	31.46	n/a	Japan	n/a	n/a
43	India (2010)	5.60	31.46	n/a	Jordan	n/a	n/a
45	Sweden	5.50	30.90	n/a	Kenya	n/a	n/a
46	Montenegro	5.30	29.78	n/a	Mali	n/a	n/a
46	Slovak Republic	5.30	29.78	n/a	Senegal	n/a	n/a
48	Finland	5.20	29.21	n/a	Venezuela, RB	n/a	n/a
49	Serbia (2010)	5.10	28.65				
50	Austria	5.00	28.09				
50	Spain	5.00	28.09				
52	Brazil (2007)	4.90	27.53				
52	Germany	4.90	27.53				
54	Czech Republic	4.70	26.40				
55	Armenia (2008)	4.50	25.28				

Source: International Labour Organization, Key Indicators of the Labour Market, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

6.1.3 Professionals

Professionals (%) | 2011

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Luxembourg	33.00	100.00	54	Uruguay (2007)	9.40	28.05
2	Sweden	25.20	76.22	57	Chile (2002)	9.30	27.74
3	Denmark	24.90	75.30	57	Qatar (2009)	9.30	27.74
4	United Kingdom	23.80	71.95	59	Peru (2008)	9.00	26.83
5	Iceland	22.90	69.21	60	Namibia (2004)	8.90	26.52
5	Switzerland	22.90	69.21	61	Kuwait (2005)	8.50	25.30
7	Netherlands	22.50	67.99	62	Ecuador (2006)	8.40	25.00
8	Lithuania	22.10	66.77	62	Saudi Arabia (2008)	8.40	25.00
8	Norway	22.10	66.77	64	Iran, Islamic Rep. (2008)	7.80	23.17
10	Ireland	21.70	65.55	65	Turkey (2010)	7.10	21.04
11	Finland	21.30	64.33	66	Mexico (2008)	6.80	20.12
12	United States (2008)	21.10	63.72	67	Bolivia (2007)	6.70	19.82
13	Belgium	20.40	61.59	67	Brazil (2007)	6.70	19.82
14	Estonia	19.50	58.84	69	Dominican Republic (2007)	6.30	18.60
14	Slovenia	19.50	58.84	69	Malaysia (2010)	6.30	18.60
16	Russian Federation (2008)	18.50	55.79	71	Paraguay (2008)	5.90	17.38
17	Australia (2008)	18.10	54.57	72	Sri Lanka (2008)	5.80	17.07
18	Greece	17.70	53.35	73	China (2005)	5.70	16.77
19	Canada (2008)	17.60	53.05	73	South Africa	5.70	16.77
20	Germany	17.30	52.13	75	Botswana (2006)	5.00	14.63
20	Poland	17.30	52.13	76	Thailand	4.80	14.02
22	Cyprus	17.00	51.22	77	Philippines	4.70	13.72
23	Montenegro	16.80	50.61	78	Algeria (2004)	4.10	11.89
23	New Zealand (2008)	16.80	50.61	78	El Salvador (2010)	4.10	11.89
25	France	16.70	50.30	80	Argentina (2006)	4.00	11.59
26	Latvia	16.60	50.00	81	India (2010)	3.80	10.98
27	Spain	16.00	48.17	81	Indonesia (2008)	3.80	10.98
28	Hungary	15.80	47.56	83	Nicaragua (2006)	3.50	10.06
28	Israel (2008)	15.80	47.56	83	Vietnam (2004)	3.50	10.06
30	Bulgaria	15.40	46.34	85	Trinidad and Tobago (2005)	3.30	9.45
31	Malta	15.20	45.73	86	Ethiopia (2006)	3.00	8.54
32	Armenia (2008)	15.10	45.43	87	Uganda (2009)	2.30	6.40
32	Azerbaijan (2008)	15.10	45.43	88	Morocco	1.80	4.88
34	Portugal	14.20	42.68	89	Cambodia (2008)	1.70	4.57
35	Austria	14.10	42.38	90	Pakistan (2008)	1.50	3.96
35	United Arab Emirates (2008)	14.10	42.38	91	Tanzania (2006)	0.60	1.22
37	Romania	14.00	42.07	92	Burkina Faso (2006)	0.50	0.91
38	Singapore	13.70	41.16	93	Bangladesh (2003)	0.20	0.00
39	Moldova (2008)	13.50	40.55	n/a	Albania	n/a	n/a
40	Croatia	13.40	40.24	n/a	Bosnia and Herzegovina	n/a	n/a
41	Italy	13.20	39.63	n/a	Colombia	n/a	n/a
42	Egypt, Arab Rep. (2007)	13.00	39.02	n/a	Guatemala	n/a	n/a
42	Ukraine (2008)	13.00	39.02	n/a	Japan	n/a	n/a
44	Macedonia, FYR	12.90	38.72	n/a	Jordan	n/a	n/a
45	Georgia (2007)	12.80	38.41	n/a	Kenya	n/a	n/a
45	Kazakhstan (2008)	12.80	38.41	n/a	Mali	n/a	n/a
47	Czech Republic	12.70	38.11	n/a	Senegal	n/a	n/a
48	Serbia (2010)	11.80	35.37	n/a	Venezuela, RB	n/a	n/a
49	Slovak Republic	11.60	34.76				
50	Mongolia (2008)	11.50	34.45				
51	Costa Rica	10.30	30.79				
51	Lebanon (2007)	10.30	30.79				
53	Panama	9.80	29.27				
54	Korea, Rep. (2008)	9.40	28.05				
54	Kyrgyz Republic (2006)	9.40	28.05				

Source: International Labour Organization, Key Indicators of the Labour Market, 7th edition. (<http://kilm.ilo.org/kilmnet/>)

6.1.4 Researchers

Researchers per million population, headcounts | 2009

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Iceland	17,401.75	100.00	56	Chile (2008)	1,179.48	6.41
2	Finland	14,878.66	85.44	57	Botswana (2005)	1,140.92	6.18
3	Denmark	14,771.36	84.82	58	Thailand (2007)	1,084.10	5.86
4	Norway	13,265.61	76.14	59	Costa Rica	1,083.26	5.85
5	Switzerland (2008)	13,226.11	75.91	60	Morocco (2008)	1,079.96	5.83
6	Sweden	12,312.28	70.64	61	Uruguay (2006)	1,032.62	5.56
7	Luxembourg	11,552.60	66.25	62	Egypt, Arab Rep.	1,017.53	5.47
8	Austria	11,530.01	66.12	63	Kazakhstan	996.96	5.35
9	New Zealand	11,451.37	65.67	64	Trinidad and Tobago	986.27	5.29
10	Korea, Rep. (2010)	10,379.55	59.49	65	Malaysia (2006)	924.84	4.94
11	Germany	9,395.89	53.81	66	Mongolia	915.68	4.88
12	Portugal	9,354.73	53.57	67	Albania (2008)	909.03	4.85
13	Japan	9,109.22	52.16	68	Senegal (2008)	865.94	4.60
14	Slovenia	8,421.28	48.19	69	Pakistan	804.84	4.24
15	Singapore	8,368.57	47.88	70	Mexico (2003)	771.47	4.05
16	Jordan (2003)	8,270.50	47.32	71	Kyrgyz Republic	670.28	3.47
17	United Kingdom	8,232.04	47.10	72	Algeria (2005)	513.71	2.56
18	Spain	7,861.92	44.96	73	Vietnam (2002)	510.77	2.55
19	France	7,690.79	43.97	74	Panama (2010)	487.27	2.41
20	Ireland	7,446.39	42.56	75	Sri Lanka (2008)	482.91	2.39
21	Czech Republic (2010)	7,424.31	42.44	76	Colombia	347.53	1.61
22	Estonia	7,382.07	42.19	77	Peru (2004)	309.60	1.39
23	Netherlands	6,353.96	36.26	78	Kuwait	309.49	1.39
24	Italy	5,884.16	33.55	79	Bolivia	292.83	1.29
25	Lithuania	5,515.55	31.42	80	Ecuador (2008)	289.04	1.27
26	Greece (2005)	5,495.25	31.31	81	Indonesia (2005)	242.49	1.00
27	Hungary	5,251.02	29.90	82	Venezuela, RB	239.45	0.98
28	Belgium	5,239.50	29.83	83	Paraguay (2008)	193.89	0.72
29	Russian Federation (2010)	5,152.14	29.33	84	Kenya (2007)	181.38	0.65
30	Slovak Republic (2010)	5,149.65	29.31	85	Mali (2007)	172.17	0.59
31	United States (2006)	4,663.28	26.51	86	Philippines (2007)	165.25	0.55
32	Canada (2006)	4,260.42	24.18	87	Ethiopia (2010)	157.87	0.51
33	Australia (2006)	4,224.33	23.97	88	Burkina Faso (2010)	154.72	0.49
34	Croatia	4,103.96	23.28	89	India (2005)	136.94	0.39
35	Latvia	4,048.41	22.96	90	Bangladesh (1997)	135.89	0.38
36	Malta	3,773.90	21.37	91	Cambodia (2002)	126.51	0.33
37	Ukraine	3,211.20	18.13	92	Uganda	123.64	0.31
38	Poland	3,161.45	17.84	93	Guatemala	113.94	0.26
39	Georgia (2005)	2,996.42	16.89	94	Saudi Arabia	99.03	0.17
40	Bulgaria	2,912.89	16.41	95	Tanzania (2007)	87.49	0.11
41	Brazil (2010)	2,392.71	13.41	96	El Salvador (2010)	83.32	0.08
42	China	2,384.95	13.36	97	Nicaragua (2004)	69.27	0.00
43	Cyprus	2,376.03	13.31	n/a	Dominican Republic	n/a	n/a
44	Armenia	2,245.07	12.55	n/a	Israel	n/a	n/a
45	Montenegro (2007)	2,140.26	11.95	n/a	Lebanon	n/a	n/a
46	Argentina	2,077.03	11.58	n/a	Namibia	n/a	n/a
47	Serbia	2,036.96	11.35	n/a	Qatar	n/a	n/a
48	Turkey (2010)	2,026.29	11.29	n/a	United Arab Emirates	n/a	n/a
49	Romania	1,969.61	10.96				
50	Iran, Islamic Rep. (2008)	1,962.55	10.92				
51	Azerbaijan	1,919.24	10.67				
52	Moldova	1,505.47	8.29				
53	Macedonia, FYR (2008)	1,337.86	7.32				
54	Bosnia and Herzegovina (2007)	1,207.45	6.57				
55	South Africa (2008)	1,194.16	6.49				

Source: UNESCO Institute for Statistics, UIS online database.
(<http://stats.uis.unesco.org>)

6.2.1 Innovation output

Innovation output sub-index | 2012

RANK	COUNTRY	VALUE	SCORE / 0 - 100	RANK	COUNTRY	VALUE	SCORE / 0 - 100
1	Switzerland	68.50	100.00	56	Turkey	30.70	28.27
2	Sweden	60.70	85.20	57	Lebanon	30.60	28.08
3	Netherlands	58.20	80.46	57	Paraguay	30.60	28.08
4	Malta	57.00	78.18	59	Argentina	30.20	27.32
5	Finland	56.10	76.47	60	Uruguay	30.00	26.94
6	United Kingdom	54.50	73.43	61	Armenia	29.80	26.57
7	Germany	53.70	71.92	62	Saudi Arabia	29.40	25.81
8	Estonia	53.30	71.16	63	Macedonia, FYR	29.20	25.43
9	Denmark	52.50	69.64	64	Colombia	28.70	24.48
10	Luxembourg	52.40	69.45	65	South Africa	28.50	24.10
11	Singapore	52.00	68.69	66	Sri Lanka	28.00	23.15
12	Iceland	50.60	66.03	67	Dominican Republic	27.30	21.82
13	Israel	50.50	65.84	68	Senegal	27.20	21.63
14	Ireland	49.90	64.71	69	Mongolia	27.10	21.44
14	New Zealand	49.90	64.71	70	Bosnia and Herzegovina	26.90	21.06
16	United States	49.10	63.19	71	Georgia	26.80	20.87
17	Norway	48.80	62.62	72	Greece	26.50	20.30
18	Belgium	48.30	61.67	73	Philippines	26.30	19.92
19	China	48.10	61.29	74	Trinidad and Tobago	26.00	19.35
20	Canada	48.00	61.10	75	Ecuador	25.90	19.17
21	Austria	46.70	58.63	75	Mexico	25.90	19.17
22	Slovenia	46.60	58.44	75	Namibia	25.90	19.17
23	Czech Republic	46.10	57.50	78	Peru	25.80	18.98
24	Korea, Rep.	45.90	57.12	79	Indonesia	25.50	18.41
25	France	44.40	54.27	80	Morocco	24.70	16.89
26	Latvia	42.60	50.85	81	El Salvador	24.50	16.51
27	Japan	42.00	49.72	82	Azerbaijan	24.00	15.56
28	Hungary	41.90	49.53	83	Mali	23.80	15.18
29	Moldova	40.70	47.25	84	Albania	23.30	14.23
30	Australia	40.40	46.68	84	Egypt, Arab Rep.	23.30	14.23
31	Cyprus	39.30	44.59	86	Guatemala	23.10	13.85
32	Portugal	38.70	43.45	86	Panama	23.10	13.85
33	Chile	38.50	43.07	88	Venezuela, RB	22.80	13.28
33	Serbia	38.50	43.07	89	Bangladesh	22.60	12.90
33	Spain	38.50	43.07	90	Kazakhstan	22.40	12.52
36	Lithuania	37.80	41.75	91	Pakistan	21.80	11.39
37	Malaysia	37.60	41.37	92	Uganda	21.70	11.20
38	Italy	37.50	41.18	93	Kenya	21.30	10.44
39	India	37.30	40.80	94	Iran, Islamic Rep.	20.80	9.49
40	Qatar	36.90	40.04	95	Nicaragua	20.40	8.73
41	Bulgaria	35.80	37.95	96	Bolivia	20.30	8.54
42	Slovak Republic	35.40	37.19	97	Botswana	19.90	7.78
43	Montenegro	35.30	37.00	98	Burkina Faso	19.80	7.59
44	Croatia	34.90	36.24	99	Ethiopia	18.10	4.36
45	Jordan	34.60	35.67	100	Tanzania	18.00	4.17
46	Ukraine	34.20	34.91	101	Cambodia	17.30	2.85
47	Russian Federation	33.80	34.16	101	Kyrgyz Republic	17.30	2.85
48	Poland	33.60	33.78	103	Algeria	15.80	0.00
48	United Arab Emirates	33.60	33.78				
50	Brazil	33.00	32.64				
51	Costa Rica	32.80	32.26				
52	Kuwait	32.40	31.50				
53	Thailand	31.80	30.36				
54	Romania	31.70	30.17				
55	Vietnam	30.80	28.46				

Source: INSEAD and World Intellectual Property Organization, The Global Innovation Index 2012.
(<http://www.globalinnovationindex.org/>)

6.2.2 New product entrepreneurial activity

New product entrepreneurial activity (%) | 2012

RANK	COUNTRY	VALUE	SCORE / 0 – 100	RANK	COUNTRY	VALUE	SCORE / 0 – 100
1	Chile	88.00	100.00	53	Sweden	36.00	32.47
2	Colombia	80.00	89.61	57	Malaysia	35.00	31.17
3	Italy	79.00	88.31	57	Montenegro (2010)	35.00	31.17
4	Poland	72.00	79.22	59	Botswana	34.00	29.87
4	Saudi Arabia (2009)	72.00	79.22	59	Germany (2011)	34.00	29.87
6	France	69.00	75.32	61	Lithuania	31.00	25.97
7	South Africa	66.00	71.43	62	Croatia	30.00	24.68
8	Ecuador	65.00	70.13	62	Uruguay (2011)	30.00	24.68
9	Namibia	62.00	66.23	62	Venezuela, RB (2011)	30.00	24.68
10	Denmark	61.00	64.94	65	Egypt, Arab Rep.	28.00	22.08
11	China (2011)	60.00	63.64	65	Norway	28.00	22.08
11	Turkey	60.00	63.64	65	Philippines (2006)	28.00	22.08
13	Czech Republic (2011)	59.00	62.34	68	Costa Rica	27.00	20.78
14	United Arab Emirates (2011)	57.00	59.74	68	Russian Federation	27.00	20.78
15	El Salvador	56.00	58.44	70	Bosnia and Herzegovina	23.00	15.58
16	Belgium	53.00	54.55	70	Ethiopia	23.00	15.58
17	Korea, Rep.	52.00	53.25	70	India (2008)	23.00	15.58
17	Mexico	52.00	53.25	73	Trinidad and Tobago	22.00	14.29
17	Slovak Republic	52.00	53.25	74	Morocco (2009)	17.00	7.79
20	Estonia	51.00	51.95	75	Uganda	16.00	6.49
20	Guatemala (2011)	51.00	51.95	76	Kazakhstan (2007)	12.00	1.30
22	Iceland (2010)	50.00	50.65	77	Bangladesh (2011)	11.00	0.00
23	Ireland (2011)	49.00	49.35	77	Brazil (2011)	11.00	0.00
23	Israel	49.00	49.35	77	Iran, Islamic Rep.	11.00	0.00
23	Latvia	49.00	49.35	n/a	Albania	n/a	n/a
23	Slovenia	49.00	49.35	n/a	Armenia	n/a	n/a
27	Austria	48.00	48.05	n/a	Azerbaijan	n/a	n/a
27	Romania	48.00	48.05	n/a	Bulgaria	n/a	n/a
29	United States	47.00	46.75	n/a	Burkina Faso	n/a	n/a
30	Algeria	46.00	45.45	n/a	Cambodia	n/a	n/a
31	Japan	45.00	44.16	n/a	Cyprus	n/a	n/a
31	Jordan (2009)	45.00	44.16	n/a	Georgia	n/a	n/a
33	Canada (2006)	44.00	42.86	n/a	Kenya	n/a	n/a
33	Finland	44.00	42.86	n/a	Kuwait	n/a	n/a
35	Pakistan (2011)	43.00	41.56	n/a	Kyrgyz Republic	n/a	n/a
35	Peru	43.00	41.56	n/a	Luxembourg	n/a	n/a
35	Portugal	43.00	41.56	n/a	Mali	n/a	n/a
35	Serbia (2009)	43.00	41.56	n/a	Malta	n/a	n/a
35	Switzerland	43.00	41.56	n/a	Moldova	n/a	n/a
40	Argentina	42.00	40.26	n/a	Mongolia	n/a	n/a
40	Netherlands	42.00	40.26	n/a	Nicaragua	n/a	n/a
40	Spain	42.00	40.26	n/a	Paraguay	n/a	n/a
40	Thailand	42.00	40.26	n/a	Qatar	n/a	n/a
44	Australia (2011)	41.00	38.96	n/a	Senegal	n/a	n/a
45	Greece	40.00	37.66	n/a	Sri Lanka	n/a	n/a
45	Indonesia (2006)	40.00	37.66	n/a	Tanzania	n/a	n/a
45	Singapore (2011)	40.00	37.66	n/a	Ukraine	n/a	n/a
48	Dominican Republic (2009)	39.00	36.36	n/a	Vietnam	n/a	n/a
49	Macedonia, FYR	38.00	35.06				
49	New Zealand (2005)	38.00	35.06				
49	United Kingdom	38.00	35.06				
52	Lebanon (2009)	37.00	33.77				
53	Bolivia (2010)	36.00	32.47				
53	Hungary	36.00	32.47				
53	Panama	36.00	32.47				

Source: Global Entrepreneurship Research Association, Global Entrepreneurship Monitor database. (<http://www.gemconsortium.org/Data/>)

APPENDIX IV

ABOUT THE AUTHORS AND PARTNERS

ABOUT THE AUTHORS

Paul Evans

Paul Evans is the Emeritus Professor of Organisational Behaviour and Shell Chaired Professor of Human Resources and Organisational Development, Emeritus. His research and teaching focuses on three domains: (1) leadership and talent development, building on his pioneering research into executive lifestyles (*Must success cost so much?*, translated into eight languages); (2) international human resource management where his most recent book is *The Global Challenge: International Human Resource Management*; and (3) multinational organisational development. He has launched and directed many executive programmes at INSEAD, taught courses as a visiting professor at universities in North America, Europe, Russia, Brazil and China, winning awards for his teaching and research. Prof. Evans was titular professor at the European Institute for Advanced Studies in Management in Brussels in recognition for his work in building scholarly networks in HR in Europe. He has a PhD in Management and Organisational Psychology from MIT, an MBA from INSEAD, and he is a graduate in law from Cambridge University. He has been chairman of INSEAD's Organizational Behaviour Area for successive periods, also heading Executive Education at INSEAD for two years. Prof. Evans has been an advisor to 150 multinational organisations across the world, including in the public sector, created numerous forums for top executive exchange, and he is a frequent speaker at international conferences and conventions.

Pamela Dale

Pamela Dale is a consultant with the International Labour Mobility program at the Center for Mediterranean Integration, where she specialises in social protection and migration. She coordinates the program area on Balancing Mobility with Worker Protection, working to reduce the implementation gaps in the portability of social security benefits, and to explore options for social insurance schemes that offer increased protection for a mobile workforce. Previously, Ms. Dale was a Social Protection Specialist with the World Bank office in Timor-Leste. She is a graduate of the Harvard Kennedy School (Public Policy).

Kwan Chee Wei

Kwan Chee Wei joined the Human Capital Leadership Institute as its Executive Director in February 2010 when the Institute was set up by the Ministry of Manpower in collaboration with the Singapore Management University. He is currently the Chief Executive Officer of the Institute.

Before joining HCLI, Mr. Kwan was the Chief Human Resources Officer at IMC Corp Limited, where he was responsible for all HR matters spanning the entire operations across the IMC Corp group of companies. Between 1997 and 2007, Mr. Kwan gained his HR consulting experience with SHL and Watson Wyatt. After seven years, he left Watson Wyatt as the Regional Director for the Human Capital Group, Asia Pacific. He was also the Managing Director for South East Asia at SHL from 1997 to 2000. Mr. Kwan worked extensively across the Asia Pacific region with clients on various operational and strategic HR issues, including recruitment and selection, competency modelling and development, performance management, promotion, and career and succession planning. He started his career as an organisation psychologist in the Singapore Ministry of Defence and over a tenure of ten years, he led many signature leadership and organisation development projects.

Mr. Kwan has a Bachelor of Science (Psychology) from Leeds University (UK) and an MBA from the University of Leicester (UK).

Bruno Lanvin

Bruno Lanvin is the Executive Director of INSEAD's European Competitiveness Initiative (IECI), and of Global Indices projects at INSEAD (the Global Information Technology Index, Global Innovation Index, and Global Talent Competitiveness Index).

He is a Director on the Board of ICANN, and a member of the Board of Directors of IDA Infocomm in Singapore. Since 2010, he has been a Broadband Commissioner (www.broadbandcommission.org). In 2009–2010, he was Chair of the Global Advisory Council on the Future of Government (World Economic Forum).

From 2000 to 2007, Dr. Lanvin worked for the World Bank, where he was, inter alia, Senior Advisor for E-strategies, Regional Coordinator (Europe and Central Asia) for ICT and e-government issues, and Chairman of the Bank's e-Thematic Group. From June 2001 to December 2003, he was the Manager of the Information for Development Program (infoDev). In 2000, he was appointed Executive Secretary of the G-8 DOT Force. Before that, he worked for some 20 years in senior positions in the United Nations.

The author of numerous books and articles on international economics, information technology and development, Dr. Lanvin holds a BA in Mathematics and Physics, an MBA from Ecole des Hautes Etudes Commerciales (HEC) in Paris, and a PhD in Economics from the University of Paris I – La Sorbonne.

Amy Lui Abel

Amy Lui Abel, PhD, is the director of human capital research at The Conference Board. She leads research efforts focusing on human capital analytics, talent management, leadership development, human resources and employee engagement. Dr. Lui Abel was previously a director of leadership development with Morgan Stanley supporting high-potential senior leaders globally. She has also held roles at Accenture, Adobe Systems and JPMorganChase, and led a private consulting organisation performance practice.

Dr. Lui Abel has taught at the New York University Stern School of Business in management and organisation studies and served on the Board of Directors for the American Society for Training and Development (ASTD) New York Chapter. She was named “Outstanding Alumni of the Year” from New York University’s Business Education Program. Based on her doctoral research study about corporate universities and organisational learning, she was recognised for “Best Workplace Learning Dissertation” from the American Educational Research Association Workplace Learning Group.

Dr. Lui Abel was recently published in *People and Strategy Journal*, *The Handbook of Workplace Learning* by Sage Publications, *Human Resources Development Quarterly*, and *ASTD’s T+D (Training and Development) Magazine*. She holds several degrees, including a PhD, from New York University in information technology, business education, and organisational learning and performance.

Manjula Luthria

Manjula Luthria leads the program on international labour mobility (ILM) at the World Bank and is based at the Center for Mediterranean Integration in Marseilles, France. The goal of the ILM program is to help create the policy and institutional infrastructure necessary to facilitate the safe and productive movement of people in a way that is beneficial to the people that move as well as for the places they move from and to. Dr. Luthria works closely with stakeholders in labour origin and host countries in conducting research as well as in tailoring practical technical assistance on migration management issues. She is an economist by training and has worked extensively on issues of growth, innovation, competitiveness, trade and labour market integration in Asia, Europe, the Middle East, North Africa and Oceania. Dr. Luthria earned her PhD in economics from Georgetown University, USA.

Martina Mettgenberg Lemière

Martina Mettgenberg Lemière is the lead researcher for the Global Talent Competitiveness Index at INSEAD driving the project delivery and stakeholder collaboration while leading the data management team. Dr. Mettgenberg Lemière’s expertise includes human capital/talent, financial services and mobility, as well as a wide analytical skillset ranging from ethnography and case studies to composite indicators and impact assessment.

Before joining INSEAD, Dr. Mettgenberg Lemière was a senior research associate at the Human Capital Leadership Institute in Singapore and worked in business and financial services research in Gurgaon in India – first as business analyst for a Evalueserve and then as country representative for a British professional services start-up. She also taught at the Universities of Manchester and Sussex.

Her PhD thesis, completed at Manchester Business School, ethnographically examined international adjustment and cosmopolitanism of self-initiated international employees in India’s knowledge process offshoring industry. Dr. Mettgenberg Lemière holds an MSc and BA (Hons) in Anthropology from the University of Sussex and the University of Manchester respectively.

Nurina Merdikawati

Nurina Merdikawati leads data management, collection, and analysis for INSEAD eLab projects and the Global Talent Competitiveness Index. Her work includes firm-level studies on building business performance and competitiveness with new information and communications technologies, country-level studies on payment systems, and talent competitiveness.

Ms. Merdikawati holds a Master in Public Policy from the Lee Kuan Yew School of Public Policy at the National University of Singapore, where she specialised in Economic Policy and Analysis and was a Mochtar Riady Scholar. She received her first degree in Economics from Nanyang Technological University, with a minor in Business.

Prior to joining INSEAD, she was a visiting researcher in the Islamic Banking Division of the Central Bank of Indonesia, where she developed policy options to accelerate human capital development for the Islamic banking industry in Indonesia. She also worked at the Asia Competitiveness Institute, where she was involved in a study of Competitiveness Analysis and Development Strategies for 33 Indonesian provinces.

Aung Myint Thein

Aung Myint Thein is a Research Programmer at INSEAD eLab in Singapore. He is involved in data management, collection, programming and analysis for INSEAD eLab projects and the Global Talent Competitiveness Index. His work includes reproducible researches using R, country-level studies on payment security, and talent competitiveness. He is also responsible for leading the creation, design, and implementation of data visualisation across eLab projects.

Mr. Thein has a BSc in Information Systems Management from Singapore Management University where he focused on Business Intelligence and Analytics systems and tools. His work focused on helping businesses identify innovative ways to transform information technology and analytics into insights for improving business models and processes.

Amanda Popiela

Amanda Popiela is a research assistant in human capital at The Conference Board and supports projects in employee engagement, leadership development, and diversity and inclusion. Ms. Popiela graduated from the University of Michigan with a bachelor's degree in Brain, Behavior, and Cognitive Sciences.

Fiammetta Rossetti

Fiammetta Rossetti is currently a researcher at the Econometrics and Applied Statistics Unit of the European Commission's Joint Research Centre (JRC). She received her PhD in Finance from the University of Rome, Tor Vergata, in 2010. Before joining the JRC she worked for the Italian Ministry of Economy and Finance, the European Central Bank, the University of Southampton and the University of Liège.

Dr. Rossetti's research papers and publications cover topics such as the economics of wellbeing, the financing of small firms' innovation, and the behaviour of banks during crises. The methodologies applied in her studies refer specifically to the econometrics of panel data and to the statistical analysis of composite indicators. Especially within her current position at the JRC, she is dealing exhaustively with the statistical methodologies to construct and audit composite indicators.

Michaela Saisana

Michaela Saisana is a Senior Scientific Officer at the Joint Research Centre of the European Commission. She conducts, coordinates and supervises research on multi-dimensional measures and socioeconomic indicators for policymaking. Between 2005 and 2013, she has assessed the statistical soundness of over 60 composite indicators, upon invitation of their developers, including the Human Development Index for the UNDP; the Corruption Perceptions Index for Transparency International; the Environmental Performance Index for Yale and Columbia Universities; the National Country Resilience Index for the World Economic Forum; the Index of African Governance for the Mo Ibrahim Foundation and the Harvard School of Economics; the Global Innovation Index for INSEAD, the World Intellectual Property Organization, and Cornell University; and the European Systemic Risk Board Country Heat maps for the European Central Bank.

She offers regular courses on the development and robustness assessment of composite indicators and on multi-criteria analysis to academia, international organisations, and the European Commission (over 1,000 participants in the last ten years). She is a principal author of the *2008 OECD Handbook on Composite Indicators*, co-author of the book *Global Sensitivity Analysis: The Primer* (2008), and developer and moderator of the JRC Information server on composite indicators. She has a steady flow of publications on composite indicators, multi-criteria analysis, multivariate analysis, sensitivity analysis, multi-objective optimisation, and mathematical modelling and forecasting (20 peer-reviewed publications, 50 working papers). In 2004 she was awarded the European Commission – JRC Young Scientist Prize in Statistics and Econometrics in recognition of her research on composite indicators. She has a PhD and an MSc in Chemical Engineering.

Rebecca Siow

Rebecca Siow is senior manager at the Human Capital Leadership Institute (HCLI). Since joining HCLI in November 2011, she has co-designed the Institute's flagship executive development programme, the Singapore Business Leaders Programme. As part of the Research & Solutions Development team, she has also steered a joint research initiative with Deloitte Consulting on Asia's talent challenges, strategies and trends, and further developed HCLI's proprietary research on the "5 paradoxes" of leadership development in Asia. In addition, she is one of the issue editors for HCLI's flagship publication, HQ Asia.

Prior to her time with HCLI, Ms. Siow was at Deutsche Bank where she engaged in numerous change management projects for its finance division. She was also with the Singapore Economic Development Board, specifically looking at the development of new industry frontiers such as performing arts and music in Singapore.

Ms. Siow holds a Master of Arts in Management & Organisational Analysis from the University of Warwick, as well as a Bachelor of Business Management (Finance) and Bachelor of Accountancy from the Singapore Management University.

Desirée van Welsum

Desirée van Welsum is an economist, managing The Conference Board Business Scenario Program. She has over ten years of experience in applied economic research and policy analysis on private and public sectors in the economy. Prior to joining The Conference Board, she worked at the OECD, the UN (UNCTAD and ITU), and the UK National Institute of Economic and Social Research (NIESR). She has also worked as a consultant for the RAND Corporation, INSEAD, the European Commission and the World Bank. She holds a PhD from Birkbeck College (University of London), an MSc from the University of Nottingham, and a Maîtrise from the University of Paris IX Dauphine. She is fluent in English, French and Dutch.

Dr. van Welsum has worked on many research topics, such as the economic impacts of information and communications technologies (ICT), including on growth and economic performance, the globalisation of services activities and trade, foreign direct investment and offshoring in ICT-enabled services, and business location choices; measuring ICT skills and employment; measuring employment and activities potentially affected by ICT-enabled globalisation and offshoring; factors enabling and supporting the knowledge economy; e-skills for competitiveness and innovation, e-leadership skills, and technology-driven changes in skills demand. She has published widely in these areas.

ABOUT THE PARTNERS

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As one of the world's leading and largest graduate business schools, INSEAD brings together people, cultures and ideas to change lives and to transform organisations. A global perspective and cultural diversity are reflected in all aspects of its research and teaching. INSEAD became a pioneer of international business education with the opening of the Fontainebleau campus in Europe in 1959. In 2000, INSEAD opened its Asia campus in Singapore. And in 2007 the school began an association in the Middle East, officially opening the Abu Dhabi campus in 2010.

With campuses in Europe (France), Asia (Singapore) and Abu Dhabi, INSEAD's business education and research spans three continents. Its 145 renowned Faculty members from 35 countries inspire more than 1,000 degree participants annually in its MBA, Executive MBA, Specialised Master's degrees and PhD programmes. In addition, more than 9,000 executives participate in INSEAD's Executive Education programmes each year. INSEAD also participates in academic partnerships in North and Latin America and China and is a founding partner in the multidisciplinary Sorbonne University created in 2012.

Around the world and over the decades, INSEAD continues to conduct leading-edge research and to innovate across all our programmes to provide business leaders with the knowledge and sensitivity to operate anywhere. These core values have enabled INSEAD to become truly "The Business School for the World".

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The Human Capital Leadership Institute was established in 2010 with the Singapore Ministry of Manpower, the Singapore Economic Development Board and the Singapore Management University as strategic partners. The Institute is a national centre of excellence, with the mission to help organisations accelerate human capital and leadership development in Asia, for a globalised Asia.

It has the unique capability to bring together best-in-class thought leadership, faculty and insights on successfully doing business in Asia and the associated implications for leadership and human capital strategies. Through its efforts, the Institute aims to develop global leaders with a strong understanding of leading in Asia, as well as to build Asian leaders with the ability to lead on the global stage.

The Institute achieves this by driving pan-Asian research, creating cutting-edge executive development programs and fostering rich networks between leaders in business, government, academia and consulting.

Adecco Group – www.adecco.com

The Adecco Group, based in Zurich, Switzerland, is the world's leading provider of HR solutions. With over 31,000 FTE employees and around 5,200 branches, in over 60 countries and territories around the world, Adecco Group offers a wide variety of services, connecting more than 650,000 associates with over 100,000 clients every day. The services offered fall into the broad categories of temporary staffing, permanent placement, career transition and talent development, as well as outsourcing and consulting. The Adecco Group is a Fortune Global 500 company.

Adecco S.A. is registered in Switzerland (ISIN: CH0012138605) and listed on the SIX Swiss Exchange (ADEN).

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