Research Insights

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Agility, skills and cybersecurity

Three keys to competitiveness in an era of economic uncertainty

IBM

Contents

By Kazuaki Ikeda,
Anthony Marshall and
Dave Zaharchuk

Even before the onset of the novel coronavirus (COVID-19) pandemic, uncertainty was threatening global economic growth.[1] Suddenly, existing factors, such as access to skills, capital, supply chains, and markets are no longer uncertainties. They have ballooned into massive issues for enterprises and economies of all sizes.

When this crisis subsides, the underlying issues of uncertainty will remain. Last year, we spoke to leaders from the 12 largest economies on Earth about risks and challenges in the midst of uncertainties. In light of recent events, their insights into the practical steps both private and public sector leaders can take to succeed are more relevant than ever.

Key takeways

Economic watershed
With global uncertainty threatening economic growth, the world's largest economies must find new ways to stay competitive.

View from the top
Executives from the 12 largest economies share their views on economic challenges, risks, opportunities and competitiveness – we compare perception to reality.

Taking action
Learn what practical steps private and public sector leaders can take to navigate and succeed in an ever more complex world.

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Introduction

More than a decade has passed since the onslaught of the 2008 global financial crisis. After enduring a seemingly endless slow recovery period, the world's largest economies are now at a tipping point. Global economic uncertainty has reached a level impossible to ignore. The combination of rapid technological change, political and social volatility, and renewed protectionism is already influencing corporate investment. So, in light of these challenges, what are the next steps? How can leaders from the public and private sectors work together to address challenges and embrace new opportunities to drive sustained economic prosperity?

To better understand the current state of economic competitiveness as well as the challenges and opportunities both present and emerging for national economies, the IBM Institute for Business Value (IBV) in collaboration with Oxford Economics surveyed more than 2,700 C-level executives across the world's 12 largest national economies on a range of topics – specific and broad – related to both their organizations' and their nations' successes. In addition to identifying challenges and opportunities, executives surveyed were asked to deep dive into diverse topics ranging from workforce skills and education to innovation, technology, automation and business models. Together, these executives paint a compelling picture of their organizations' struggles today and map a way forward – despite continued uncertainty.

90%

of executives cite skilled labor availability and quality as a critical factor for their organization when considering expansion into new markets

54%

of executives identify complex regulatory and policy environments as a challenge to doing business in their country

54%

of executives say cyber threats are among the biggest strategic risks for their nation's economy in the next five years

120 million

workers in the world's 12 largest economies may need to be retrained/reskilled in the next 3 years as a result of intelligent/AI-enabled automation

Today's forecast: Lingering uncertainty with limited visibility

In late September 2018, the Organisation for Economic Co-operation and Development (OECD) published an interim economic outlook concluding that high levels of uncertainty are weighing negatively on global economic growth.[2] Indeed, discussion about uncertainty remains prominent in major economies.[3] Despite some respite in global uncertainty since hitting an all-time high in the aftermath of the Brexit decision, the most recent World Uncertainty Index conducted by the Economic Policy Uncertainty group suggests that global economic uncertainty remains extremely high.[4]

High global uncertainty does not bode well for sustained economic success. Based on more than 20 years of data, the Economic Policy Uncertainty group concludes that economic and policy uncertainty is counter-cyclical.[5] That is, high uncertainty is correlated with negative growth. OECD's outlook affirms this, predicting that global economic growth is plateauing, wage growth will remain disappointing and living standards are at risk.[6]

In a global economy characterized by historically high levels of uncertainty and threat of economic decline, national competitiveness has never been more important. As the global economic engine begins to splutter and possibly even stall, it will be crucial for business, government and education leaders to refocus on building economies hardened to withstand inevitable bumps and positioned to leverage inevitable new opportunities.

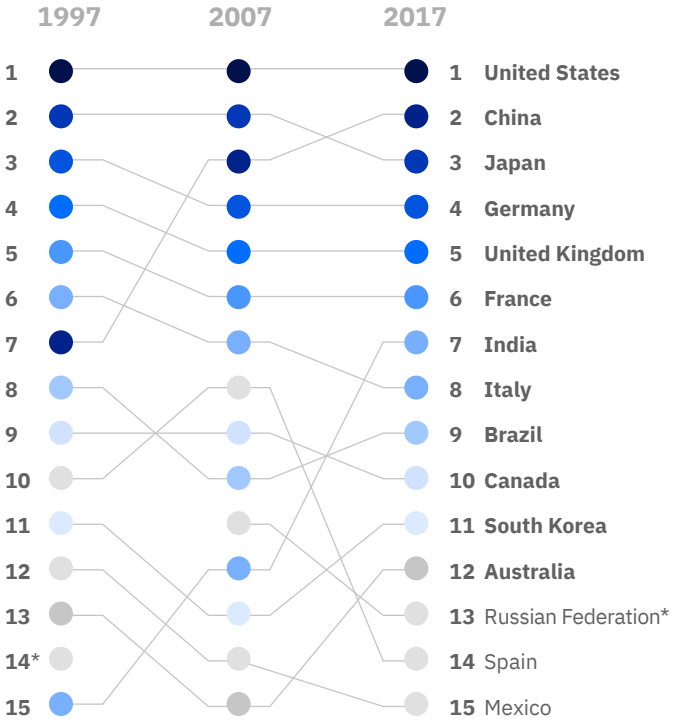
What's up with the world's big 12?

The two decades from 1997 to 2017 were characterized by what can only be described as massive change in economics, politics, technology and society. Despite this, all but 2 of the top 12 largest economies identified by the United Nations in 1997 remained in the top 12 in 2017.[7] But this superficial stability belies substantial change in the relative size and strength of the countries. China jumped from 7th to 2nd largest economy in the two decades to 2017. India jumped from 15th to 7th. Number 11 in 1997, South Korea bounced out of the top 12 in 2007, only to bounce back into the number 11 spot in 2017. And with more than 26 years of uninterrupted economic growth, Australia leapt into the number 12 spot after being 15th in 2007 (see Figure 1).[8]

The beginning of 2019 sees all 12 major economies in positive – albeit relatively low – growth territory and stable income per capita. Despite continuing discussion around the possible negative impact of artificial intelligence (AI) and automation on the labor force, data also shows that at the end of 2018, almost all of the 12 (with the notable exception of Brazil) either are experiencing decreases in the number of unemployed or find themselves at historically low levels of unemployment.[9]

Figure 1

Top 12 nations by economic activity, December 2017



** In 1997, the Netherlands was #14, and the Russian Federation was #16.*
Source: "National Accounts: Analysis of Main Aggregates (AMA)." United Nations Statistics Division, Economic Statistics Branch. December 2017.

Real wage growth has dropped globally, and foreign direct investment has slowed for many economies.

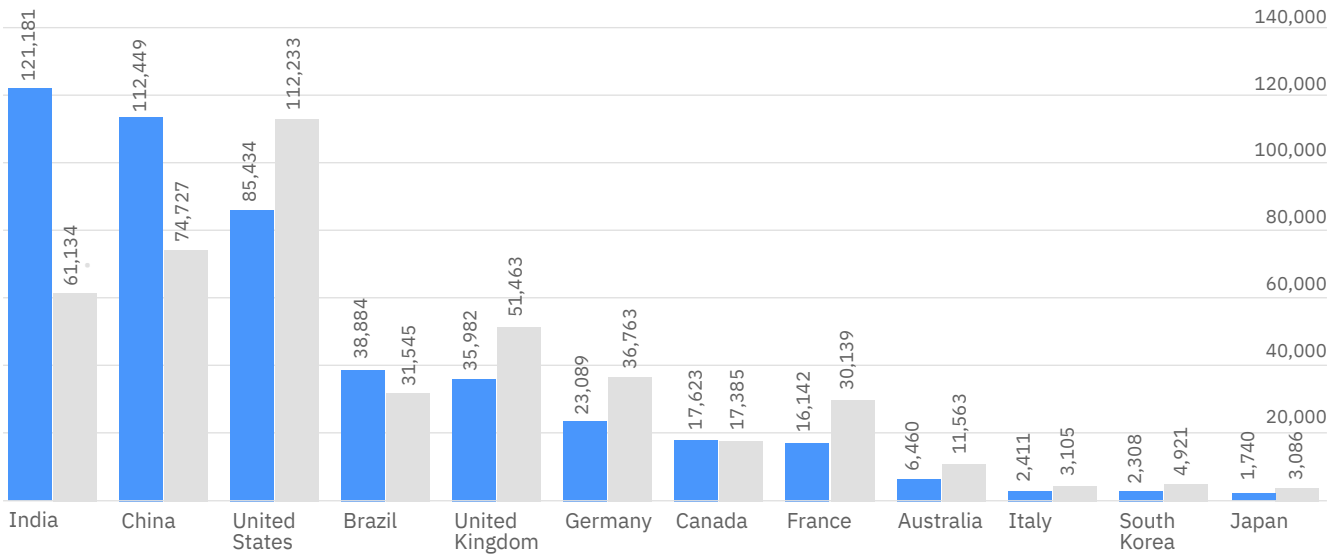
However, despite these positive growth metrics, clouds remain on the economic horizon of the big 12 economies. International Monetary Fund (IMF) analysis concludes that low unemployment rates hide a large number of workers leaving the labor force altogether due to sustained involuntary unemployment, especially of part-time workers, resulting in markedly low nominal wage growth over the past decade.[10]

In its most recent Global Wage Report for 2018-2019, the International Labour Organization (ILO) affirms the IMF's conclusions, indicating that global wage growth has fallen to its lowest rate since 2008, remaining far below the levels obtained before the global financial crisis. Indeed, if China, which stands out as a relatively high-wage-growth country, were removed from the 136 countries averaged, global real wage growth would have been a paltry 1.1 percent in 2017. And real wage growth has fallen even lower in major economies such as the United States and the United Kingdom.[11]

Along with real wages, foreign direct investment (FDI), along with the job creation that should accompany it, has been anemic for many of the major economies compared to peaks achieved just prior to the 2008 global financial crisis.[12] (See Figure 2.)

Figure 2

Job creation resulting from foreign direct investment



Source: IBM Global Location Trends database.

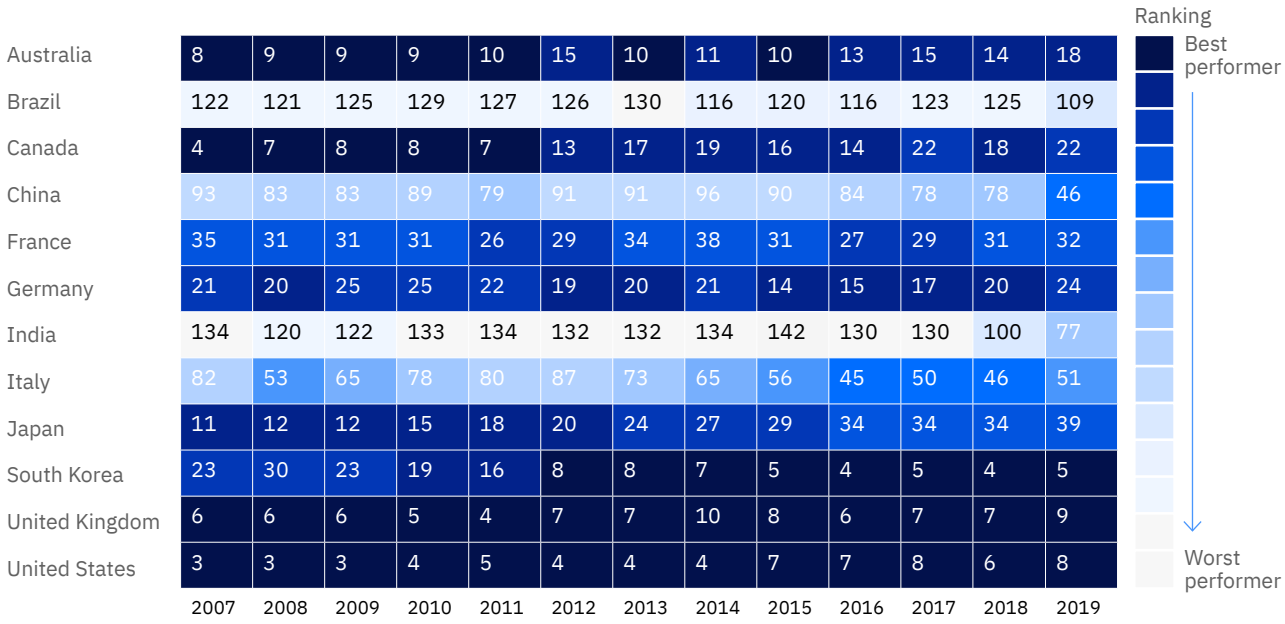
According to data from the IBM Global Location Trends database, global foreign investment activity, measured by the number of jobs created, declined in 2017 by approximately 5 percent over 2016. In contrast, the number of foreign investment projects increased by almost 10 percent to record levels, suggesting a shift toward smaller-scale projects on average. The overall decline in job creation from foreign investment has typically been associated with a significant geographic reconfiguration of where investment is headed. Hence, while overall investment in Africa grew by more than 10 percent, investment in Asia, Latin America and the Middle East declined by between 10 and 20 percent. Meanwhile, investment in Europe and North America remained relatively stable in job creation, but strongly increased in number of projects.[13]

And decreasing FDI has corresponded with declines in the ease doing business in each of the economies as defined by the World Bank index of the same name.[14] This index ranks economies based on scores associated with the time it takes to start a new business, obtain construction permits, connect electricity, register property, obtain financial credit and resolve insolvency, as well as the extent protections are present for minority investors, ease of paying taxes and trading across borders, and the ability to enforce contracts.

The United States, the United Kingdom, Japan, Germany, Canada and Australia all declined in ease of doing business ranking between 2007 and (estimated) 2019, although the United States and the United Kingdom remain in the top 10 – just (see Figure 3). Japan, Canada and Australia have performed especially poorly, with Australia falling from 8th to 18th, Canada from 4th to 22nd and Japan 11th to 39th. Italy, India, China and Brazil have all improved over the past two decades, although none are currently ranked higher than 46th. The big winner in terms of progress – despite low performance in the FDI stakes – is South Korea, having moved up the rankings from 23rd to 5th. New Zealand claims the number one spot, followed by Singapore, Denmark and Hong Kong.[15]

Figure 3

Ease of doing business of the top 12 economies



Source: "Doing Business 2019: Training for Reform." The World Bank, accessed November 28, 2018. http://www.doingbusiness.org/en/reports/global-reports/doing-business-2019

Labor tops the list of factors executives consider when expanding into new markets.

Taking stock: Executive perspectives on economic competitiveness

While ease of doing business remains an important indicator of international competitiveness, comparing Figures 3 and 2 reveals clear inconsistencies. The United States, the United Kingdom, Germany, Australia and Japan all experienced ease of doing business declines while also benefiting from increases in FDI. India, China and Brazil had ease of doing business improvements while experiencing FDI declines. Clearly, there is more to the competitive story.

To better understand what is most important to global executives making decisions about where to locate and expand into new markets, we identified 23 individual competitiveness factors grouped under either cost or quality (see Figure 4). Ultimately, multiple cost and quality factors define the economic value proposition of a region, and improving these factors has been the central task of economic development efforts to date. Cost and quality of education, research, healthcare, physical infrastructure, digital infrastructure, energy, water, public safety, real estate and more all impact business conditions and quality of life. They create environments that influence success or failure for private industry and, in turn, industry's ability to grow and create high-value jobs and economic value for a region.

While factors such as fully loaded labor costs and real estate costs are top of mind for executives making new investment decisions, skilled labor ranks most important (see Figure 5). And while location access to markets and customers is important, so too is utility, telecommunications and internet reliability; corporate tax rates; regulation; access to capital; and quality of infrastructure – all elements that national and regional governments, at least to some degree, can influence or control.

Figure 4

Factors impacting the economic competitiveness and attractiveness of a nation or region

Cost factors

- Land/building/ office costs
- Fully loaded labor costs
- Transportation and distribution
- Utilities
- Effective tax rates
- Personal taxes
- Cost of housing
- Cost of consumer products and services
- Healthcare costs
- Education costs

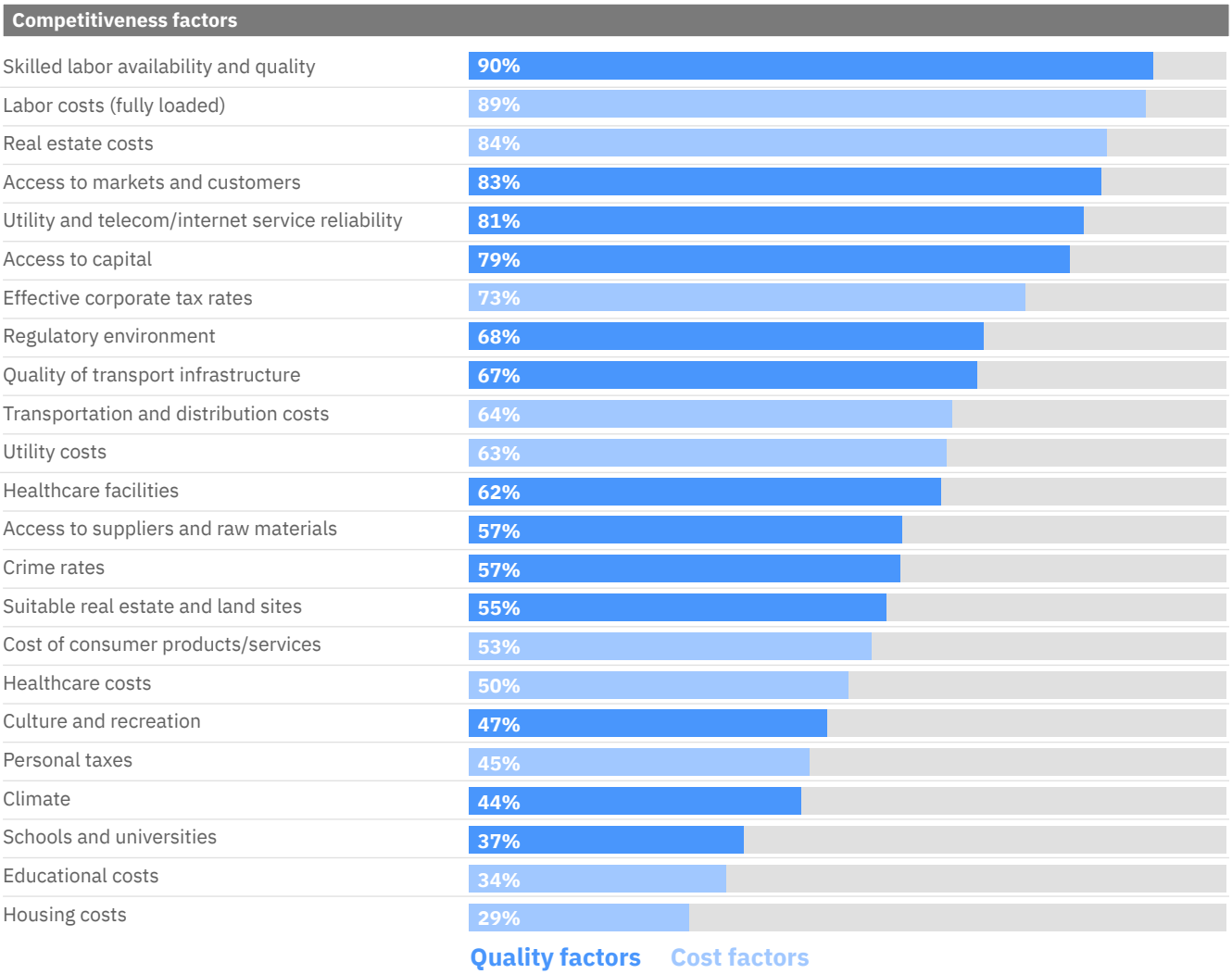
Quality factors

- Availability and quality of skilled workers
- Access to capital
- Access to markets and consumers
- Access to suppliers and raw materials
- Utility and telecom/ internet service reliability
- Climate
- Culture and recreation
- Suitable real estate and land sites
- Regulatory environment
- Crime rates
- Healthcare facilities
- Schools and universities
- Quality of transport infrastructure

Source: IBM Institute for Business Value analysis. 2018.

Figure 5

Relative importance of factors for executives making market expansion decisions



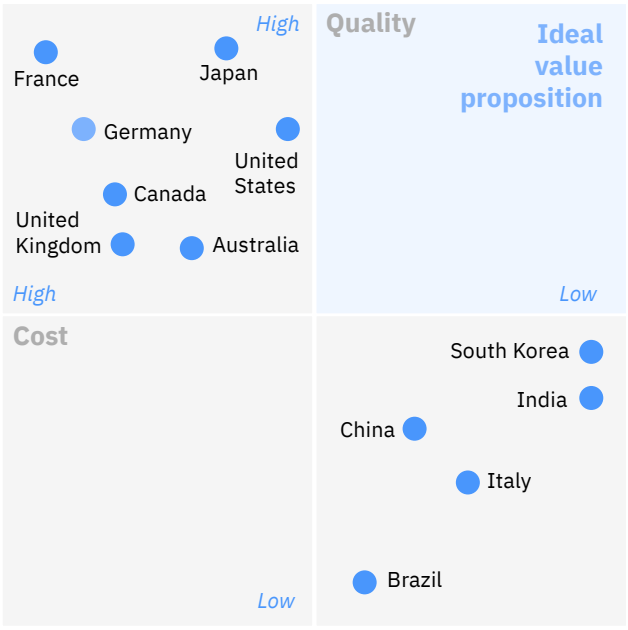
Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018.

Executives from all the G7 countries other than Italy indicate their economies compete primarily on a quality basis.

To take the competitiveness question a step further, we also asked the executives we surveyed to evaluate the competitiveness of their own countries – where they themselves live and conduct business. Their responses demonstrate diversity within the 12 largest economies (see Figure 6). With the exception of Italy, the G7 economies compete largely on the basis of quality. Comparatively, China, Italy, Brazil, South Korea and India compete largely on a cost basis. However, as they focus on qualitative improvements, these countries will likely sacrifice some cost competitiveness on a global level.

Figure 6

Executive perceptions of their country's competitiveness



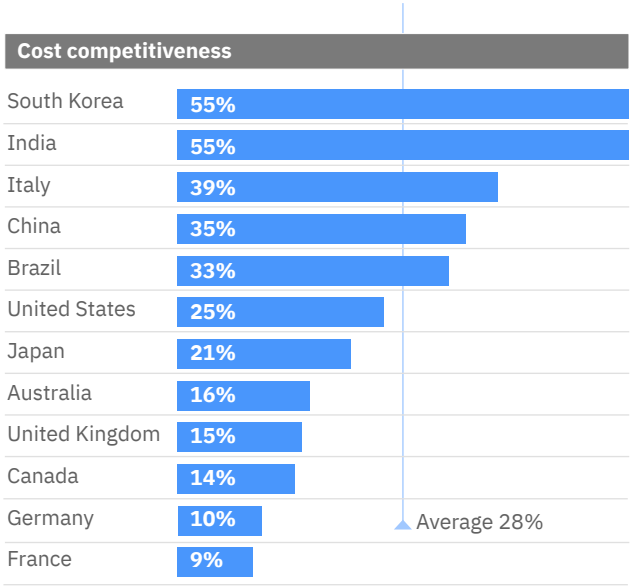
Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018.

Cost competitiveness

When national cost competitiveness is decoupled from quality competitiveness, an even clearer picture emerges. On the cost side, South Korea and India stand out from the pack, with 55 percent of executives from these countries indicating confidence in the cost competitiveness of their economies (see Figure 7). Europeans are on the opposite end, with only 9 percent of France-based executives, 10 percent of German executives and 15 percent of UK executives expressing confidence in the cost competitiveness of their respective countries' economies. (Note: Country-specific responses can be found in the Appendix.)

Figure 7

Self-assessed cost competitiveness of the 12 biggest economies



Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018.

But perception does not necessarily equate reality. When we examine specific elements of cost competitiveness, such as fully loaded labor costs and healthcare costs, comparison of objective data does not always align with executives' perceptions.

For example, 79 percent of Indian executives say their country's fully loaded labor costs are globally competitive compared to 52 percent of Chinese executives, 17 percent of Australians, only 6 percent of US executives and just 3 percent of Germans. But a look at labor share of national income data reveals a dramatically different story: India remains in the number 1 position, with less than 34 percent of national income flowing to wages and salaries. However, Australia, which ranks 6th in perceived cost competitiveness along with Canada, shoots to the number 2 position in terms of labor share of income. South Korea drops from its self-assessed number 2 position to number 10. And the United States and Germany – which rank second to lowest and lowest, respectively, in perceived labor competitiveness – rise to share the number 5 position (see Figure 8).[16]

When we examine global competitiveness in healthcare costs, divergence between perception and reality is equally acute. India and South Korea self-rank at the top again, with 62 and 57 percent of their executives confident in their competitiveness, respectively. Interestingly, the United States ranks 3rd, with 36 percent of US-based executives indicating that healthcare costs in the country are highly competitive on the global stage. Germany again ranks last with 7 percent.[17]

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Figure 8

Perceived labor competitiveness versus labor share of income

Nation	Percentage of executives confident in nation's labor cost competitiveness	Self-assessed ranking of nation's labor cost competitiveness	Labor share of income (2017)	Ranking (among top 12) of labor share of income
India	79%	1	33.5%*	1
South Korea	69%	2	59.5%	10
Italy	53%	3	52.2%	3
China	52%	4	**	**
Brazil	26%	5	**	**
Australia	17%	6	50.2%	2
Canada	17%	6	55.5%	4
Japan	15%	8	57.0%	7
United Kingdom	11%	9	58.0%	8
France	7%	10	58.1%	9
United States	6%	11	56.4%	5
Germany	3%	12	56.4%	5

** 2014 data available ** Data not available in source. Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018; ILOStat customized report, Labour income share in GDP (%). International Labour Organization. 2017.*

Executive perceptions do not always mesh with reality. Many executives either over- or underestimate their country's competitiveness.

However, when we look at national healthcare spending compared to GDP and at life expectancy, a different picture emerges (see Figure 9). While India remains at number 1 in healthcare spending as a percentage of GDP, it ranks last – by a wide margin – for life expectancy. An infant born in India in 2016 can expect to live, on average, 68.6 years compared to 84.0 years for a baby born in Japan, the best performing country in life expectancy among the top 12 – a stark 15.4-year difference.[18]

The United States drops from the number 3 most competitive country in healthcare costs – at least in the opinion of the US-based executives surveyed – to last with a massive 16.84 percent of GDP being channeled to healthcare spending every year. And for life expectancy, the United States drops to 9th. In other big changes, Australia moves up the tables from 3rd to last in perceived competitiveness to 6th in healthcare share of GDP. And while only 12 percent of Chinese executives surveyed cite China's healthcare system as a competitive advantage, actual spending as a percentage of GDP ranks 2nd among the top 12 economies. However, at 76.3 years, life expectancy in China is only ahead of Brazil and India among the big 12.[19]

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Figure 9

Perceived healthcare cost competitiveness versus healthcare spending share of income and life expectancy

Nation	Percentage of executives confident in nation's healthcare cost competitiveness	Self-assessed ranking of nation's healthcare cost competitiveness	National healthcare spending as a percentage of GDP (2015)	Ranking (among top 12) of national healthcare spending as a percentage of GDP	Life expectancy in years (2016)	Ranking (among top 12) of life expectancy
India	62%	1	3.89%	1	68.6	12
South Korea	57%	2	7.39%	3	82.0	6
United States	36%	3	16.84%	12	78.7	9
Italy	35%	4	9.00%	5	82.5	2
Brazil	20%	5	8.91%	4	75.5	11
France	18%	6	11.07%	10	82.3	4
United Kingdom	17%	7	9.88%	7	81.0	7
Canada	17%	7	10.44%	8	82.3	4
Japan	15%	9	10.90%	9	84.0	1
Australia	13%	10	9.45%	6	82.5	2
China	12%	11	5.32%	2	76.3	10
Germany	7%	12	11.15%	11	80.6	8

Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018; Current health expenditure (% of GDP), World Health Organization Global Health Expenditure database. The World Bank. 2015; World Development Indicators, Life expectancy at birth, total (years). The World Bank. 2016.

Quality competitiveness

When it comes to quality, executive perspectives on competitiveness are significantly more bullish. (See Figure 10. Note: Country-specific responses can be found in the Appendix.) Executives are most vocal about the competitive position of their countries with regard to skilled worker availability and quality, access to markets and consumers, and utility and telecom/internet service reliability. These are also the three factors identified by executives as being most important in making investment decisions.

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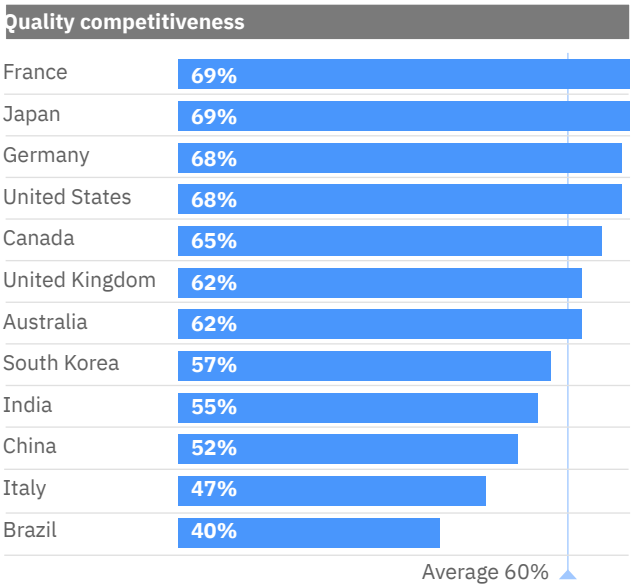
Figure 10

Self-assessed quality competitiveness of the 12 biggest economies



Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018.

The lowest ratings from executives are on access to capital. India and South Korea are the only two countries where a majority of executives say their country is more competitive than other countries. The greatest variances in executive responses by country relate to crime. Seventy percent of executives in France say the country is competitive relative to crime rates, while only 5 percent of executives in Brazil and 6 percent in China share that view of their own countries.

Executives in Italy are down on most factors and have the bleakest perspective of all G7 countries. Interestingly, despite tremendous rhetoric in the United States, 74 percent of US executives say the regulatory environment is more competitive than in other countries. This percentage is the highest among all 12 countries.

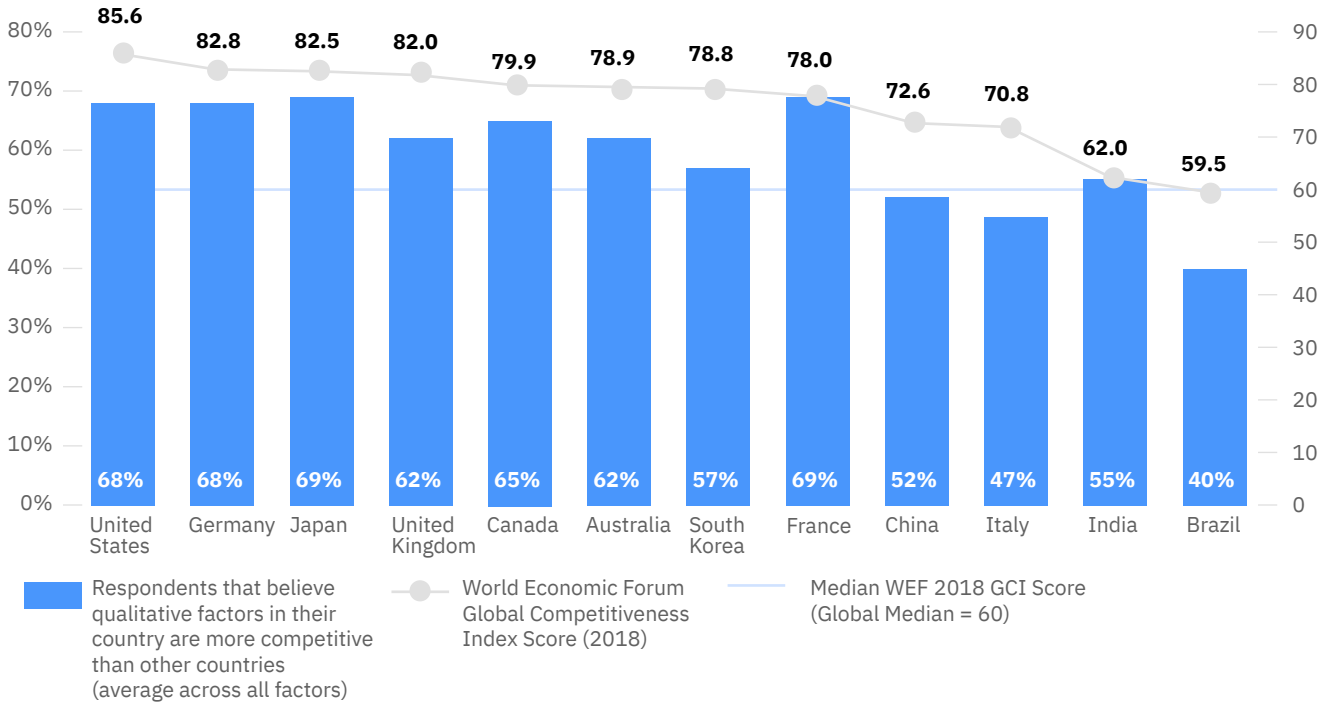
In several countries, perspectives on quality competitiveness reflect both over and under confidence when compared to objective assessments. For comparison, we used the World Economic Forum (WEF) Global Competitiveness Index (GCI), an objective assessment of national economies that tracks the performance of 140 countries on 12 pillars of competitiveness. It assesses the factors and institutions identified by empirical and theoretical research as determining improvements in productivity, which in turn is the main determinant of long-term growth and an essential factor in economic growth and prosperity.[20]

When executive perspectives of country quality competitiveness are compared to GCI data, perception gaps are revealed (see Figure 11). For example, France-based executives' perspectives on their country's quality competitiveness are extremely bullish, similar to those of US and German executives. However, the United States and Germany both have much higher GCI scores and rankings. France is ranked 17th, while the United States and Germany are ranked 1st and 3rd, respectively.[21]

Generally, executives from countries with higher GDP per capita rank their countries high in quality competitiveness.

Figure 11

Perceived quality competitiveness compared to World Economic Forum (WEF) Global Competitiveness Index (GCI)



Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018; "The Global Competitiveness Report 2018." World Economic Forum. 2018.

A similar misalignment exists among executives in India. India ranked 58th with a GCI score just above the global median (60) and behind both Greece and the Philippines.[22] This might be a result of executives in India having a different reference point of competition and comparing themselves to other developing countries rather than the more established economies in the top 12.

Self-perceived competitiveness in the quality stakes is bifurcated, aligning closely with income per capita (see Figure 12). The United States, Germany, France and Japan are bunched at the top at 68 and 69 percent. Canada comes in a close 5th, followed by the United Kingdom and Australia as equal 6th. China and India are in the low 50s in terms of self-perceived quality competitiveness, with Brazil last at 40 percent.[23]

Figure 12

Perceived quality competitiveness compared to GDP per capita

Nation	Percentage of executives saying their nation is advantaged in terms of quality	Self-assessed ranking of nation's quality competitiveness	GDP per capita in current USD (2017)	Ranking (among top 12) of income per capita
France	69%	1	$38,477	6
Japan	69%	1	$38,428	7
Germany	68%	3	$44,470	4
United States	68%	3	$59,532	1
Canada	65%	5	$45,032	3
Australia	62%	6	$53,800	2
United Kingdom	62%	6	$39,720	5
South Korea	57%	8	$29,743	9
India	55%	9	$1,940	12
China	52%	10	$8,827	11
Italy	47%	11	$31,953	8
Brazil	40%	12	$9,821	10

Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705; GDP per capita (current USD). The World Bank. 2017.

Risks, challenges and opportunities

To better gauge the path forward for policy makers and business and education leaders across major economies, we asked the executives surveyed to share their insights into major risks, challenges and opportunities facing their nations today and in the future.

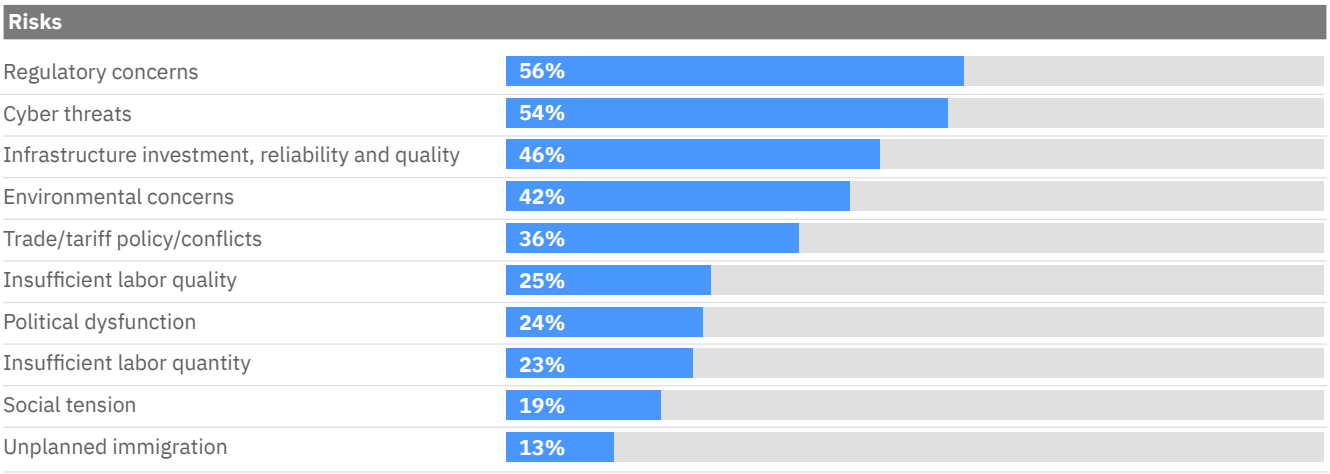
Value at risk

Media attention has exploded worldwide around fears of unplanned immigration in countries as diverse as India, Thailand, the United Kingdom and Australia.[24] However, unplanned immigration ranks 10th in importance among executives surveyed, with only 13 percent identifying it as a risk to their national economy in the next five years. (See Figure 13. Note: Country-specific responses can be found in the Appendix.) Even in the United States, where immigration rhetoric has been dominating headlines for several years, only 11 percent of business, government and education leaders report any level of concern about the impact of unplanned immigration on the nation's economy.[25]

Global executives rank cyber threats among the biggest strategic risks facing their national economies – just under regulatory concerns.

Figure 13

Executive views on biggest strategic risks to national economies over the next five years



Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705.

By a wide margin, regulatory risk and cyber threats dominate the attention of business and other leaders as primary risks to their respective economies. Indeed, in the United Kingdom, cyber threats rank number 1. And this is despite palpable risks around regulation and market stability associated with uncertain Brexit negotiations, which were in full flight when our survey was conducted. Among leaders in the United States, fully 70 percent identify cyber threats as a major national risk, more than 10 percentage points higher than any other of the top 12 nations.

To gauge executive perceptions against more objective measures, we utilized the Global Cybersecurity Index (GCI), which is produced annually by the International Telecommunication Union (ITU) and provides a measure of each nation state's level of cybersecurity development. Using the ITU GCI, we found some inconsistencies between executives' concerns about national cyber threats and their countries' preparedness to deal with them.[26]

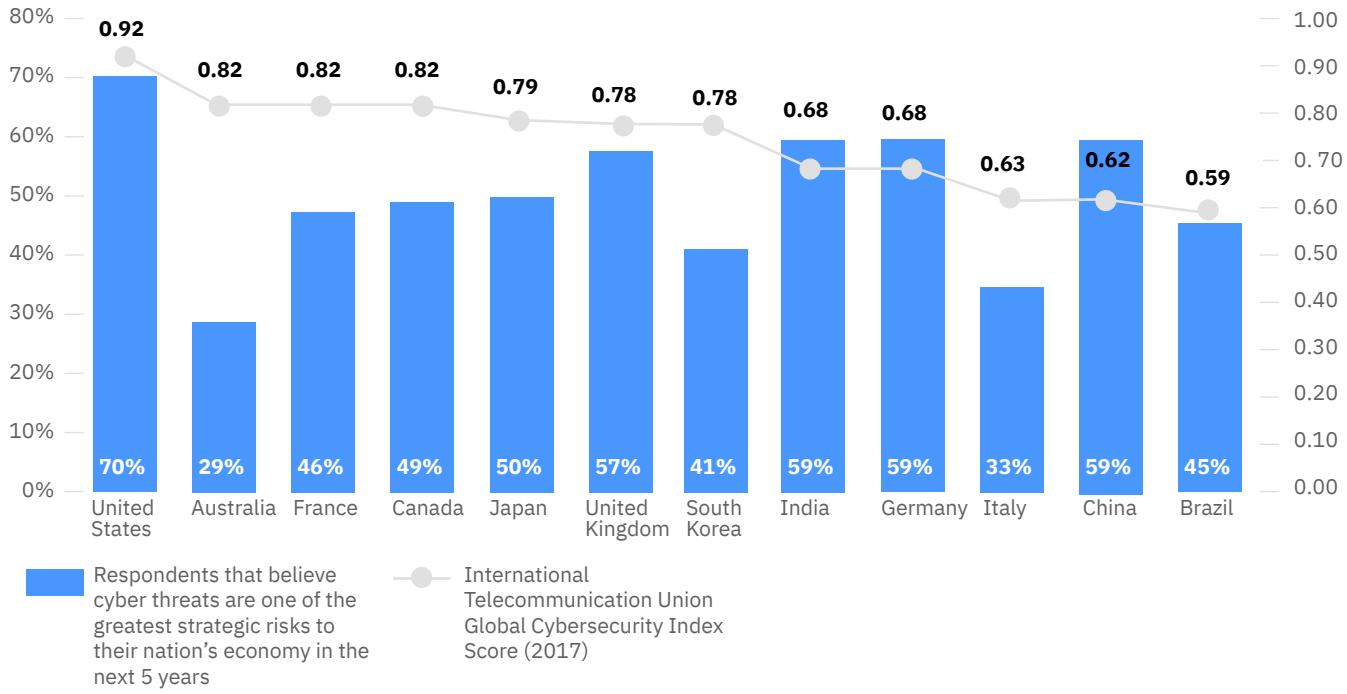
Although outside of the top 12 economies, Singapore ranks number 1 globally in cyber preparedness, closely followed by the United States at number 2.[27] Interestingly, only 29 percent of Australian executives identify cyber threats as a national risk, despite the extremely high-profile foreign hacking of Australia's 2016 national census.[28] The Australian response is the lowest among the big 12 economies and more than 40 points lower than that of the US. Irrespective of their disinterest, Australia ranks 2nd in cybersecurity preparedness among the top 12 economies and 7th overall globally. Brazil, which ranks 38th in the global preparedness rankings, is the least prepared among the big 12 according to the ITU GCI (see Figure 14).

Challenges abound

When we asked executives to identify specific challenges facing their own organizations, regulation again emerged as the top concern, 13 percentage points higher than the second highest item – high taxes and tariffs. (See Figure 15. Note: Country-specific responses can be found in the Appendix.)

Figure 14

Concern over cyber security compared to national preparedness



Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018; "Global Cybersecurity Index (GCI) 2017." International Telecommunications Union (ITU). 2017.

Although regulatory concerns are a top challenge, many executives rate their country's regulatory environment as highly competitive.

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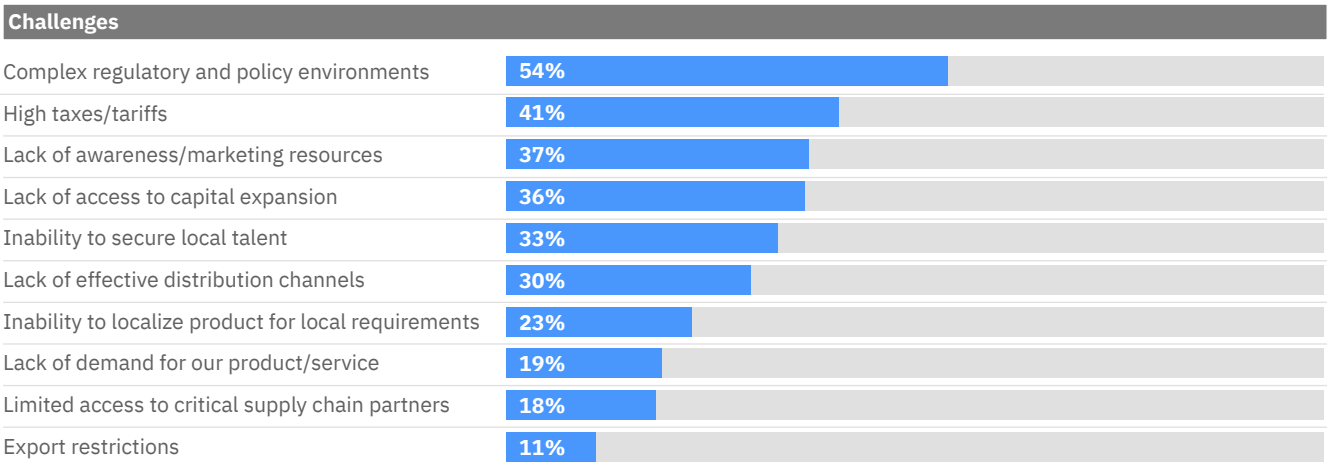
Figure 15

Major challenges impacting ability of executives' organizations doing business in their own countries



Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018.

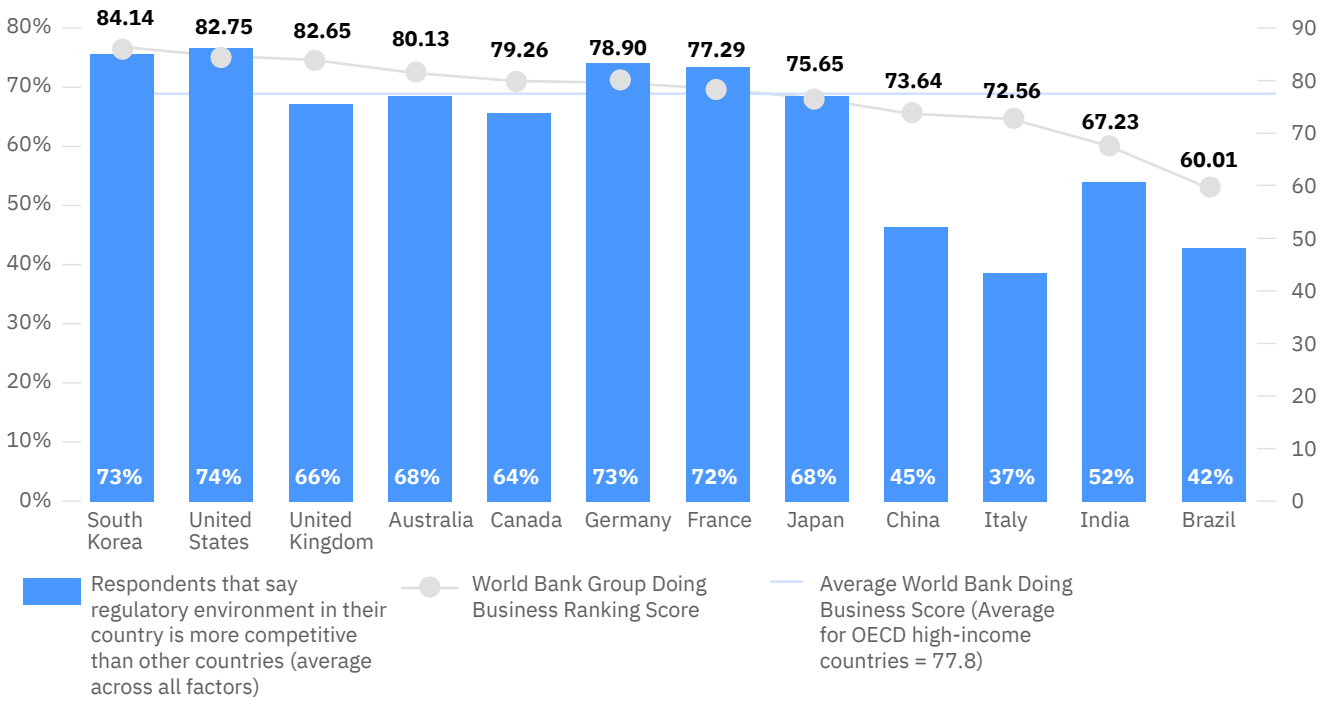
As many as 69 percent of US executives identify regulation as a challenge for their organization, the highest among the big 12 economies, followed by Australia, China and Germany. At 23 percent, Italian executives indicate they are less challenged by regulations as a roadblock.

We also compared the percentage of executives who say that the regulatory environment in their country is more competitive than the environment in other countries with scores from The World Bank Ease of Doing Business index. For some countries, we find almost an inverse relationship.[29] (See Figure 16.)

Executives from most of the countries, with the notable exception of South Korea and Italy, have a negative view of the competitiveness of their respective countries' tax regimes. German executives are particularly pessimistic, with only 4 percent indicating Germany's corporate tax rate contributes positively to the competitiveness of the German economy overall. But again, many of these perspectives do not align with more objective measures.

Figure 16

Executive perceptions of regulatory competitiveness compared to World Bank Ease of Doing Business



Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018; "Doing Business 2019: Training for Reform." The World Bank. November 28, 2018.

When we compare executives' perceptions of corporate tax competitiveness with the 2018 International Tax Competitiveness Index Rankings of the Tax Foundation's Center for Global Tax Policy, we see significant divergence (see Figure 17).[30] Although only 14 percent of Australian executives say their country's corporate tax environment is internationally competitive, the International Tax Competitiveness Index places Australia as the 8th most competitive tax environment for the past three years, highest among the 12 big economies and the only big 12 in the Tax Foundation's top 10. Although we find German executives most pessimistic about their tax environment, the Tax Foundation rates Germany second highest among the big 12 and the 16th most competitive tax environment globally in 2018. On the other hand, French executives' pessimism about their corporate tax regime seems to be warranted, with France number 35 on the Tax Competitiveness list, the lowest of the 35 economies assessed.[31]

A majority of executives expect to increase collaboration with global partners in coming years.

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Figure 17

Executives viewing their countries' corporate tax regime as challenging versus global tax competitiveness rankings

Nation	Percentage of executives saying their nation's corporate tax rate adds to competitiveness	Self-assessed ranking of nation's corporate tax rate adding to competitiveness	Tax Foundation International Tax Competitiveness Index Ranking	Combined statutory corporate income rate
South Korea	54%	1	**	**
Italy	48%	2	34	27.81%
India	39%	3	**	**
Brazil	22%	4	**	**
China	18%	5	**	**
United States	18%	6	24	25.84%
Japan	16%	7	26	29.74%
Australia	14%	8	8	30.00%
United Kingdom	14%	9	23	19.00%
Canada	13%	10	18	26.80%
France	8%	11	35	34.43%
Germany	4%	12	16	29.83%

*** Data not available in source. Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018; "2018 International Tax Competitiveness Index." Tax Foundation. October 23, 2018; "Statutory corporate income tax rate." Organisation for Economic Co-operation and Development, 2018.*

Strategic opportunities

Executive outlooks on the future are not all negative. When asked about the most important opportunities facing their nation's economy, global executives remain focused on global business integration and innovation – contrary to the forces of insularity and populism evident across many economies.[32] (See Figure 18. Note: Country-specific responses can be found in the Appendix.)

More than half of all executives surveyed – 56 percent – tell us business value can be increased by deeper collaboration with global partners. The strategic opportunity with the second highest number of percentage points is being a technology innovator. Along similar lines, being a leading producer of high-value-added products and services is the third most selected item, suggesting that executives expect their nations to take a leading role in technological and business development. Environmental sustainability also rated high, with more than 40 percent saying being a leader in sustainability initiatives is a strategic economic opportunity for their nation's economy.

Two elements are critical for nations to realize these opportunities:

1. The ability to work collaboratively across borders
2. A skilled and talented workforce.

Unfortunately, growing hesitation exists over the future of trade agreements that have underpinned corporate internationalization efforts over the last several decades. Brexit negotiations have created uncertainty in Europe, and the United States administration has placed the future of historically critical trade agreements in doubt. As a result, the continued ability of companies to access international markets and operate globally is in question.

To accelerate toward higher growth and capitalize on strategic growth opportunities, nations and regions around the world need a skilled and talented workforce. The future success of national economies is heavily dependent upon ecosystem partners working together to develop and maintain a skilled workforce across regional labor markets. And addressing skills needs must occur during a period of continuing industry and economic disruption fueled by rapidly evolving technologies.

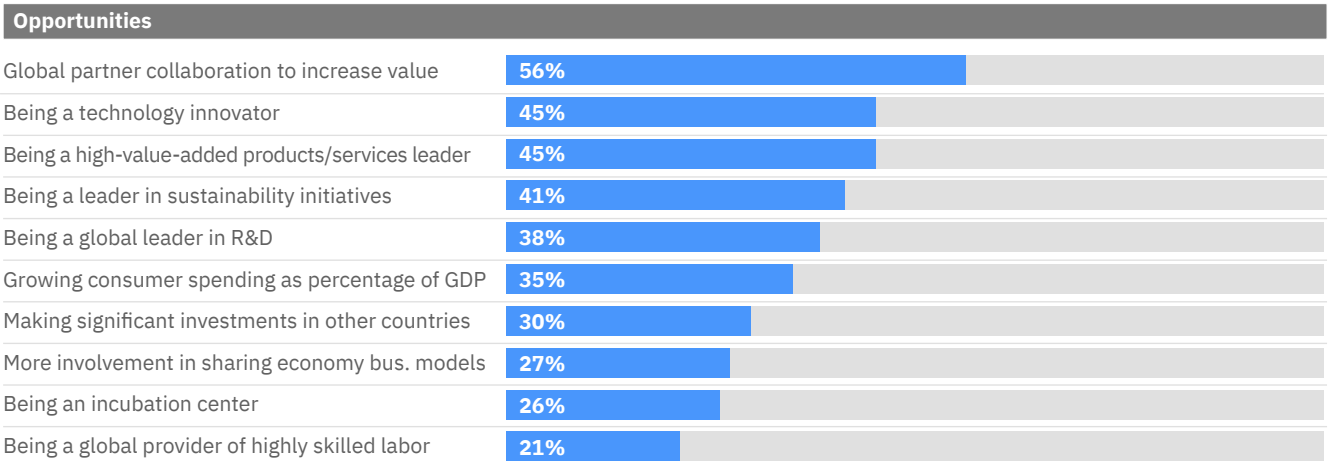
Machines: Friend or foe?

Automation has a long and storied history dating back more than 5,000 years.[33] Today, advancements in AI are spawning a new phase of automation: intelligent automation. Intelligent automation is changing the way enterprises operate by using advances in technology to optimize processes, personalize customer experiences and enhance decision making.

Intelligent automation has been hyped by media around the world. Indeed, barely a day goes by without some article or media segment scrutinizing the possibility of smart robots replacing workers and alienating populations en masse.[34] Insights of C-suite executives we surveyed from the world's top 12 economies suggest the negative impact of AI-enabled automation – at least in the near term – is overplayed.

Figure 18

Biggest strategic opportunities for national economies over the next five years



Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018.

Close to three-quarters of executives expect entirely new roles and talents will emerge to accommodate technology advancements.

Executives report that as few as 3.4 percent of positions may be reduced or redeployed over the next three years. But the upside of intelligent automation will be significant in terms of productivity and capability. Forty-three percent of executives tell us that AI-enabled automation will improve worker productivity, and 56 percent see it having a positive impact on industry productivity. According to 44 percent of executives, intelligent automation will improve the insights – and therefore value – that can be derived from data. In turn, this is likely to improve and expand organizational capabilities, as indicated by as many as 60 percent of executives surveyed.

However, one thing most executives surveyed conclude is that AI and automation will dramatically influence job roles and workforce skills. As many as 65 percent expect that advancements in robotics, AI and automation will impact the demand for skills in the next five years. But that's not the entire story. Not only will existing roles and skills need to change, but many new activities and functions will inevitably emerge. Seventy-three percent of global executives say that advancements in technology will require entirely new roles and skills that do not exist today.

Retraining and reskilling in the face of AI and intelligent automation are essential. Based on projections derived from our survey data, we find that more than 120 million workers across the world's 12 largest economies may need to be retrained and reskilled over the next 3 years. The labor force shares requiring retraining vary by economy, but they are within 6 and 9 percent. South Korea and Australia have the highest at 8.4 and 8 percent respectively, and Canada and Italy share the lowest at 6.3 percent. Regardless of the specific percentages, the actual number of workers impacted is substantial, with more than one million in Canada and many multiples of that in the larger and more populous economies of the United States, India and China (see Figure 19).

Figure 19

Intelligent automation impacts on national labor markets

		Potential to be eliminated/ redeployed by employer		Potential to require retraining/reskilling	
Nation	Size of national labor market	Number of workers	Percentage of labor force	Number of workers	Percentage of labor force
Australia	12,910,000	514,000	4.0%	1,032,000	8.0%
Brazil	104,278,000	3,309,000	3.2%	7,240,000	6.9%
Canada	20,097,000	670,000	3.3%	1,274,000	6.3%
China	786,738,000	28,917,000	3.7%	50,296,000	6.4%
France	30,356,000	1,133,000	3.7%	2,290,000	7.5%
Germany	43,473,000	1,615,000	3.7%	2,931,000	6.7%
India	520,194,000	15,728,000	3.0%	35,080,000	6.7%
Italy	25,458,000	1,035,000	4.1%	1,614,000	6.3%
Japan	66,503,000	2,484,000	3.7%	4,884,000	7.3%
South Korea	27,890,000	1,134,000	4.1%	2,355,000	8.4%
United Kingdom	33,870,000	1,092,000	3.2%	2,487,000	7.3%
United States	163,463,000	5,516,000	3.4%	11,514,000	7.0%

Sources: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018; "Labor force, total by country." The World Bank. 2017.

We asked executives to identify specific areas that were most important to prepare their economies, industries and workers for advances in intelligent automation and also asked them in which areas their nations were most prepared. We found several gaps between importance and level of preparedness, particularly across those areas most directly aligned to defining robust strategies and education: vocational and technology training, reskilling and innovation. Clearly, education systems are not keeping pace with technological developments and, if the executives we surveyed are any guide, these systems are ill-prepared for the dramatic change in workplace roles and skills required (see Figure 20).

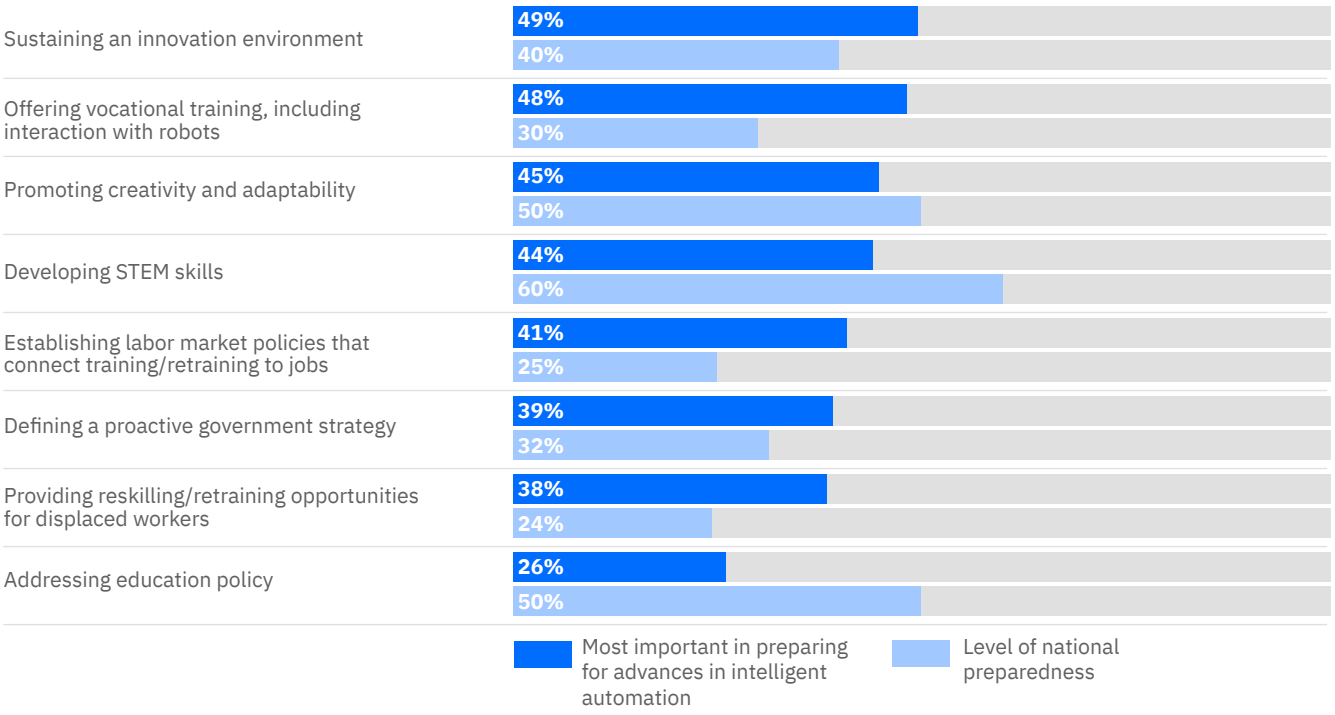
Way forward: Building a sustainable future

The challenges facing nations are both considerable and complex. Navigating this era of uncertainty will require collaboration and coordinated action across ecosystems including industry, education, public policy and economic development leaders. While there is no silver bullet to address the breadth of these challenges, there are three key focus areas that can enable nations and regions to mitigate risk and foster economic vitality:

- Build informed and agile strategies.
- Prioritize skills development.
- Bolster cybersecurity capabilities.

Figure 20

Areas needed to prepare for intelligent automation versus national preparedness



Source: IBM Institute for Business Value survey of international competitiveness in collaboration with Oxford Economics, n = 2,705. 2018.

Companies need to consider today how intelligent automation will impact operations tomorrow, particularly its affect on workforce talent requirements.

Build informed and agile strategies

It's imperative that business leaders understand the value propositions available in regions around the world to optimize value from their location strategies. It's equally critical for public sector leaders and economic development professionals to understand the competitive landscape of various regions around the world with which they compete.

The playing field is global and, unfortunately, many economic developers lack an understanding of the competitiveness of regions outside their country or neighboring regions. Similarly, our research indicates a basic level of naivety among many industry leaders as to the competitiveness of the countries in which they themselves conduct business. Both private sector companies and governments should build strategies based on an understanding of the competitive value propositions of regions globally. At the same time, these strategies must remain agile to account for uncertainty and potential disruptions.

Uncertainty can cause companies to delay or reevaluate plans to invest or expand. During this period of uncertainty, companies should consider available and appropriate strategic options. This entails identifying possible scenarios and specifying potential challenges or opportunities posed by factors creating uncertainty (tariff disputes or political instability, for example).

Companies can evaluate their current operational footprints and location strategies and then define the optimal future state in response to different scenarios. Operational footprint evaluations include understanding and assessing both cost and quality competitiveness factors for various business functions across the enterprise and the competitive value propositions of the regions where those functions are currently conducted.

Effective contingency plans address how to incorporate operational agility to respond to uncertainty and unforeseen disruptions (for example, greater operational and supply-chain visibility to reduce risks from changes in suppliers, trade or market conditions).

Companies should also evaluate the potential implications of emerging technologies and intelligent automation on their enterprises and operational footprints in the future. Those that do not leverage the potential of digital technologies might be at a competitive disadvantage. Organizations that assess how these capabilities might impact business and operating models can develop plans to optimize their value while avoiding negative implications. In particular, we recommend a focus on developing and maintaining the workforce skills required to realize value from intelligent automation and other emerging technologies.

Economic competitiveness is driven by many factors considered by investors. Business-demand-driven economic development aims to improve each factor relevant to business decision makers to enhance the overall value proposition of a region. For government and economic developers to attract and retain investment and create jobs in their regions, they need to understand their completive strengths and weaknesses relative to other regions around the world. Public sector leaders must also understand the competitive drivers and trends in various industries critical to their economies to help ensure their location provides the right conditions, skills and capabilities required for companies to compete and thrive. In this era of uncertainty, it's equally imperative that leaders understand how various change dynamics (for example, trade, tax and immigration policy, and technological advances) will or might affect their location's value proposition in the future.

Public sector leaders should work with ecosystem partners (such as academia, investment promotion agencies and industry councils) to assess the competitiveness of their regional economies against other potential global competitors. Assessments that include both cost and quality factors can more clearly convey the value proposition to existing and perspective investors. And assessments done in cooperation with industry help ensure current and future operating requirements are clearly understood.

Assessment results can be used to prioritize investments and policy decisions focused on addressing competitive weaknesses and opportunities for growth. Economic development marketing strategies should articulate regional competitive value propositions for targeted industries and also actively address plans or strategies aimed at reducing the impact of potential disruptions fueling uncertainty. In addition, ongoing dialogue and collaboration with industry and other ecosystem partners can facilitate consistent evaluation of the effectiveness of strategies and make necessary course corrections.

Prioritize skills development

Global economies are at a crossroad. As intelligent automation and other disruptions continue to redefine industries, the types of skills these industries require are also evolving. The available labor force can either help accelerate or constrain economic evolution and growth.

Our research indicates industry, technology and economic disruption has created a perfect storm that is significantly impacting the types of skills required, as well as the demand for and availability of skills in global labor markets.[35] As one of the most critical topics for organizations globally today, skills will become increasingly important in the future. The labor force is also one of the most significant issues impacting national and regional economic vitality:

- Without adequate talent*, public and private sector organizations* struggle to effectively innovate, deliver value to citizens and shareholders, grow their businesses and create new jobs. Private sector companies will be forced to seek out regions where they can obtain the necessary talent to remain competitive.
- Without adequate talent, *regional economies* struggle to retain and recruit industries that provide high-skilled/high-paying jobs. A decline in the quality of talent in regions can significantly impact the economic competitiveness and value proposition of the region, leaving primarily opportunities for lower-skilled/lower-wage jobs. Lower paying jobs can lead to a decline in GDP, reduced tax revenues and increased dependence on public services.
- Without skills to compete for higher paying jobs, *individuals* are forced to remain in lower-skilled/lower-wage jobs and might fall victim to further income inequality and increased reliance on public services.

There is no simple remedy to address these challenges and no single entity can solve the problem on its own. Governments are not able to address the challenge of building and maintaining skilled regional talent pools on their own as they are overwhelmed in dealing with operational complexities resulting from multiple forces. Higher education institutions in many regions are not capable of meeting student or industry demands and needs. And most executives in the private sector expect government to lead in tackling this issue, while most organizations have not made employee skills development a priority.[36] Bolstering the competitiveness of regional workforces requires a concerted team effort and action at multiple levels.

As governments and policy makers prepare regional and national labor forces for the future, establishing industry partnerships to help shape and deliver learning will be critical. Efforts should include not only traditional formalized learning, but also new education and training paths to facilitate continuous lifelong learning. Government leaders should assess strategies proven impactful by other government leaders globally (investing in apprenticeship/internship programs, providing incentives for private sector investments in workforce training and implementing "bridge-building" work-based learning programs, for example).

Education leaders should also evaluate strategies proven impactful by others globally, including expanding opportunities for experience/practice-based learning in educational programs and working with industry partners to update curriculum to keep pace with rapid advancements in technologies and changing industry requirements.

Industry leaders should prioritize investments in training and skills development for employees. In addition, they can work with government and other ecosystem partners to create and expand apprenticeship/internship programs and implement formal skills recognition and/or certification programs.

Bolster cybersecurity capabilities

It's clear that cyber threats are top of mind among public and private sector leaders around the world. Cyber threats have indeed become a strategic focus, and cybersecurity strategies and doctrines have been established in most countries. However, research reveals significant gaps in many countries in the ability to understand and deploy strategies and capabilities to mitigate cyber risks.[37]

Effectively addressing cyber threats requires collaboration and unified actions among leaders and organizations in both the public and private sectors. Governments can take a leadership role in establishing policies that address growing cyber threats and establishing national cybersecurity strategies. They can look to leaders – like Singapore – that have established comprehensive national-level strategies with clear vision, goals, strategies and priorities for cybersecurity. Singapore's national strategy enables coordinated action and facilitates international partnerships for a resilient and trusted cyber environment – enabling a more secure future for Singaporeans.[38]

Public and private sector leaders can join forces to create a comprehensive national strategy similar to the initiative in Singapore.

In addition, the ITU Global Cybersecurity Index provides a framework of five pillars for national cybersecurity preparedness. This can be useful for nations in developing cyber strategies and prioritizing investments aimed at mitigating cyber threats (see sidebar: *Five pillars of the ITU Global Cybersecurity Index*).

Addressing cyber threats also requires developing and maintaining skilled and trained cyber experts. Along with continued high demand for cybersecurity professionals there is an ongoing shortage of talent. Organizations around the world are pursuing numerous ways to close the talent gap in both the short and long term — including new university programs, technical and vocational programs, apprenticeships, certifications, early education and government programs. Many cybersecurity jobs can be filled by "new collar" workers, those who may not have a traditional college or university degree but have the necessary technical skills and aptitudes. A new collar approach is an important element in larger strategies aimed at addressing the formidable skills gap.[40]

Five pillars of the ITU Global Cybersecurity Index[39]

1. Legal
Legal institutions and frameworks dealing with cybersecurity and cybercrime.

2. Technical
Technical institutions and frameworks dealing with cybersecurity.

3. Organizational
Policy coordination institutions and strategies for cybersecurity development at the national level.

4. Capacity Building
Research and development, education and training programs; certified professionals and public sector agencies fostering capacity building.

5. Cooperation
Partnerships, cooperative frameworks and information-sharing networks.

Related reports

Dencik, Jacob, and Roel Spee. "Global Location Trends 2018 Annual Report: Getting ready for Globalization 4.0." IBM Institute for Business Value. July 2018. ibm.com/thought-leadership/institute-business-value/report/gltr2018

King, Michael, Anthony Marshall, and David Zaharchuk. "Facing the storm: Navigating the global skills crisis." IBM Institute for Business Value. December 2016. ibm.com/thought-leadership/institute-business-value/report/skillsstorm

Lurie, Lindsey, and Marc van Zadelhoff. "It's not where you start – it's how you finish: Addressing the cybersecurity skills gap with a new collar approach." IBM Institute for Business Value. May 2017. ibm.com/thought-leadership/institute-business-value/report/newcollarjobs

Study approach and methodology

In cooperation with Oxford Economics, the IBM Institute for Business Value surveyed 2,705 global executives representing 19 industries in the world's 12 largest economies, including 445 from the United States; 330 each from Japan, China and India; 180 each from Brazil, Canada, France, Germany and the United Kingdom; 150 from South Korea; 120 from Australia; and 100 from Italy.

About the authors

Kazuaki Ikeda

Kazuaki Ikeda is a visiting professor at Waseda University in Tokyo. Previously, he was vice president and leader of the IBM Strategy and Analytics practice area in Japan.

Anthony Marshall

bit.ly/AnthonyMarshall
anthony2@us.ibm.com

Anthony Marshall is Research Director for the IBM Institute for Business Value. Anthony is responsible for directing thought leadership research on a variety of issues related to the public and private sectors.

Dave Zaharchuk

bit.ly/DaveZaharchuk
david.zaharchuk@us.ibm.com

Dave Zaharchuk is Research Director for the IBM Institute for Business Value. Dave is responsible for directing thought leadership research on a variety of issues related to both the public and private sectors.

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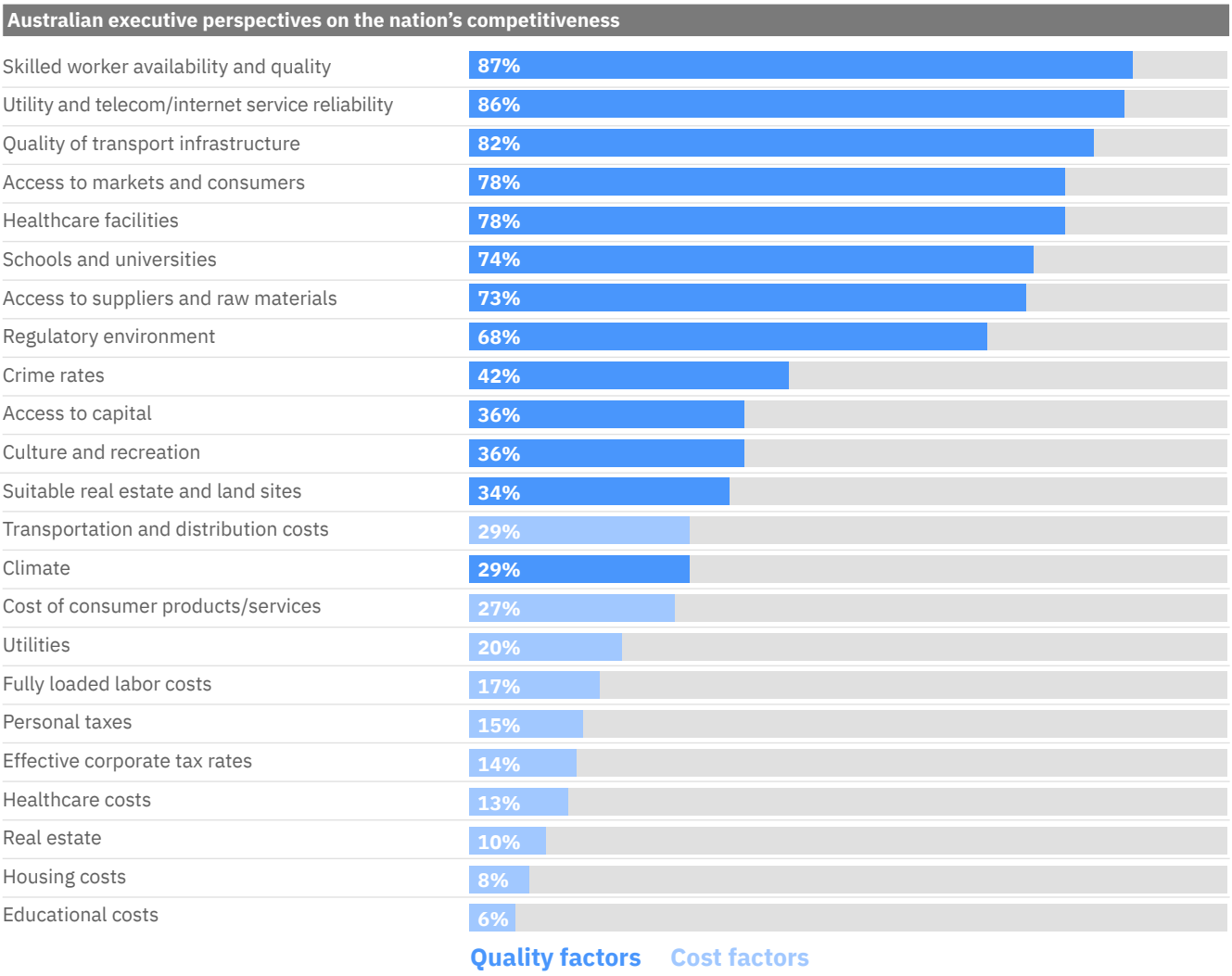
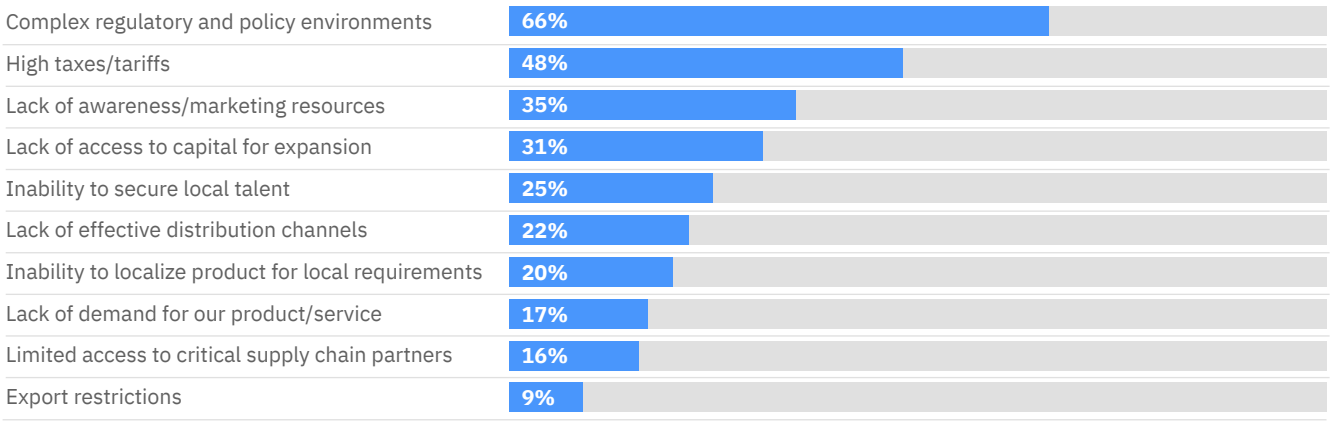
Appendix: Country perspectives

Australia

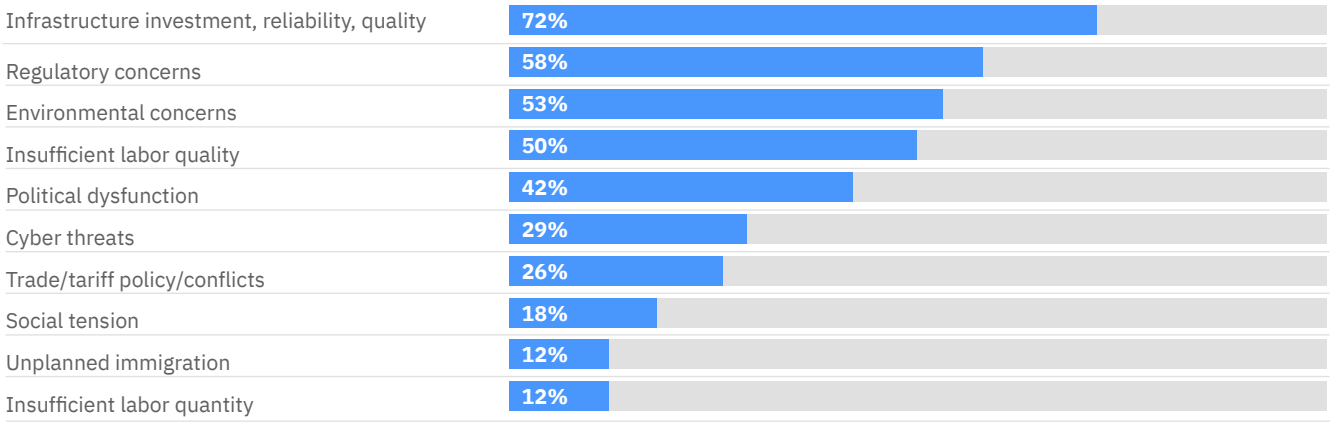


Australia

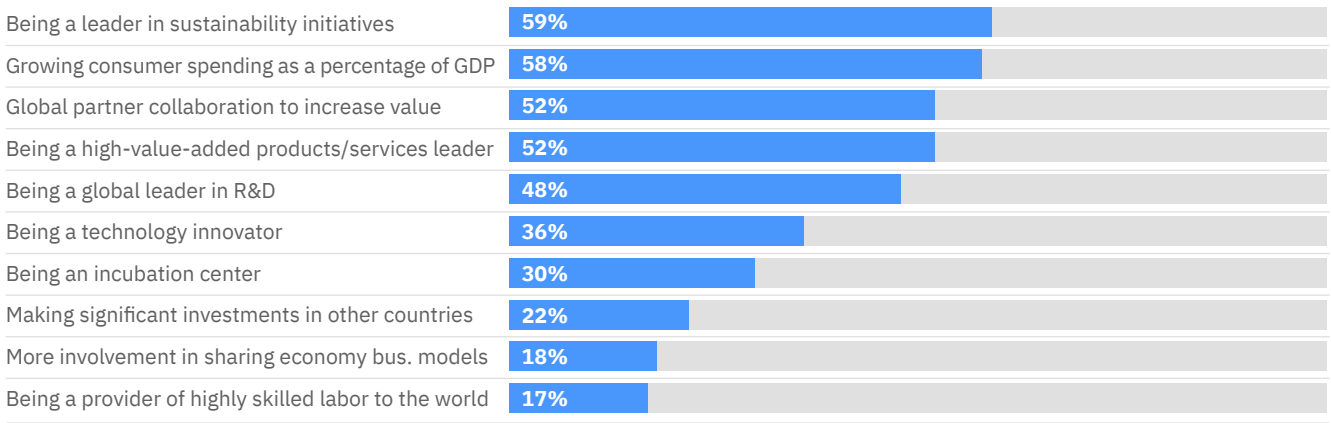
Top challenges executives in Australia face when conducting business in their home country



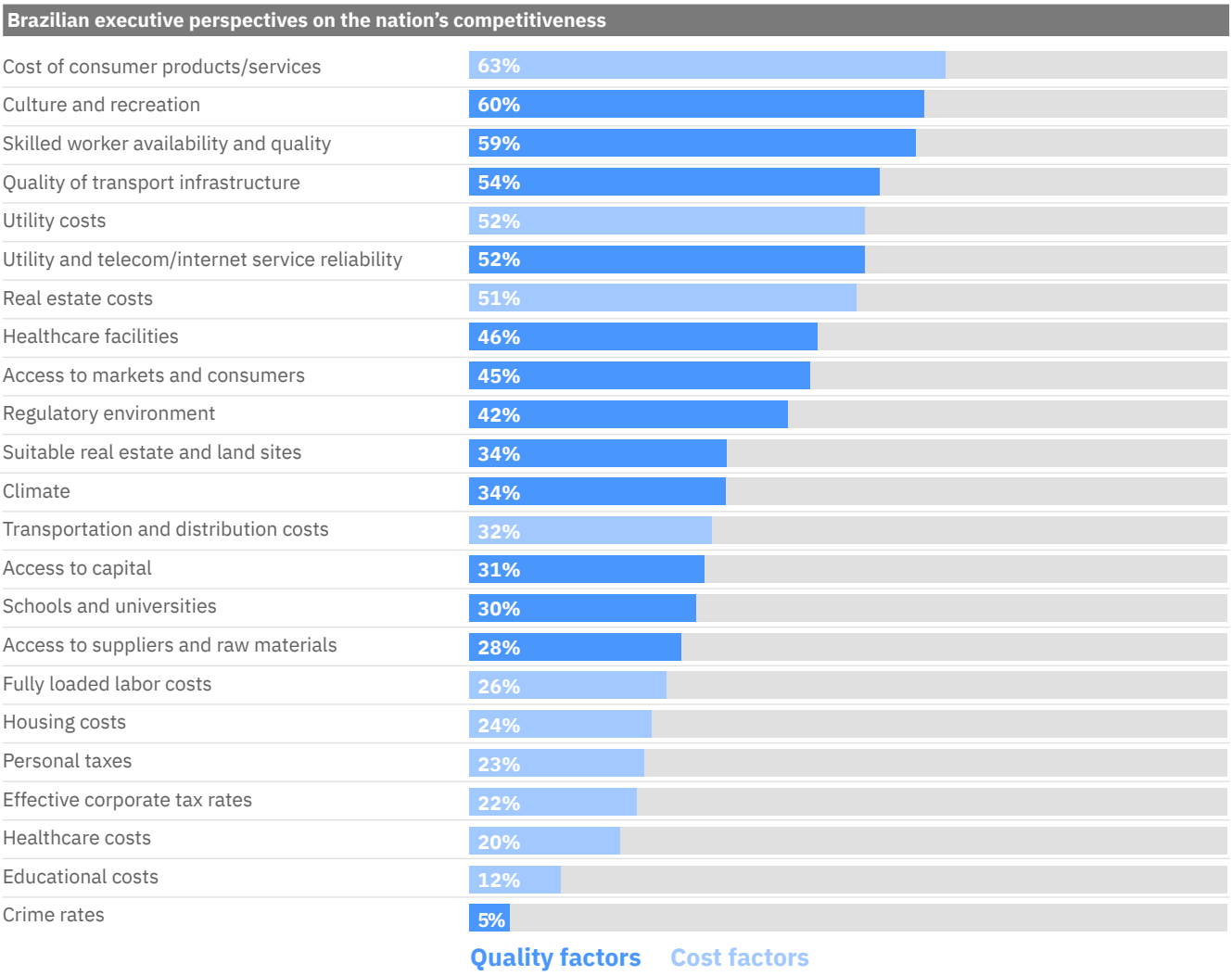
Top strategic risks executives in Australia say the nation will face in the next five years



Australian executive perspectives on the greatest opportunities for their nation's economy in the next five years

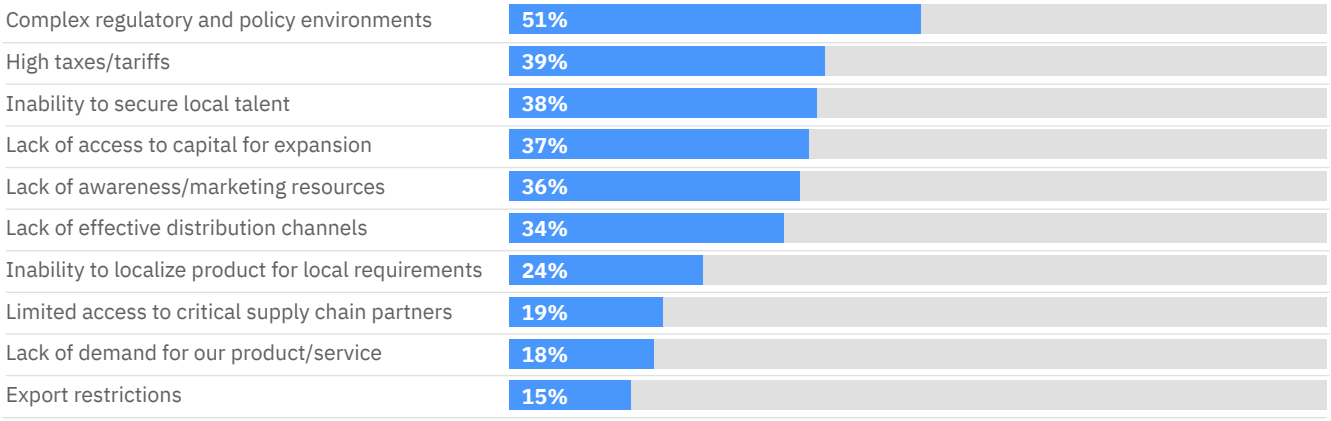


Brazil

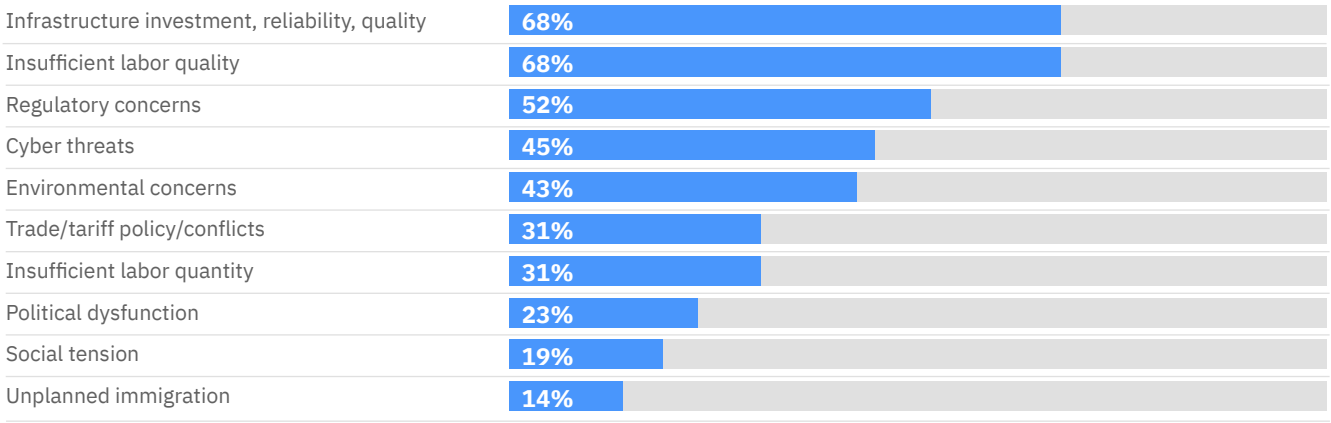

Brazilian executive perspectives on the nation's competitiveness
Cost of consumer products/services 63%
Culture and recreation 60%
Skilled worker availability and quality 59%
Quality of transport infrastructure 54%
Utility costs 52%
Utility and telecom/internet service reliability 52%
Real estate costs 51%
Healthcare facilities 46%
Access to markets and consumers 45%
Regulatory environment 42%
Suitable real estate and land sites 34%
Climate 34%
Transportation and distribution costs 32%
Access to capital 31%
Schools and universities 30%
Access to suppliers and raw materials 28%
Fully loaded labor costs 26%
Housing costs 24%
Personal taxes 23%
Effective corporate tax rates 22%
Healthcare costs 20%
Educational costs 12%
Crime rates 5%
Quality factors
Cost factors

Brazil

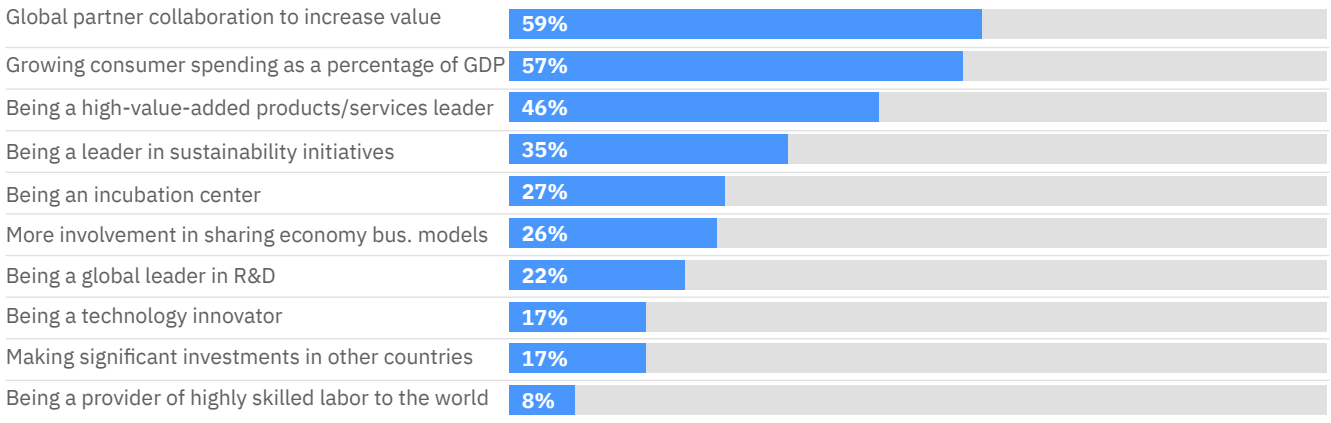
Top challenges executives in Brazil face when conducting business in their home country



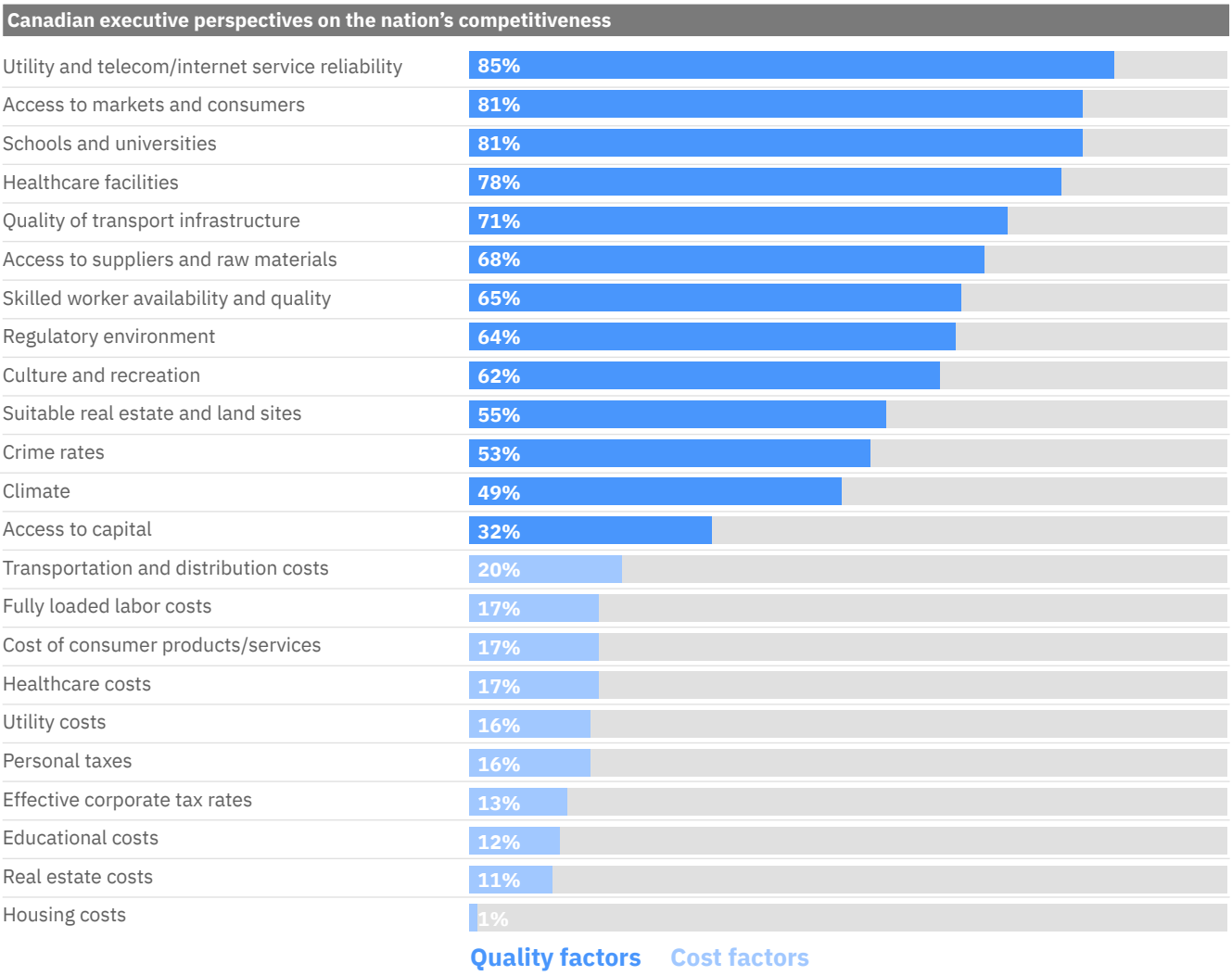
Top strategic risks executives in Brazil say the nation will face in the next five years



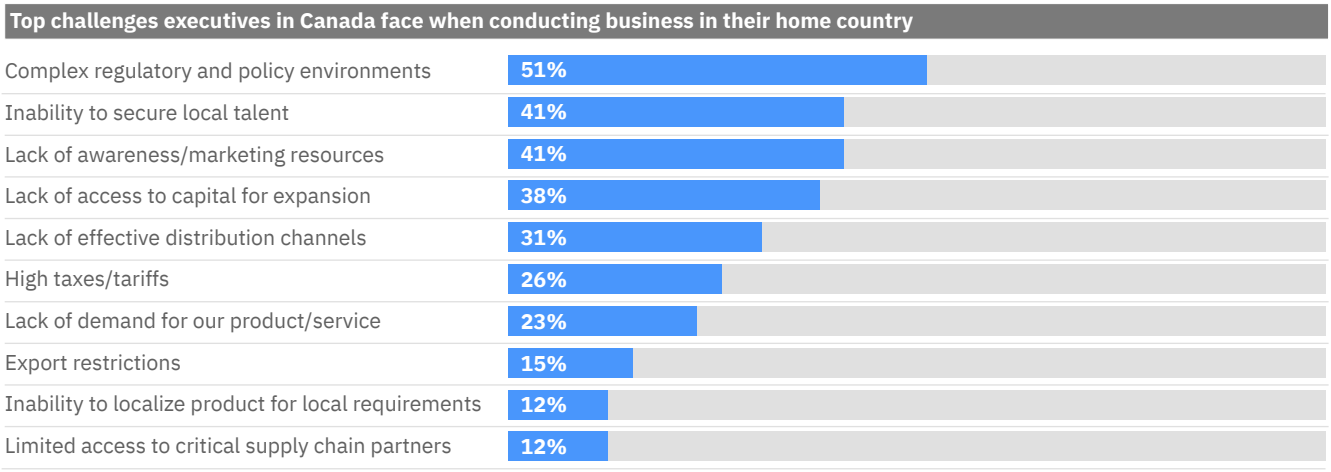
Brazilian executive perspectives on the greatest opportunities for their nation's economy in the next five years

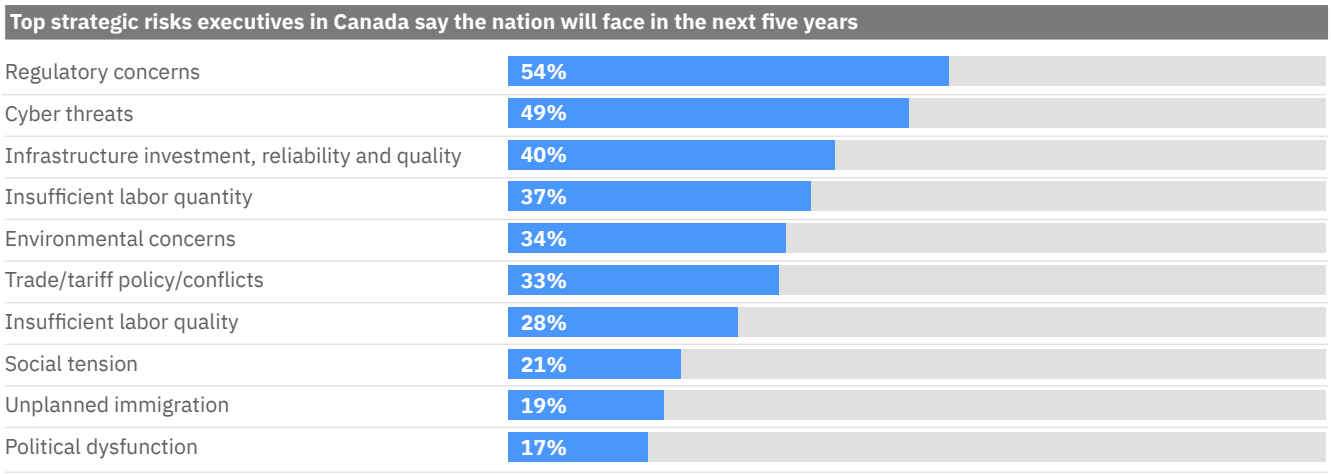


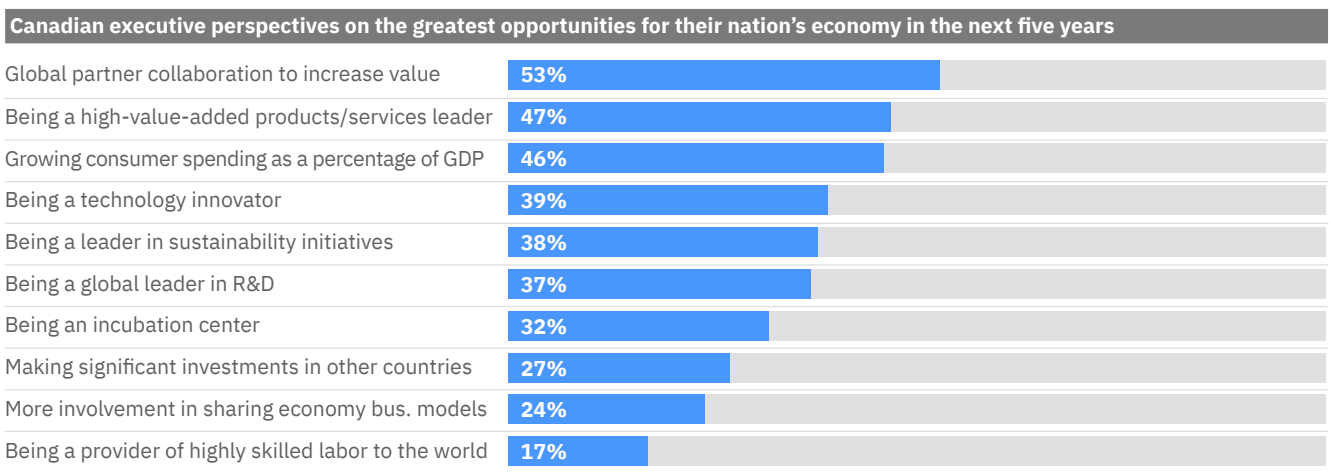
Canada


Canadian executive perspectives on the nation's competitiveness
Utility and telecom/internet service reliability 85%
Access to markets and consumers 81%
Schools and universities 81%
Healthcare facilities 78%
Quality of transport infrastructure 71%
Access to suppliers and raw materials 68%
Skilled worker availability and quality 65%
Regulatory environment 64%
Culture and recreation 62%
Suitable real estate and land sites 55%
Crime rates 53%
Climate 49%
Access to capital 32%
Transportation and distribution costs 20%
Fully loaded labor costs 17%
Cost of consumer products/services 17%
Healthcare costs 17%
Utility costs 16%
Personal taxes 16%
Effective corporate tax rates 13%
Educational costs 12%
Real estate costs 11%
Housing costs 1%
Quality factors
Cost factors

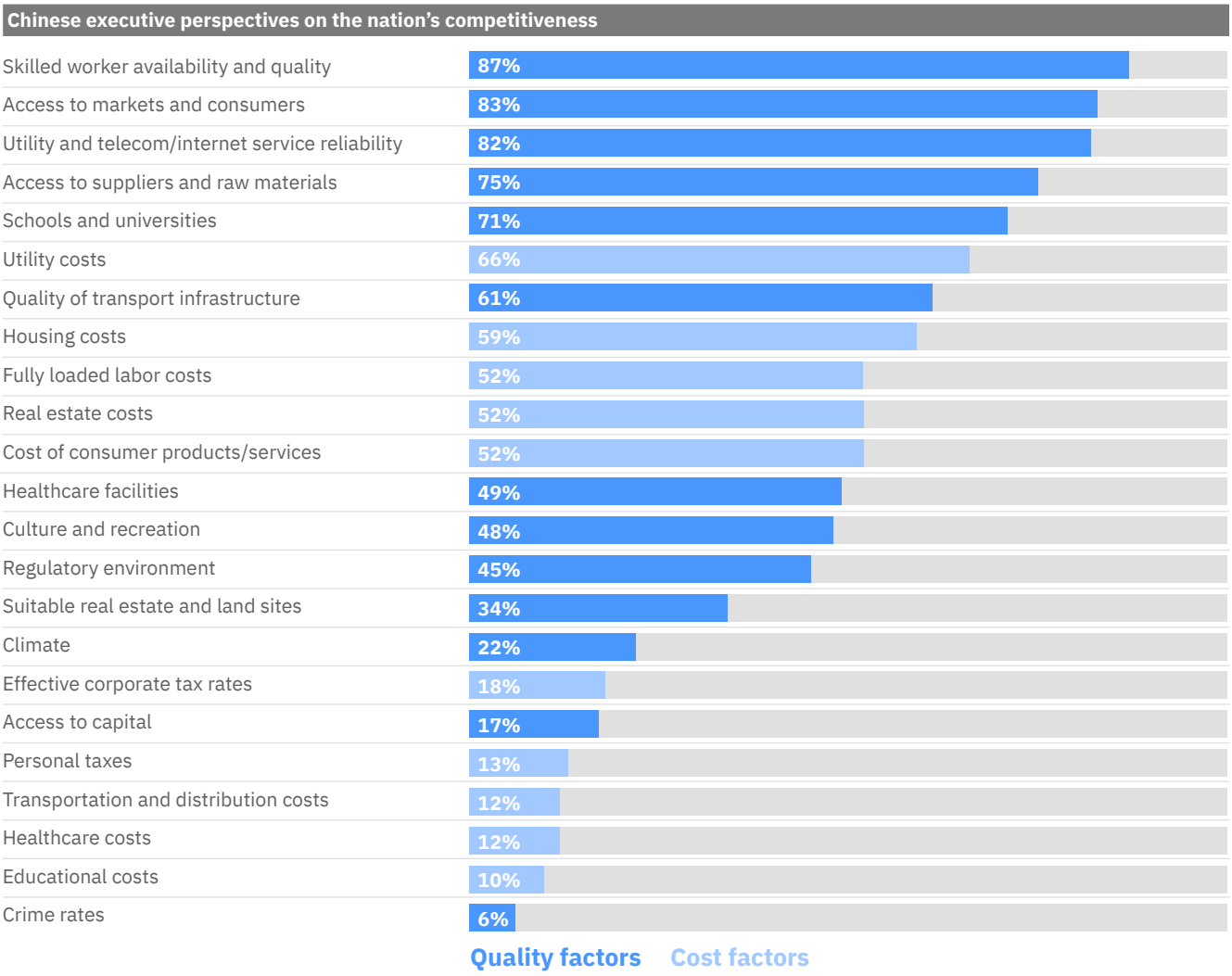
Canada


Top challenges executives in Canada face when conducting business in their home country
Complex regulatory and policy environments 51%
Inability to secure local talent 41%
Lack of awareness/marketing resources 41%
Lack of access to capital for expansion 38%
Lack of effective distribution channels 31%
High taxes/tariffs 26%
Lack of demand for our product/service 23%
Export restrictions 15%
Inability to localize product for local requirements 12%
Limited access to critical supply chain partners 12%


Top strategic risks executives in Canada say the nation will face in the next five years
Regulatory concerns 54%
Cyber threats 49%
Infrastructure investment, reliability and quality 40%
Insufficient labor quantity 37%
Environmental concerns 34%
Trade/tariff policy/conflicts 33%
Insufficient labor quality 28%
Social tension 21%
Unplanned immigration 19%
Political dysfunction 17%


Canadian executive perspectives on the greatest opportunities for their nation's economy in the next five years
Global partner collaboration to increase value 53%
Being a high-value-added products/services leader 47%
Growing consumer spending as a percentage of GDP 46%
Being a technology innovator 39%
Being a leader in sustainability initiatives 38%
Being a global leader in R&D 37%
Being an incubation center 32%
Making significant investments in other countries 27%
More involvement in sharing economy bus. models 24%
Being a provider of highly skilled labor to the world 17%

China


Chinese executive perspectives on the nation's competitiveness
Skilled worker availability and quality 87%
Access to markets and consumers 83%
Utility and telecom/internet service reliability 82%
Access to suppliers and raw materials 75%
Schools and universities 71%
Utility costs 66%
Quality of transport infrastructure 61%
Housing costs 59%
Fully loaded labor costs 52%
Real estate costs 52%
Cost of consumer products/services 52%
Healthcare facilities 49%
Culture and recreation 48%
Regulatory environment 45%
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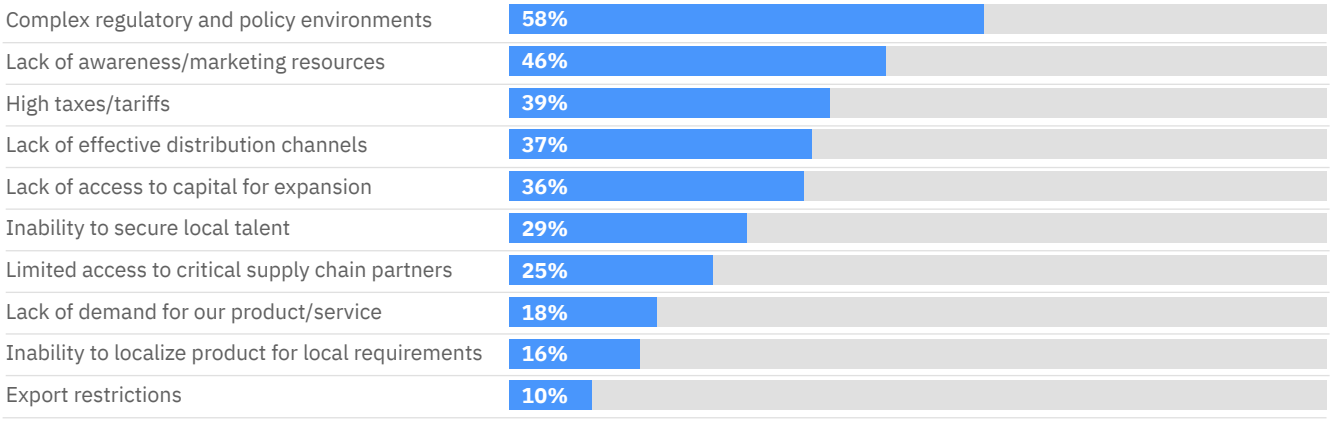
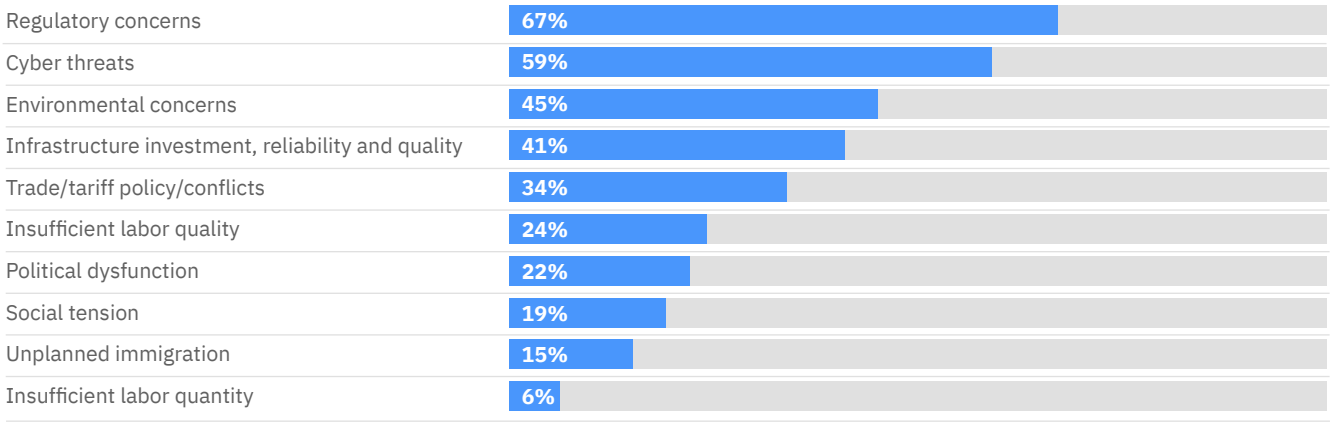
Effective corporate tax rates 18%
Access to capital 17%
Personal taxes 13%
Transportation and distribution costs 12%
Healthcare costs 12%
Educational costs 10%
Crime rates 6%
Quality factors
Cost factors

China

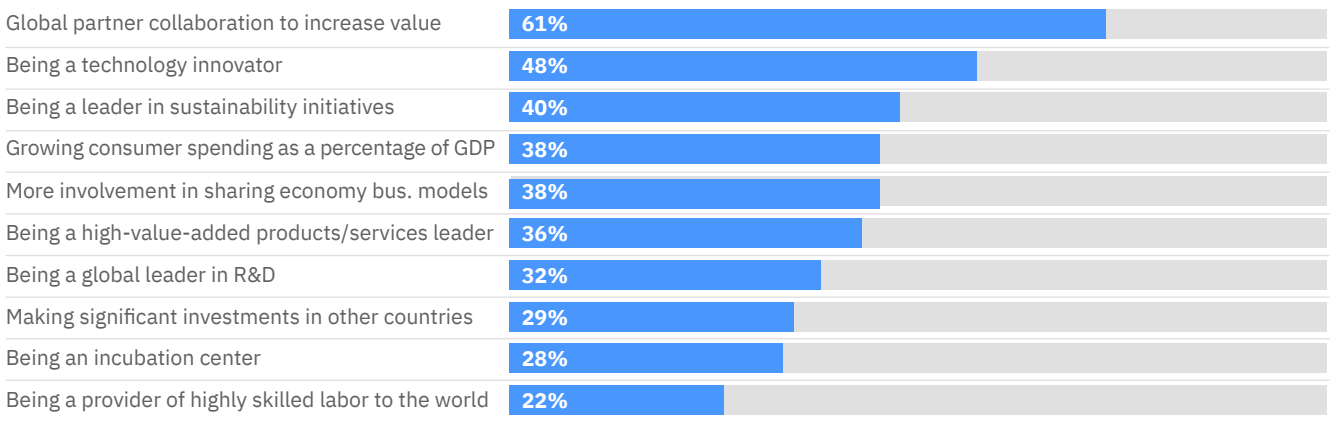
Top challenges executives in China face when conducting business in their home country



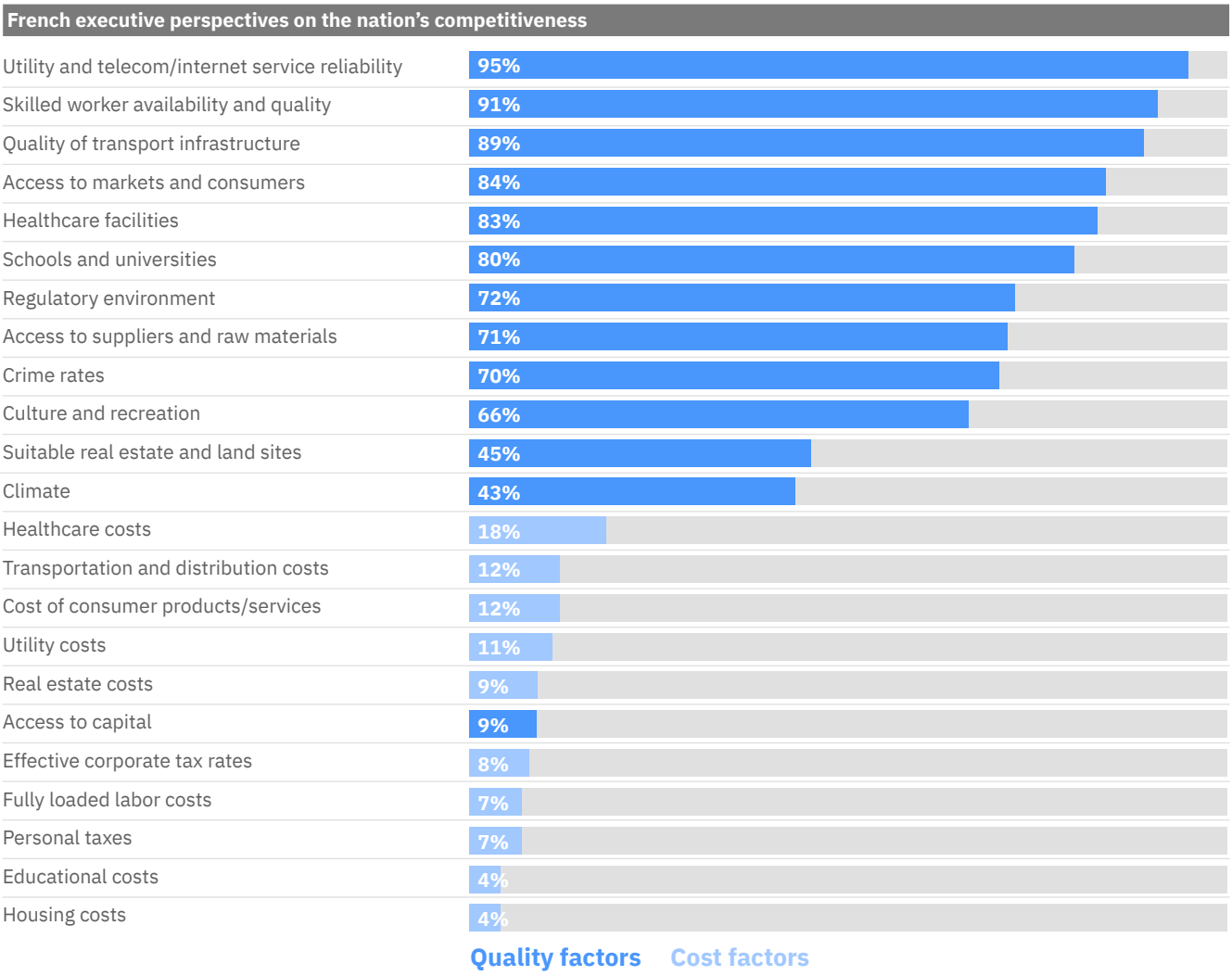
Top strategic risks executives in China say the nation will face in the next five years



Chinese executive perspectives on the greatest opportunities for their nation's economy in the next five years

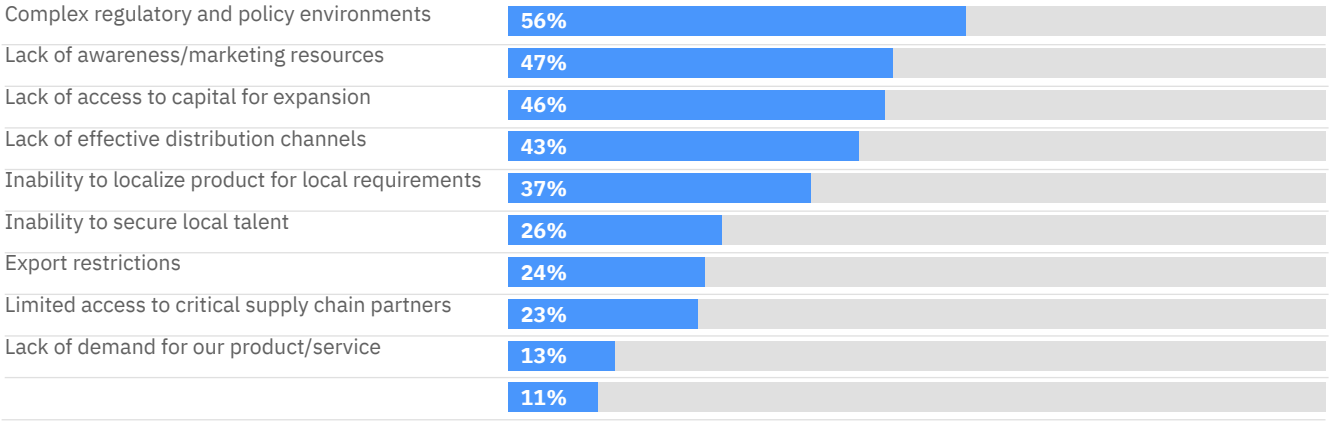


France

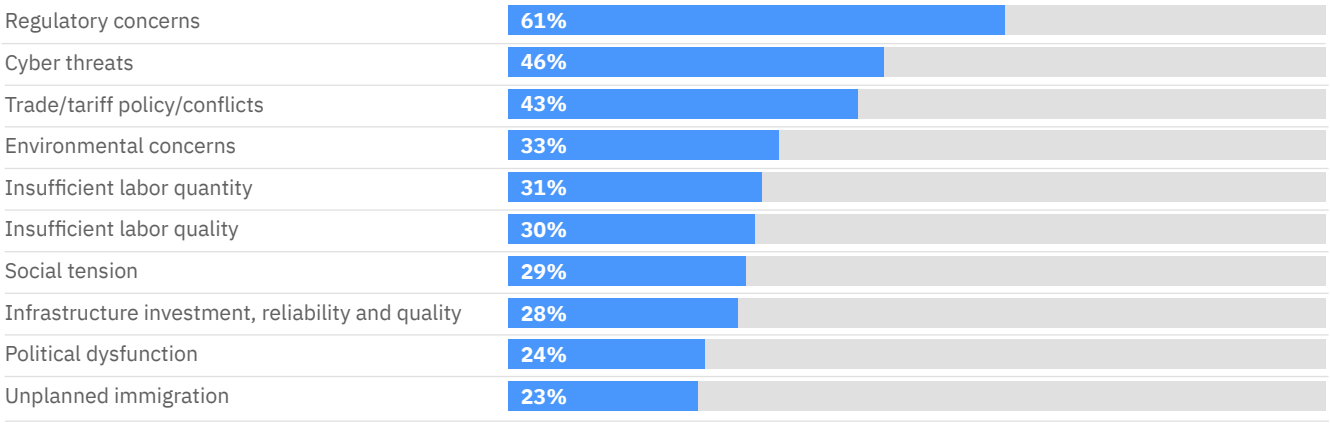

French executive perspectives on the nation's competitiveness
Utility and telecom/internet service reliability 95%
Skilled worker availability and quality 91%
Quality of transport infrastructure 89%
Access to markets and consumers 84%
Healthcare facilities 83%
Schools and universities 80%
Regulatory environment 72%
Access to suppliers and raw materials 71%
Crime rates 70%
Culture and recreation 66%
Suitable real estate and land sites 45%
Climate 43%
Healthcare costs 18%
Transportation and distribution costs 12%
Cost of consumer products/services 12%
Utility costs 11%
Real estate costs 9%
Access to capital 9%
Effective corporate tax rates 8%
Fully loaded labor costs 7%
Personal taxes 7%
Educational costs 4%
Housing costs 4%
Quality factors
Cost factors

France

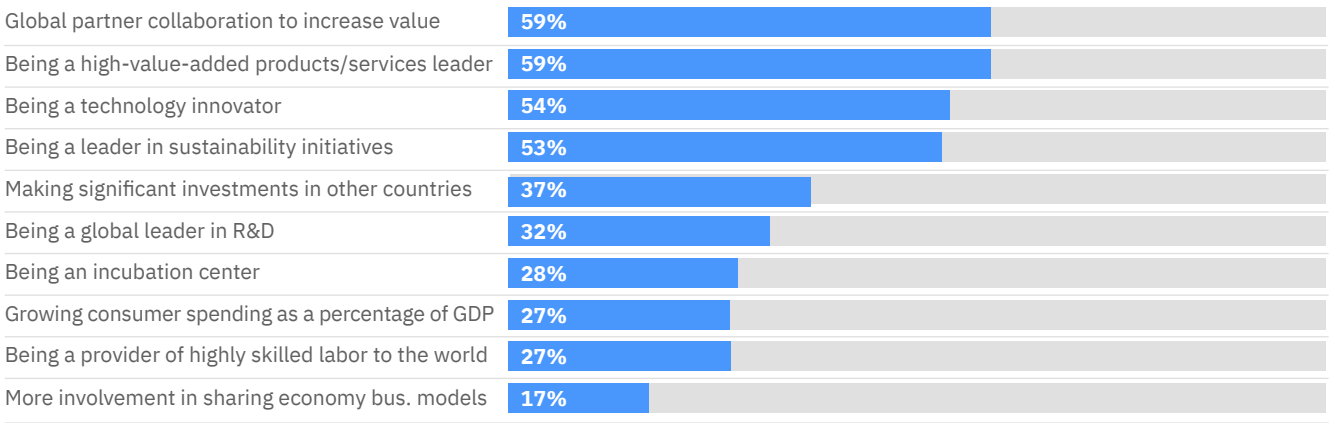
Top challenges executives in France face when conducting business in their home country



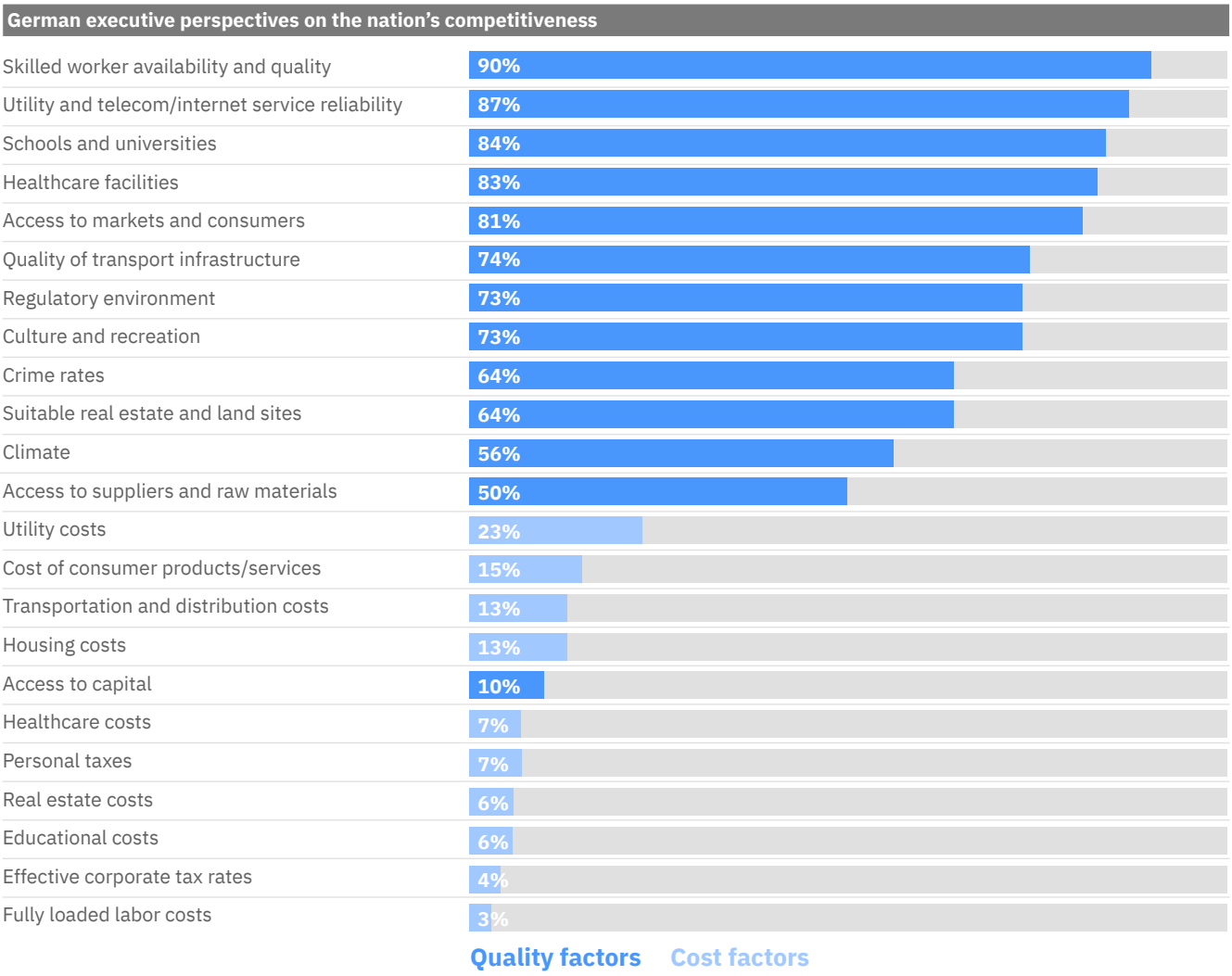
Top strategic risks executives in France say the nation will face in the next five years



French executive perspectives on the greatest opportunities for their nation's economy in the next five years

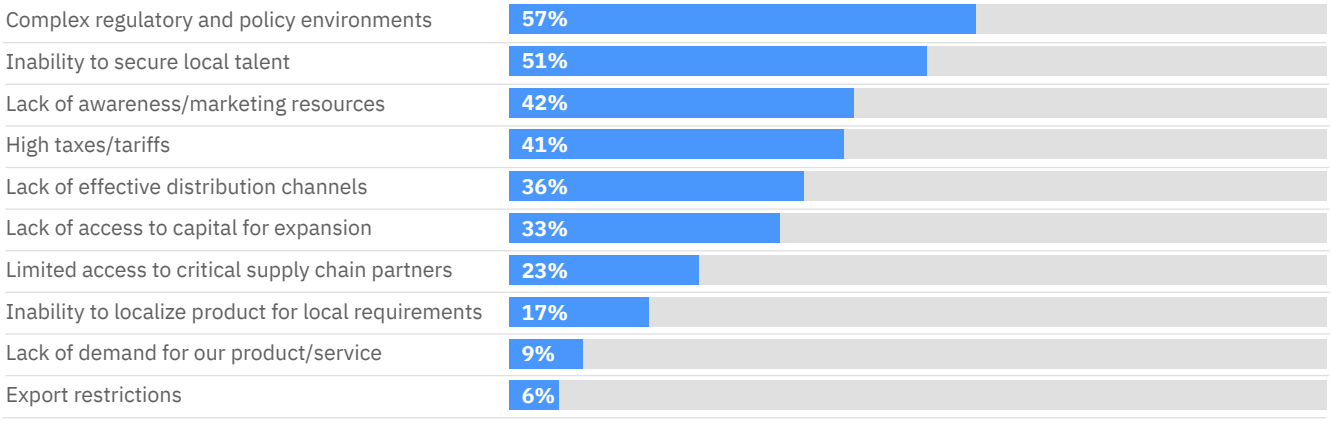


Germany

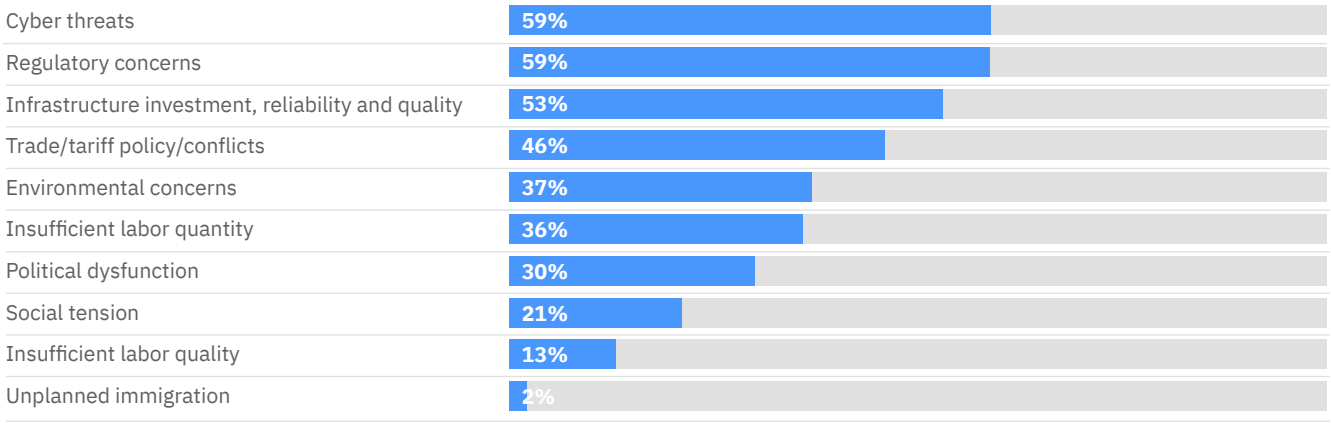

German executive perspectives on the nation's competitiveness
Skilled worker availability and quality 90%
Utility and telecom/internet service reliability 87%
Schools and universities 84%
Healthcare facilities 83%
Access to markets and consumers 81%
Quality of transport infrastructure 74%
Regulatory environment 73%
Culture and recreation 73%
Crime rates 64%
Suitable real estate and land sites 64%
Climate 56%
Access to suppliers and raw materials 50%
Utility costs 23%
Cost of consumer products/services 15%
Transportation and distribution costs 13%
Housing costs 13%
Access to capital 10%
Healthcare costs 7%
Personal taxes 7%
Real estate costs 6%
Educational costs 6%
Effective corporate tax rates 4%
Fully loaded labor costs 3%
Quality factors
Cost factors

Germany

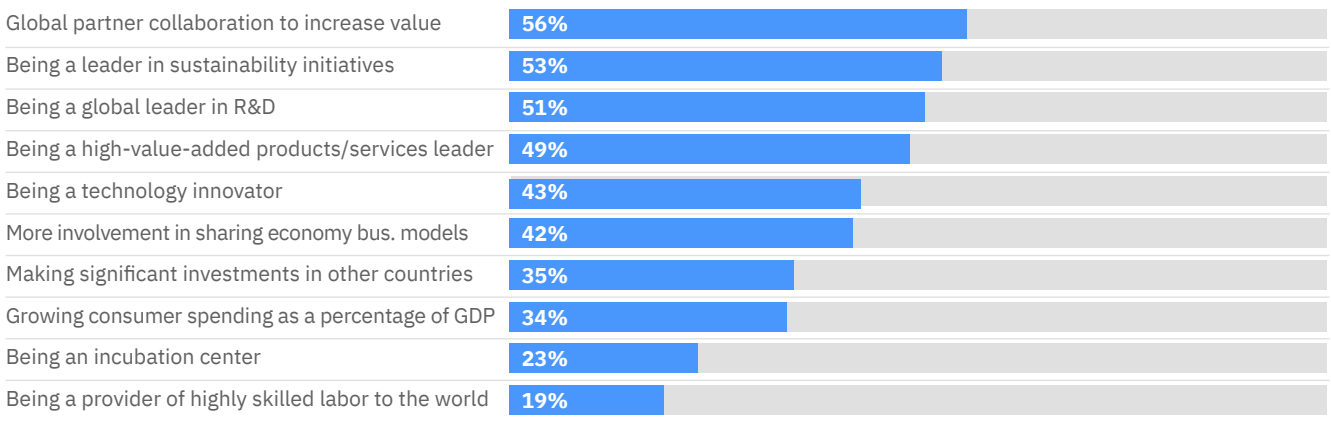
Top challenges executives in Germany face when conducting business in their home country



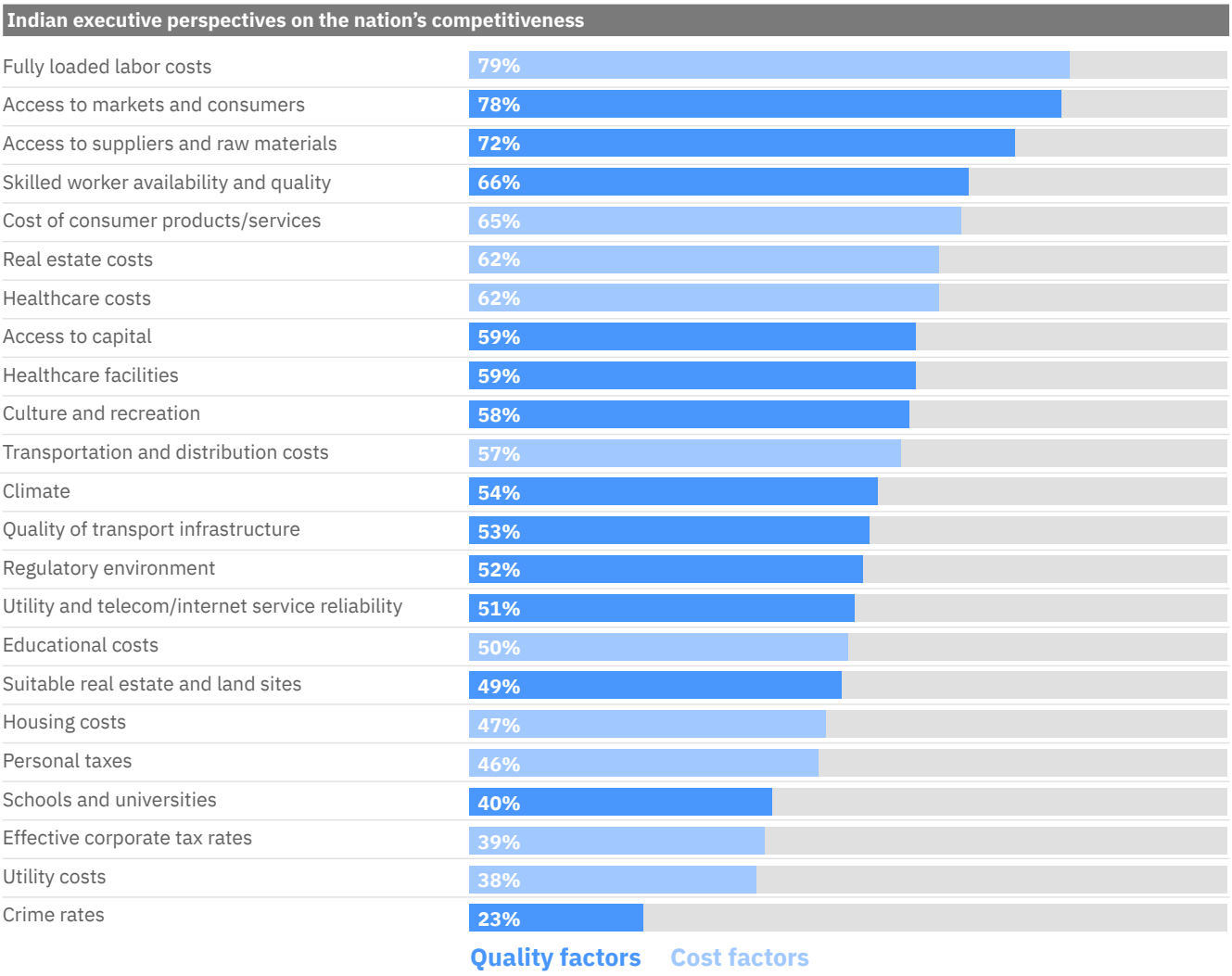
Top strategic risks executives in Germany say the nation will face in the next five years



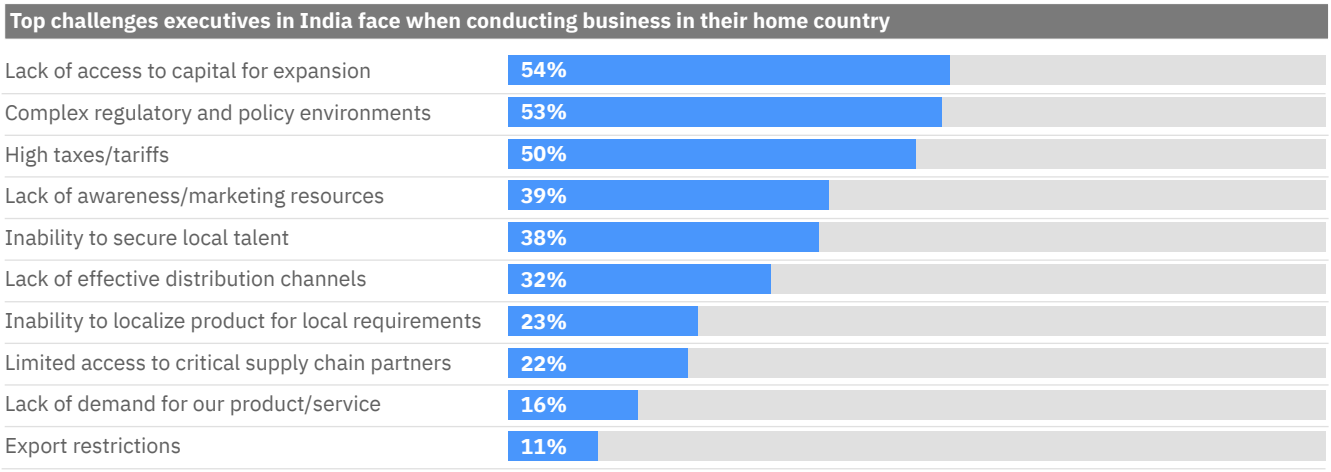
German executive perspectives on the greatest opportunities for their nation's economy in the next five years

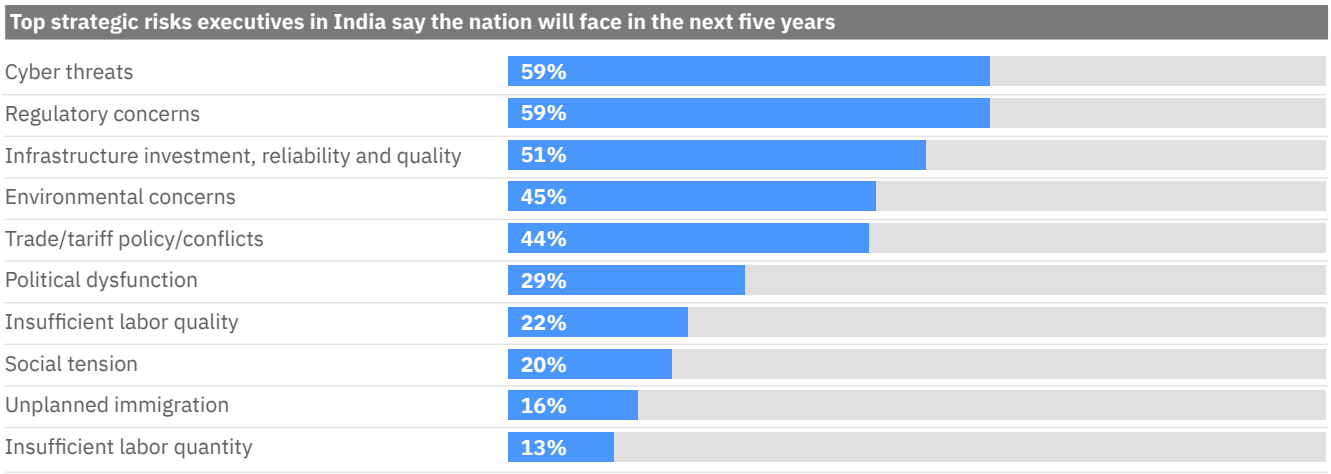


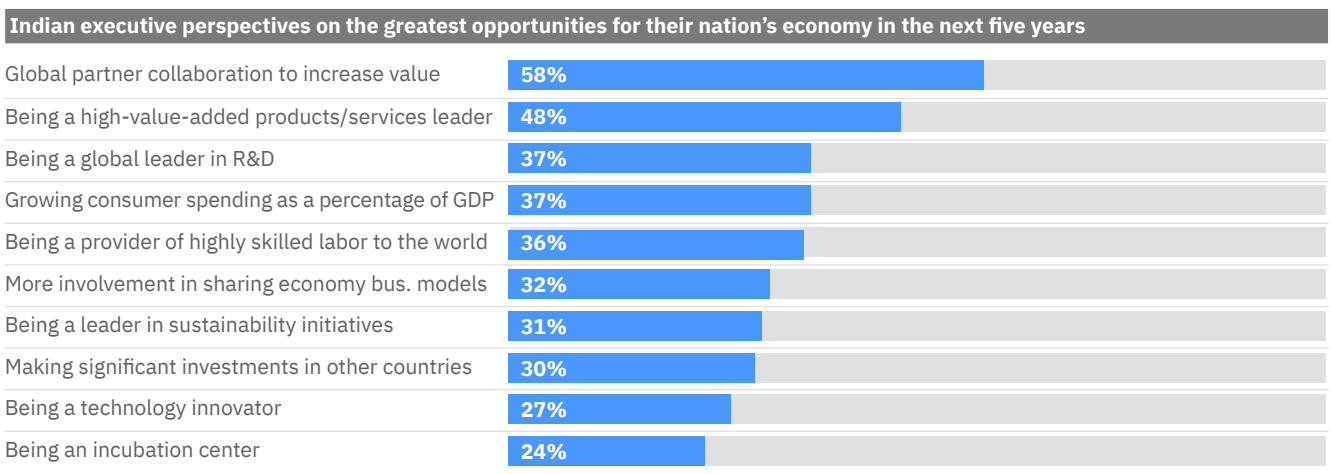
India


Indian executive perspectives on the nation's competitiveness
Fully loaded labor costs 79%
Access to markets and consumers 78%
Access to suppliers and raw materials 72%
Skilled worker availability and quality 66%
Cost of consumer products/services 65%
Real estate costs 62%
Healthcare costs 62%
Access to capital 59%
Healthcare facilities 59%
Culture and recreation 58%
Transportation and distribution costs 57%
Climate 54%
Quality of transport infrastructure 53%
Regulatory environment 52%
Utility and telecom/internet service reliability 51%
Educational costs 50%
Suitable real estate and land sites 49%
Housing costs 47%
Personal taxes 46%
Schools and universities 40%
Effective corporate tax rates 39%
Utility costs 38%
Crime rates 23%
Quality factors
Cost factors

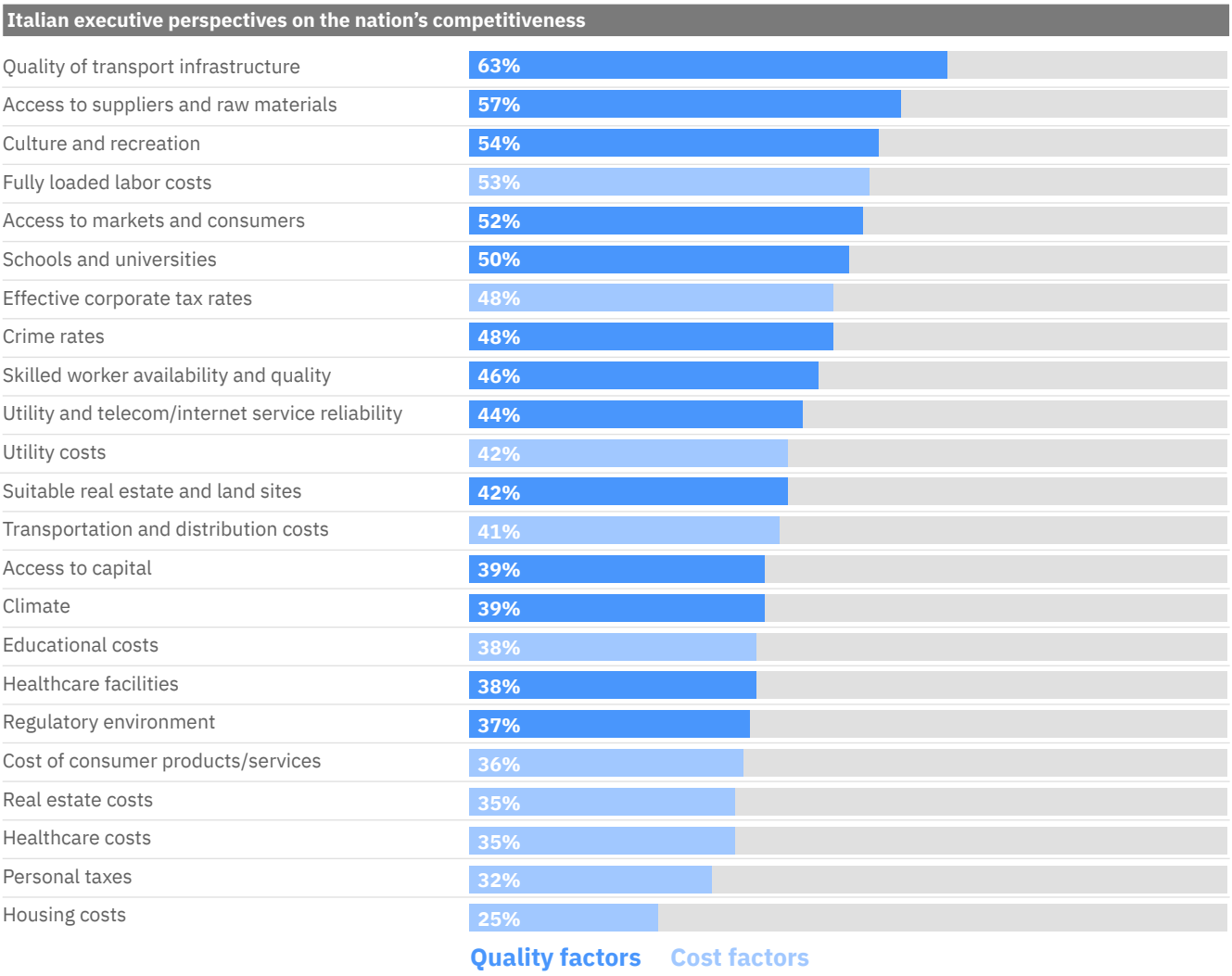
India


Top challenges executives in India face when conducting business in their home country
Lack of access to capital for expansion 54%
Complex regulatory and policy environments 53%
High taxes/tariffs 50%
Lack of awareness/marketing resources 39%
Inability to secure local talent 38%
Lack of effective distribution channels 32%
Inability to localize product for local requirements 23%
Limited access to critical supply chain partners 22%
Lack of demand for our product/service 16%
Export restrictions 11%


Top strategic risks executives in India say the nation will face in the next five years
Cyber threats 59%
Regulatory concerns 59%
Infrastructure investment, reliability and quality 51%
Environmental concerns 45%
Trade/tariff policy/conflicts 44%
Political dysfunction 29%
Insufficient labor quality 22%
Social tension 20%
Unplanned immigration 16%
Insufficient labor quantity 13%

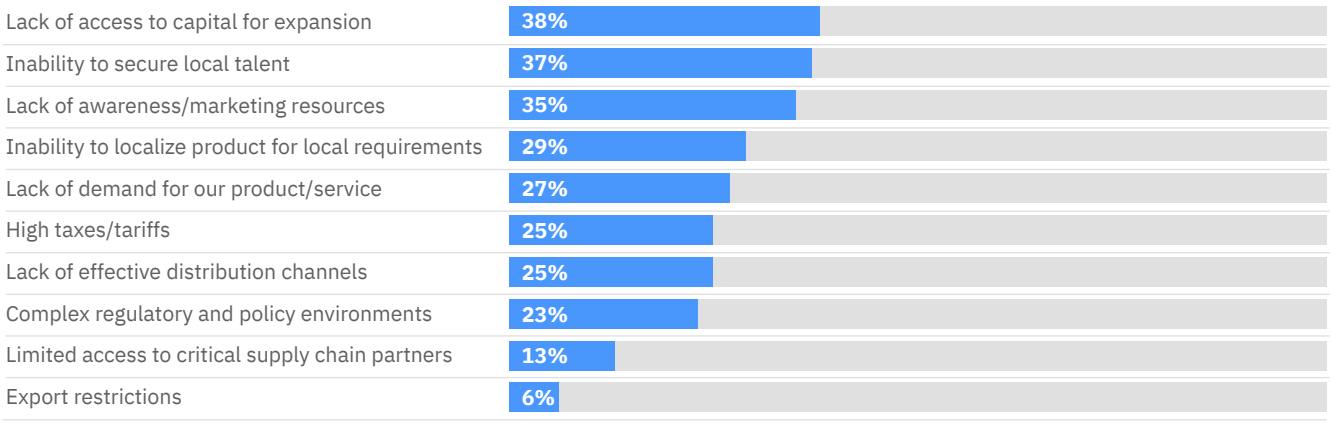

Indian executive perspectives on the greatest opportunities for their nation's economy in the next five years
Global partner collaboration to increase value 58%
Being a high-value-added products/services leader 48%
Being a global leader in R&D 37%
Growing consumer spending as a percentage of GDP 37%
Being a provider of highly skilled labor to the world 36%
More involvement in sharing economy bus. models 32%
Being a leader in sustainability initiatives 31%
Making significant investments in other countries 30%
Being a technology innovator 27%
Being an incubation center 24%

Italy

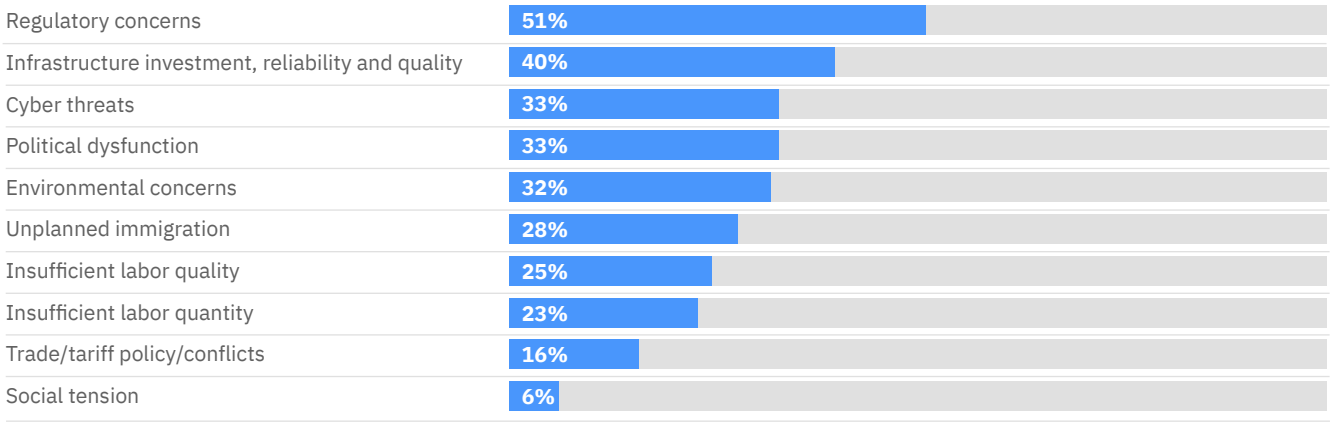

Italian executive perspectives on the nation's competitiveness
Quality of transport infrastructure 63%
Access to suppliers and raw materials 57%
Culture and recreation 54%
Fully loaded labor costs 53%
Access to markets and consumers 52%
Schools and universities 50%
Effective corporate tax rates 48%
Crime rates 48%
Skilled worker availability and quality 46%
Utility and telecom/internet service reliability 44%
Utility costs 42%
Suitable real estate and land sites 42%
Transportation and distribution costs 41%
Access to capital 39%
Climate 39%
Educational costs 38%
Healthcare facilities 38%
Regulatory environment 37%
Cost of consumer products/services 36%
Real estate costs 35%
Healthcare costs 35%
Personal taxes 32%
Housing costs 25%
Quality factors
Cost factors

Italy

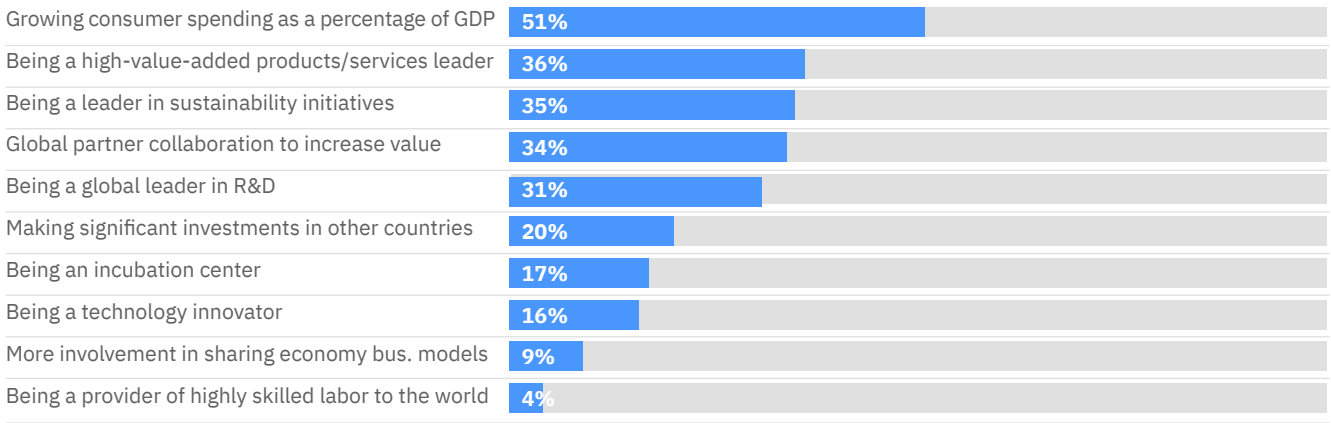
Top challenges executives in Italy face when conducting business in their home country



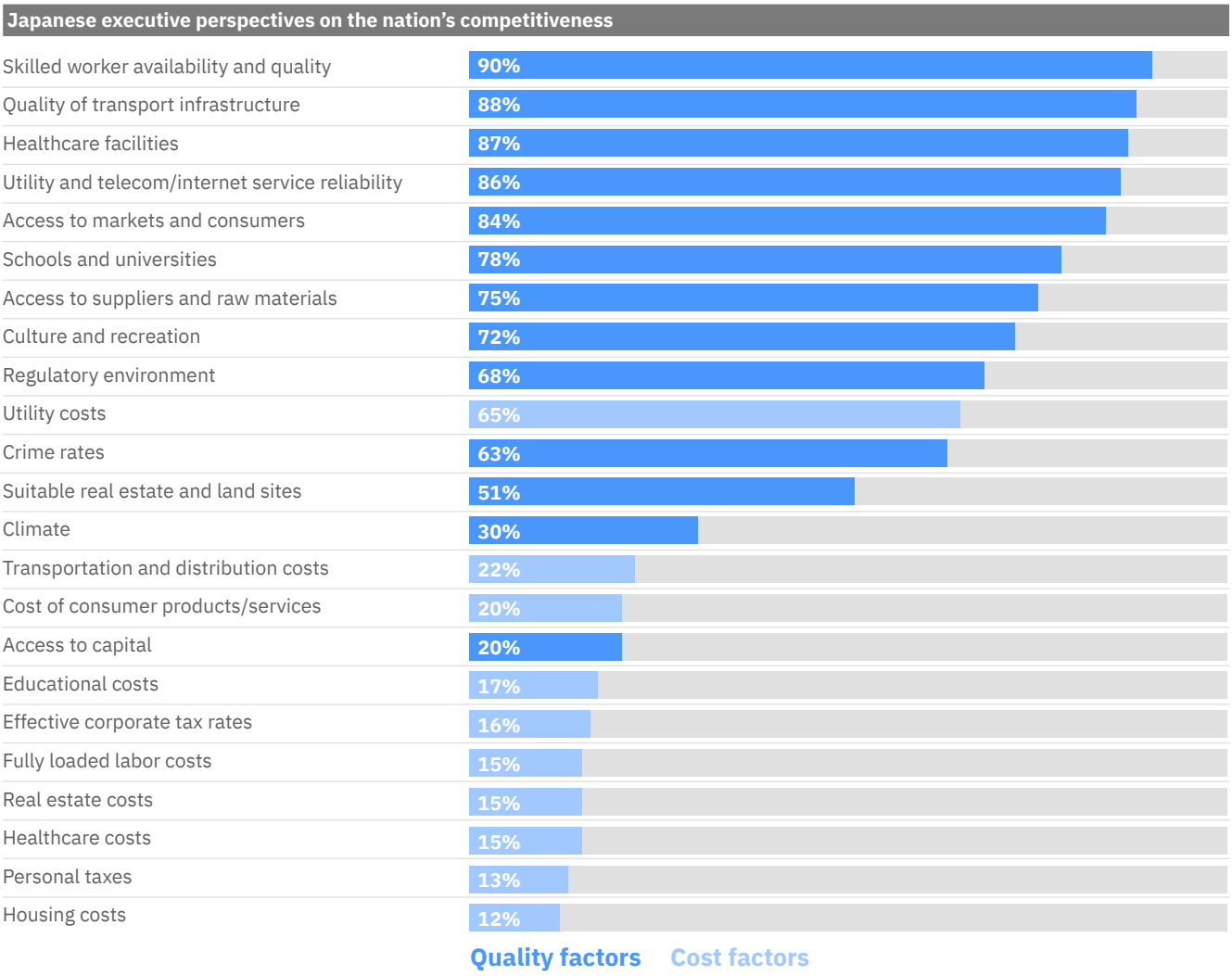
Top strategic risks executives in Italy say the nation will face in the next five years



Italian executive perspectives on the greatest opportunities for their nation's economy in the next five years

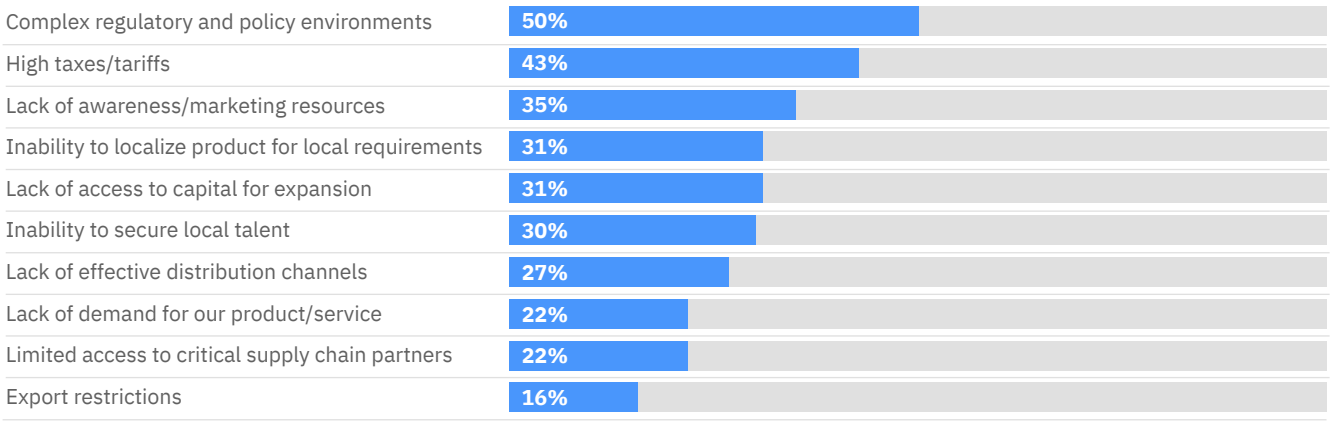


Japan

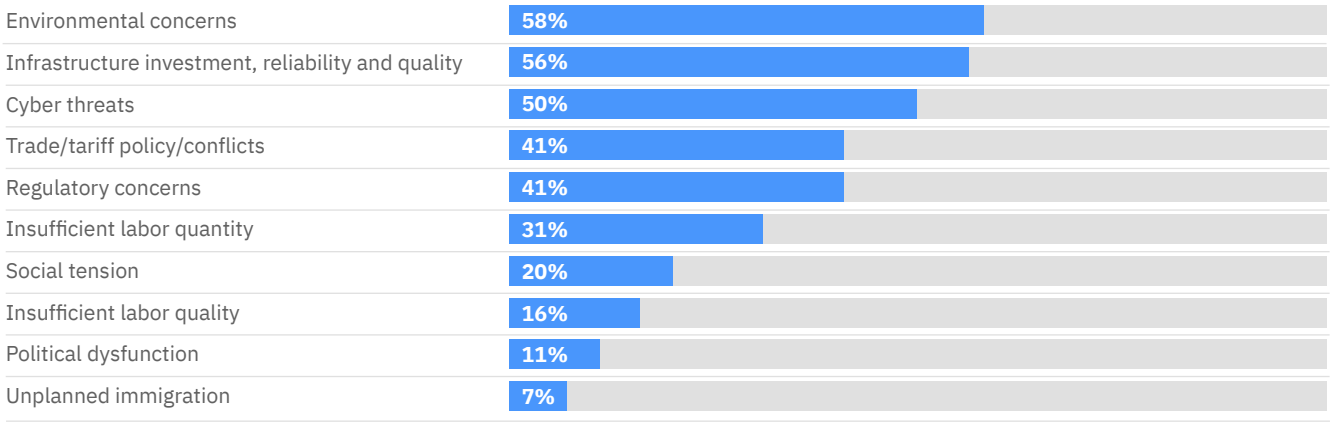

Japanese executive perspectives on the nation's competitiveness
Skilled worker availability and quality 90%
Quality of transport infrastructure 88%
Healthcare facilities 87%
Utility and telecom/internet service reliability 86%
Access to markets and consumers 84%
Schools and universities 78%
Access to suppliers and raw materials 75%
Culture and recreation 72%
Regulatory environment 68%
Utility costs 65%
Crime rates 63%
Suitable real estate and land sites 51%
Climate 30%
Transportation and distribution costs 22%
Cost of consumer products/services 20%
Access to capital 20%
Educational costs 17%
Effective corporate tax rates 16%
Fully loaded labor costs 15%
Real estate costs 15%
Healthcare costs 15%
Personal taxes 13%
Housing costs 12%
Quality factors
Cost factors

Japan

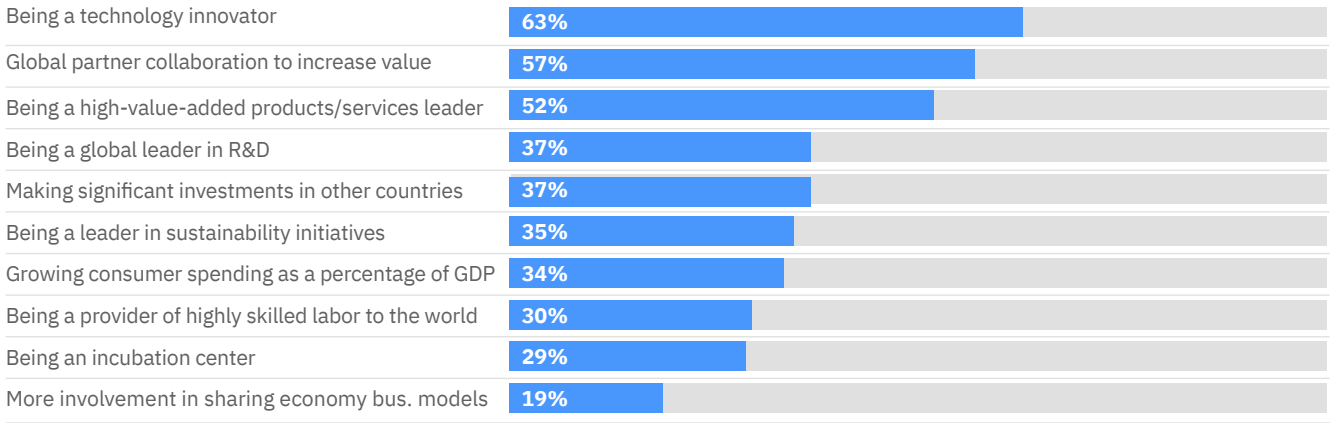
Top challenges executives in Japan face when conducting business in their home country



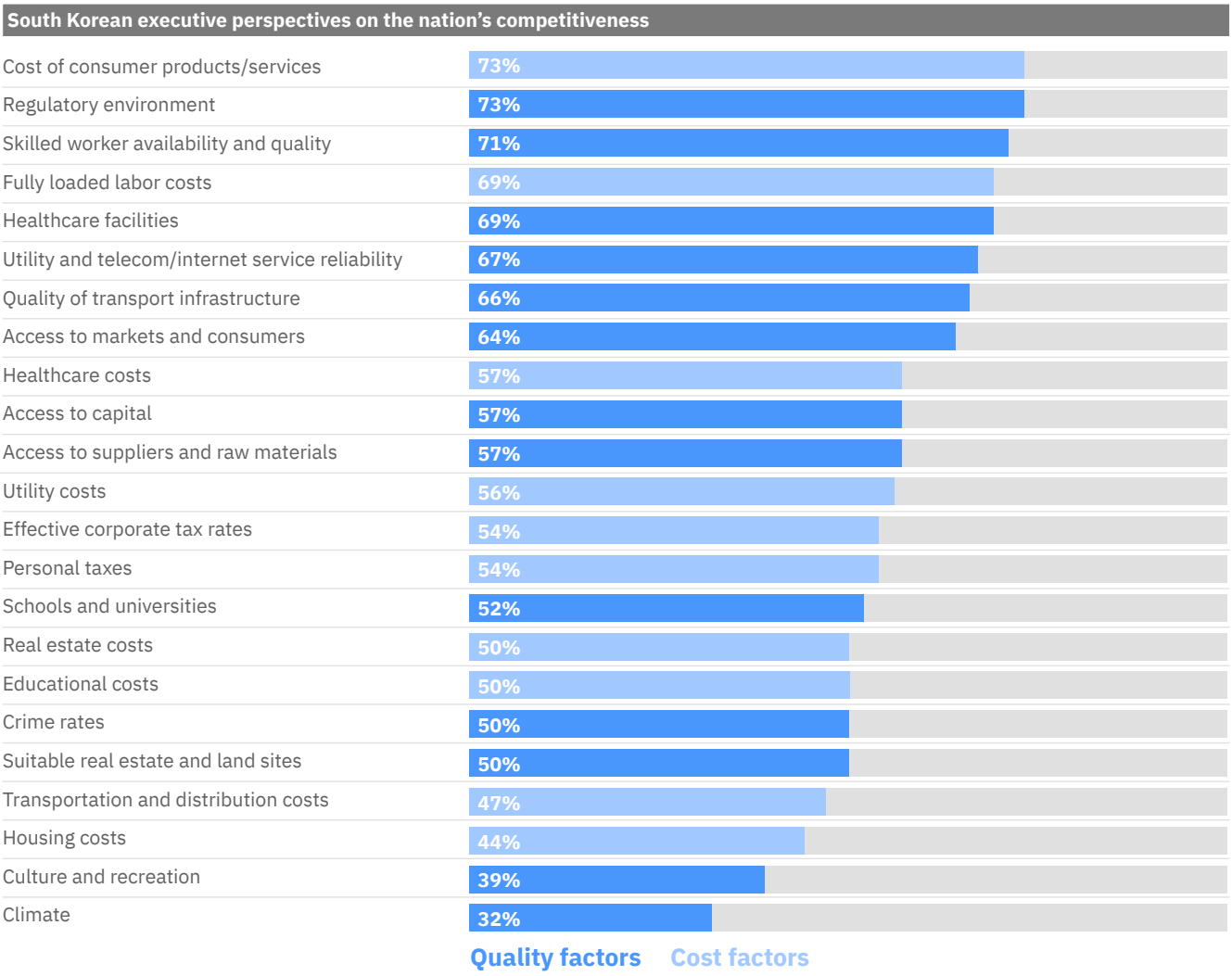
Top strategic risks executives in Japan say the nation will face in the next five years



Japanese executive perspectives on the greatest opportunities for their nation's economy in the next five years

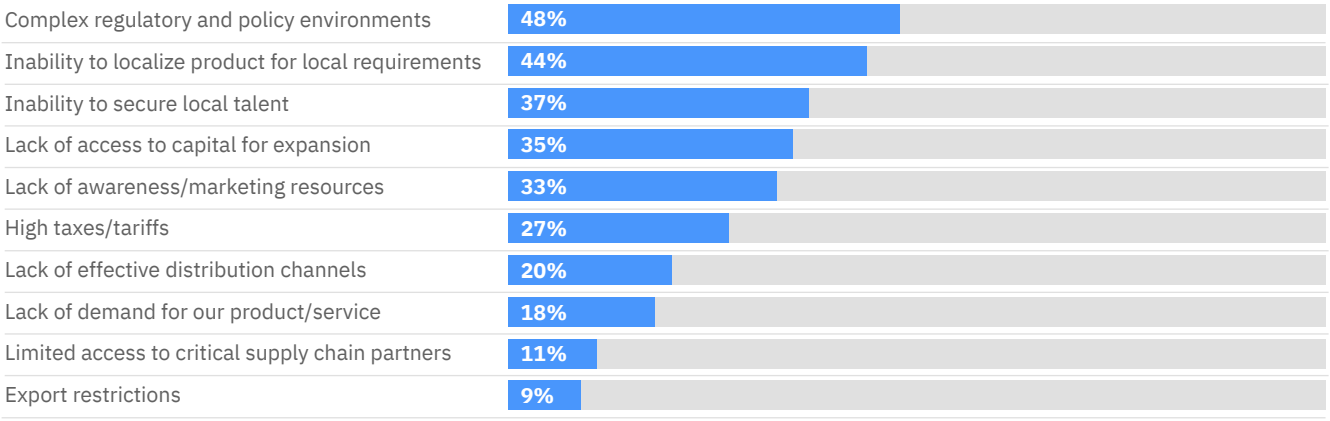


South Korea

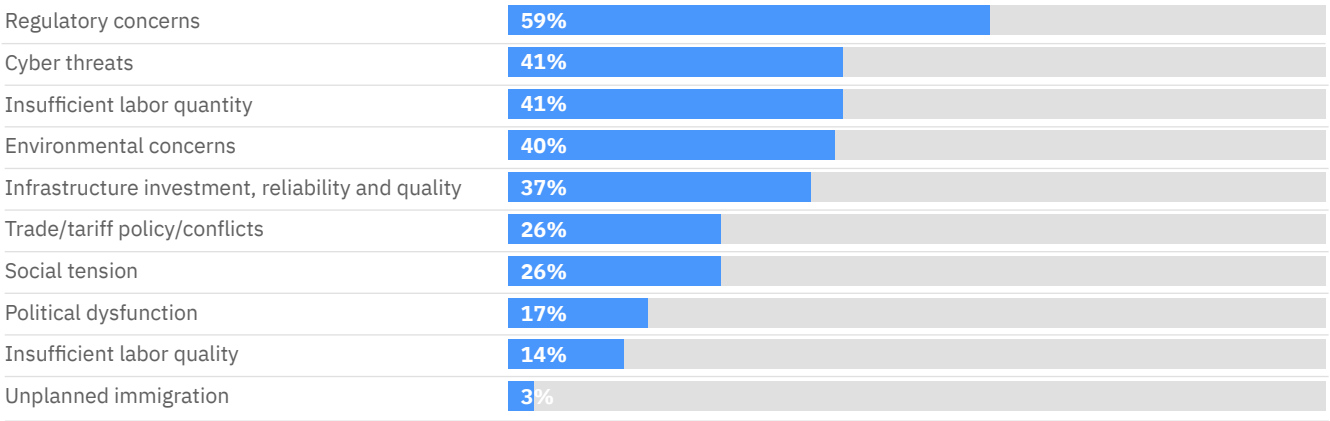

South Korean executive perspectives on the nation's competitiveness
Cost of consumer products/services 73%
Regulatory environment 73%
Skilled worker availability and quality 71%
Fully loaded labor costs 69%
Healthcare facilities 69%
Utility and telecom/internet service reliability 67%
Quality of transport infrastructure 66%
Access to markets and consumers 64%
Healthcare costs 57%
Access to capital 57%
Access to suppliers and raw materials 57%
Utility costs 56%
Effective corporate tax rates 54%
Personal taxes 54%
Schools and universities 52%
Real estate costs 50%
Educational costs 50%
Crime rates 50%
Suitable real estate and land sites 50%
Transportation and distribution costs 47%
Housing costs 44%
Culture and recreation 39%
Climate 32%
Quality factors
Cost factors

South Korea

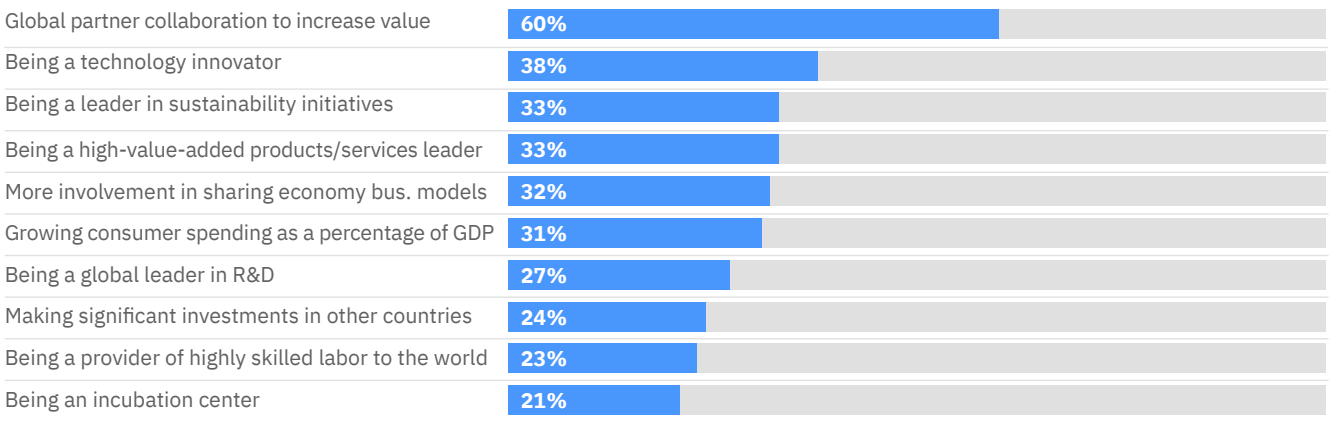
Top challenges executives in South Korea face when conducting business in their home country



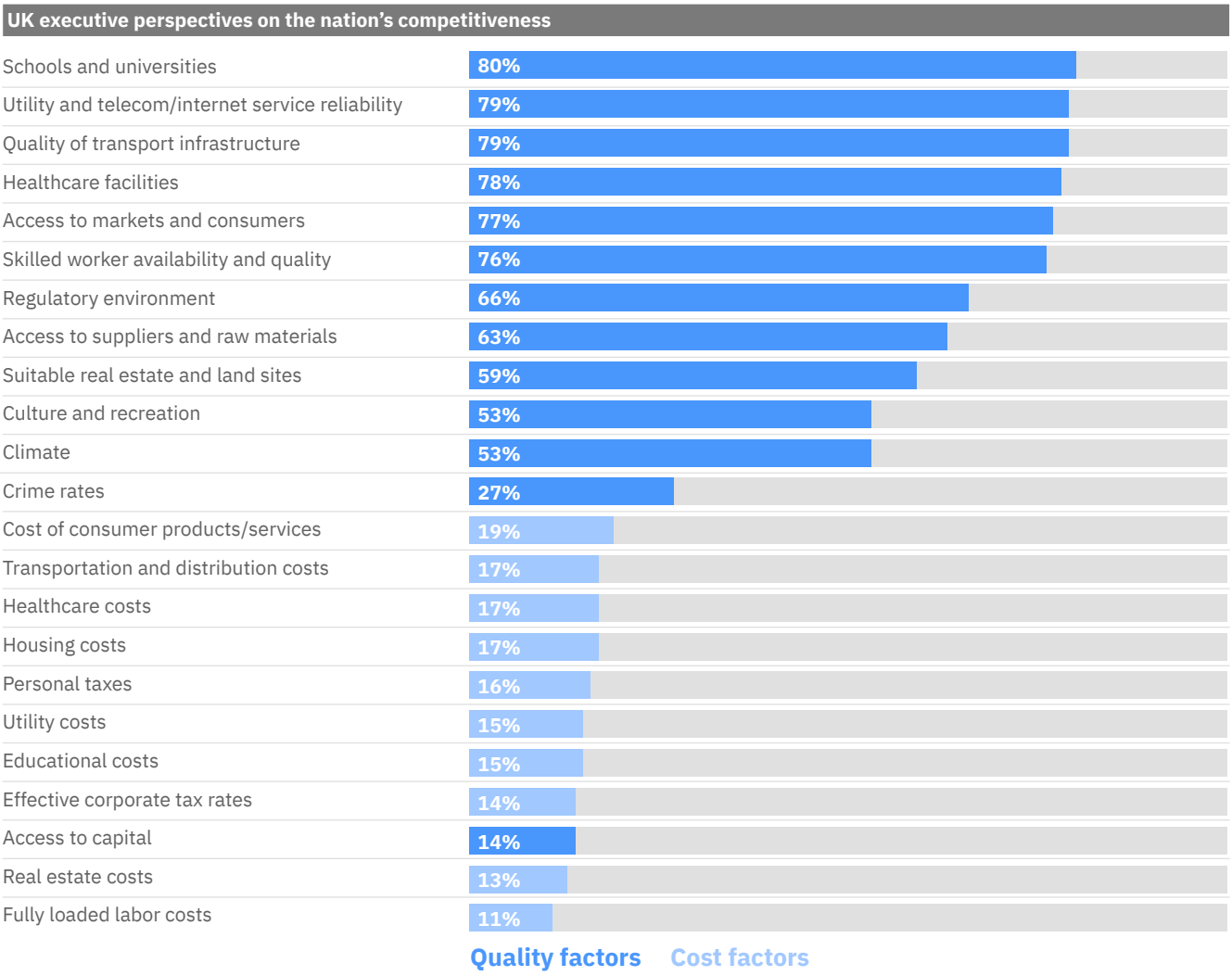
Top strategic risks executives in South Korea say the nation will face in the next five years



South Korean executive perspectives on the greatest opportunities for their nation's economy in the next five years

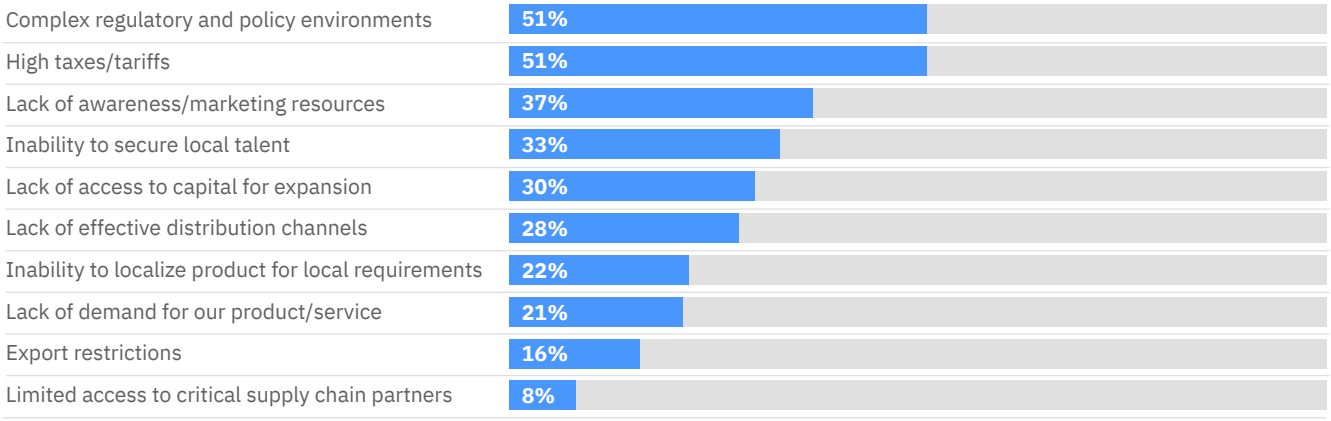


United Kingdom

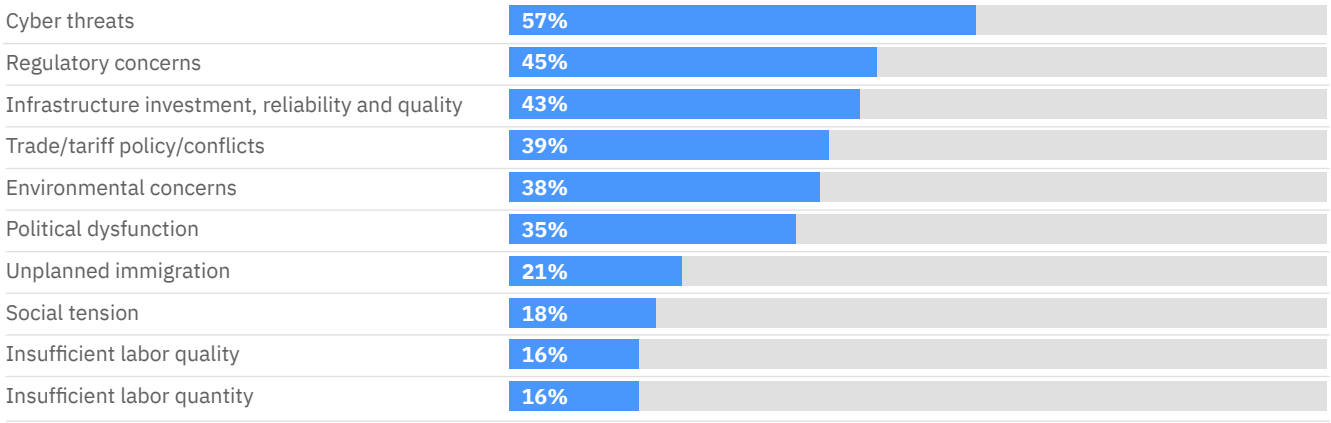


United Kingdom

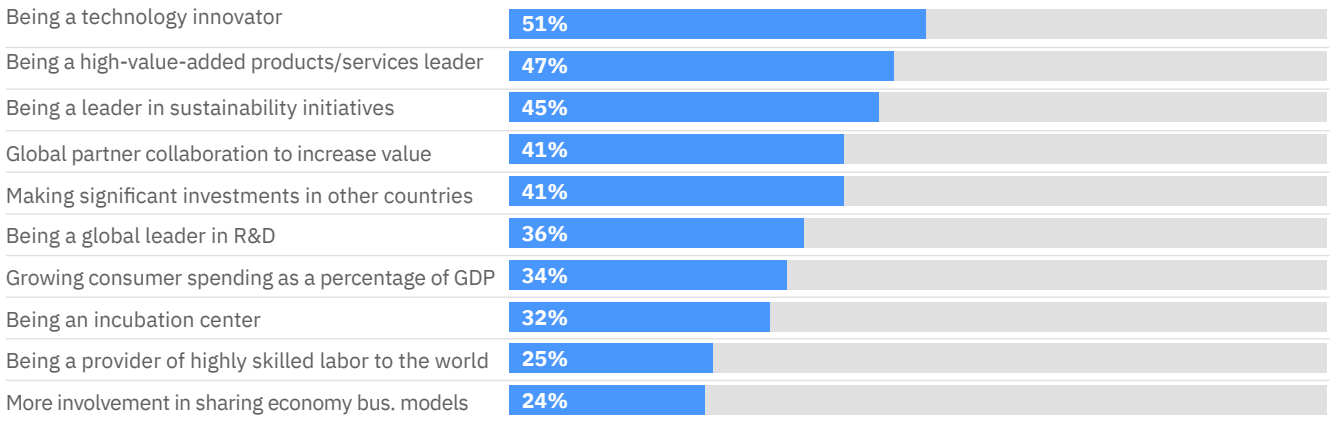
Top challenges executives in the United Kingdom face when conducting business in their home country



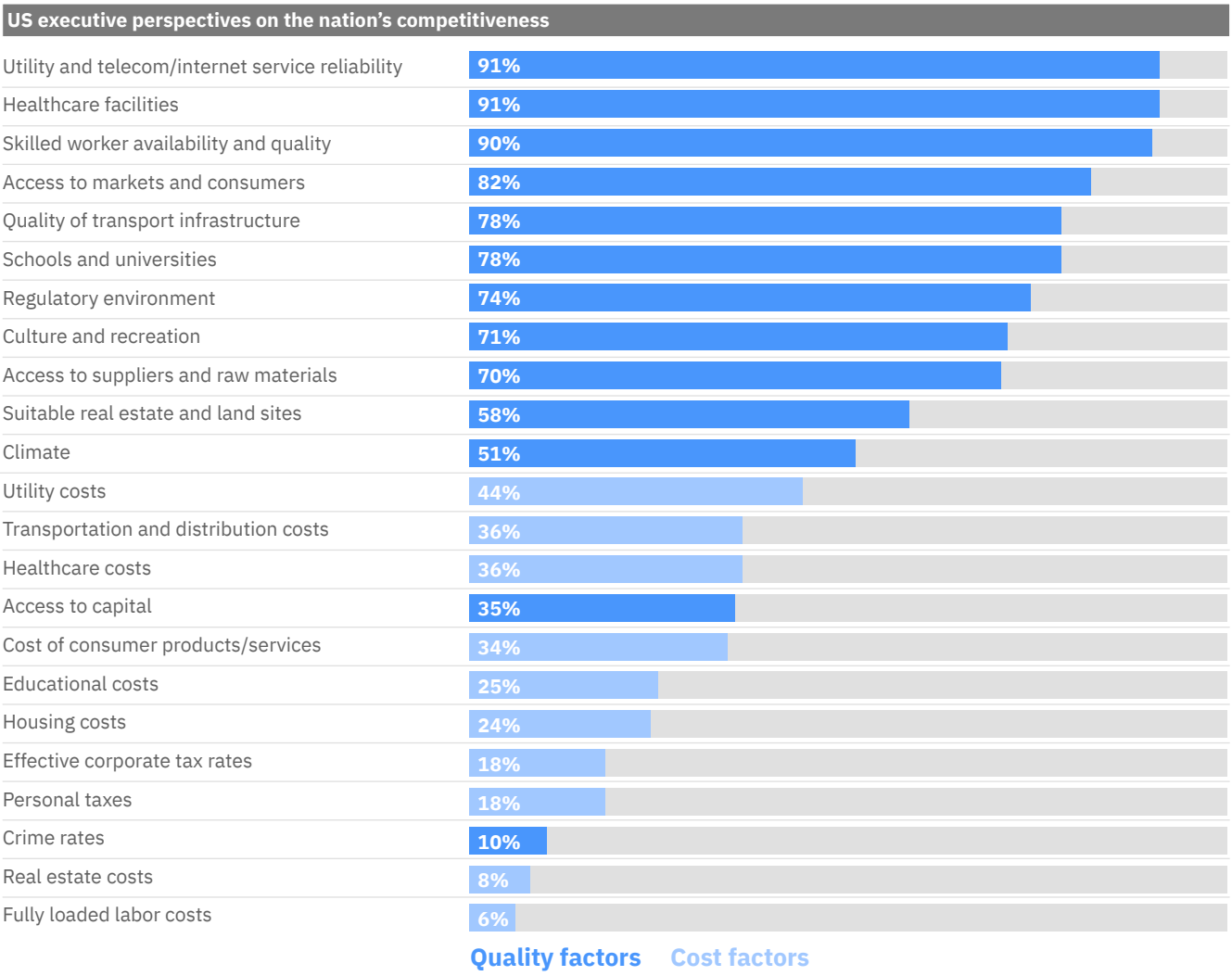
Top strategic risks executives in the United Kingdom say the nation will face in the next five years



UK executive perspectives on the greatest opportunities for their nation's economy in the next five years

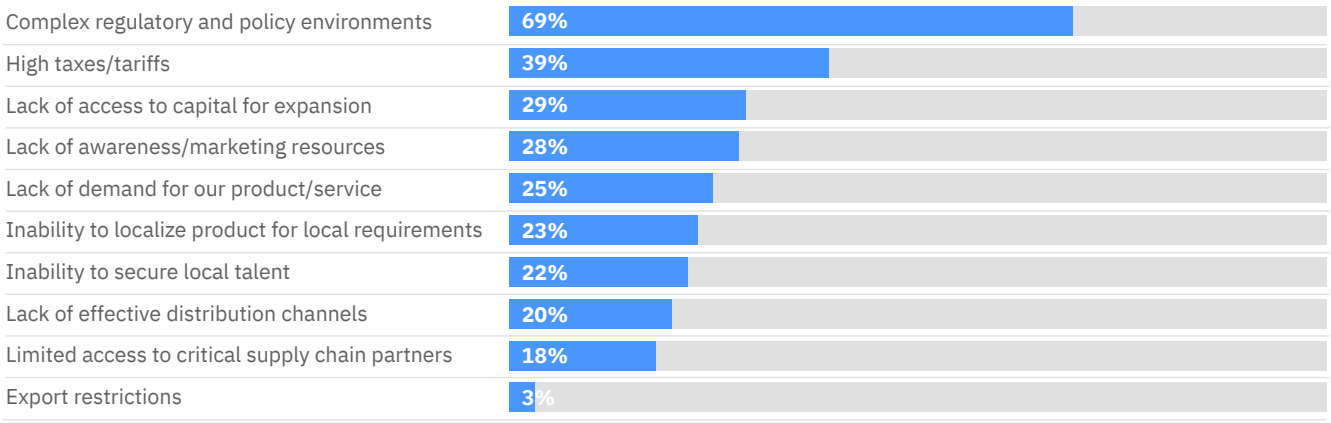


United States

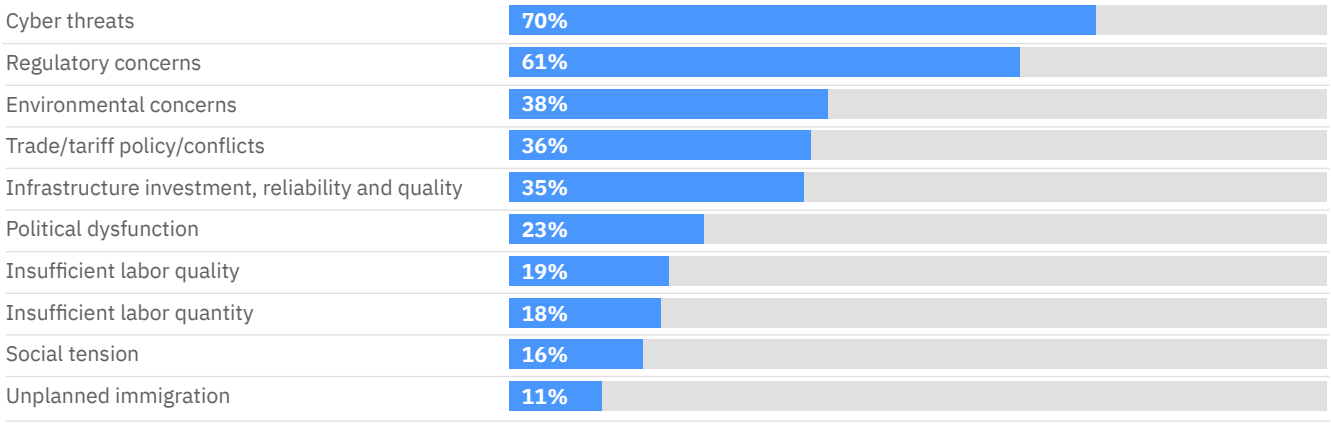


United States

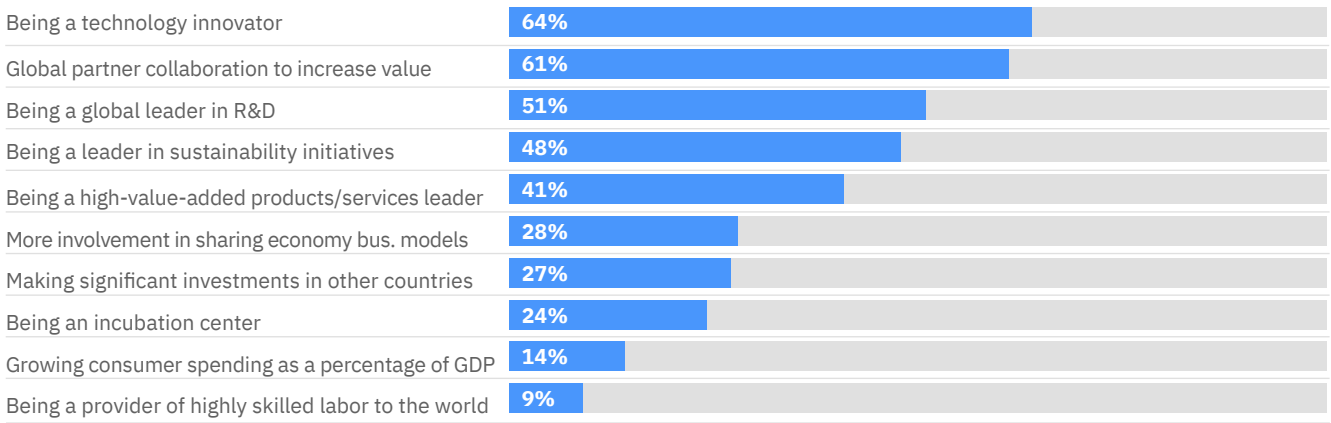
Top challenges executives in the United States face when conducting business in their home country



Top strategic risks executives in the United States say the nation will face in the next five years



US executive perspectives on the greatest opportunities for their nation's economy in the next five years



Notes and sources

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