

## Global Location Trends

2020 Special Edition: Location strategy in a post-COVID-19 world

IBM **Institute for Business Value** 





### How IBM can help

IBM-Plant Location International (PLI) is a global service of IBM Services, specializing in corporate location and economic development strategies. With a global center of excellence in Brussels, Belgium, IBM-PLI provides location strategy and site selection services to corporate clients, analyzing international business locations to help expanding or consolidating companies select the optimal location (country/city). IBM-PLI also advises economic development organizations on improving their areas' competitiveness, strategic marketing, developing value propositions, and marketing tools.

IBM-PLI maintains a proprietary Global Location Trends database, which has tracked cross-border "greenfield" and expansion investments around the world since 2002. Every year, the data are used to produce the Global Location Trends annual report, a detailed Global Location Trends Facts & Figures report, as well as multiple country reports. The analysis of foreign investment presented in these reports focuses on job creation. From an economic development perspective, job creation is the best indicator of the local economic impact of the investment. For more information, visit ibm.com/services/pli.

By Jacob Dencik, Koen Gijpers, Roel Spee, Patsy Van Hove, and David Zaharchuk

### Key takeaways

### **Economic risk of COVID-19**

Despite the fact that health risks are now viewed by a majority of executives as a long-term economic risk, COVID-19 had a relatively limited impact on existing 2020 investment plans.

### **Consolidation of operations**

Organizations are looking to consolidate operations in their home countries as part of more fundamental changes in their operating models.

### **Dramatic shift in location criteria**

Executives report a dramatic shift in strategic priorities and location criteria as companies look to location strategy to actively build agile and resilient business models.

### **Digital transformation accelerating**

Organizations are accelerating digital transformation as they review their operational footprints and location strategies.

### Chapter 1

### A different approach for a different world

For decades, technology and global trade agreements have enabled organizations to locate components of their operations where they can find the best mix of quality resources (for example, talent, suppliers, access to capital) while optimizing total operating cost (for example, labor, real estate, transportation, taxes, and utilities). Location strategy was like chess: decisions were based on cost and quality factors with organizations selecting locations with the greatest value proposition for a specific business function (for example, manufacturing, corporate headquarters). Freedom of movement of people, goods, and services was relatively unrestricted and location strategies played a critical role in corporate strategy. And we took it for granted.

But in March 2020, COVID-19 showed what a global Black Swan event can do to an interconnected, global economy. Seemingly overnight, everything changed: ports closed, planes were grounded, businesses shuttered, and workers were sent home. The movement of people across borders came to a standstill in much of the world as most countries imposed partial or complete border closures¹ in response to the coronavirus outbreak. The global economy stalled.

For more than a decade our Global Location Trends report has looked back at investment activity from the prior year to identify trends and anticipate the future. The pandemic has changed our world, our global economy, and how organizations will likely approach location strategy moving forward. As such, our report has also changed.



of companies anticipate consolidating operations in their home country in 2020



of surveyed companies have postponed or canceled projects as a result of COVID-19



Health risks were identified as the top risk to national economies in the next

5 years

To better understand the impact of COVID-19 on corporate investments and business leader views on 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 500 C-suite executives. Surveyed leaders represent multiple industries and countries and are either the direct decision maker or play an influential role for location strategy within their organization.

This year's report focuses on how the pandemic has impacted existing investment plans, where investors see opportunity and risks in the future, and what factors are expected to drive corporate investment decisions in the "new normal." We also explore the role digital technologies can play in enabling resilient business and operating models to mitigate the risk of future events like the COVID-19 pandemic.

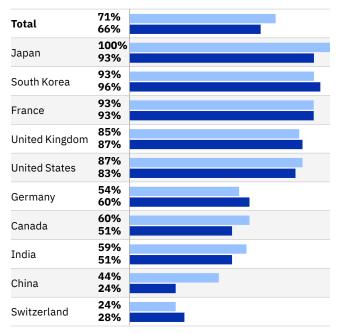
Most organizations indicate the pandemic has not materially changed their planned investment projects.

### Chapter 2

### Taking stock—The COVID-19 impact

Going into 2020, a majority of executives in countries surveyed indicated they had plans for investment projects in either their own home country or a foreign country (see Figure 1). On average, companies surveyed indicate they expect to create more than 350 new jobs in their home country and 225 jobs abroad from new greenfield or expansion investment in 2020.

**Figure 1**% organizations with 2020 investment projects planned in Home Country and Foreign Countries (by country of respondent)



Home country Foreign country

Despite massive disruption to the global economy, most organizations indicate there was little immediate impact on their investment plans as a result of the COVID-19 pandemic. A total of 95 investment projects were reported to be canceled or postponed in our survey of 503 companies.

The postponement of investment projects that has occurred has mostly affected larger facilities such as manufacturing and corporate headquarters (see "Insight: Industry and functional variation in planned investment"). Beyond 2020, companies surveyed expect to only make very limited changes to planned investment. These findings suggest a more optimistic view of the future by corporate investors, despite continued uncertainty.

Indeed, looking beyond 2020, companies are expected to create an average of more than 500 jobs in their home country through greenfield and expansion investment in the next 1 to 3 years and almost 800 jobs in the next 3 to 5 years. Meanwhile, they anticipate creating almost 400 jobs abroad in the next 1 to 3 years and almost 600 jobs in the next 3 to 5 years.

The most important strategic drivers for these future investments at home and abroad are resilience and business continuity. Access to markets and proximity to customers, either at home or abroad, are also important considerations.

## Insight: Industry and functional variation in planned investment

The planned investment activity in 2020 measured by number of jobs is particularly pronounced in the electronics, chemicals, and automotive industries at 500-600 jobs per company in home country and 300-400 jobs abroad in 2020. Looking 3 to 5 years into the future, the average company in each of these industries anticipate having created approximately 1,000 new jobs both at home and abroad from new greenfield and expansion investment.

In contrast, the travel, consumer products, and industrial products industries are expected to see substantially lower investment in 2020 at approximately 150-200 jobs per company in their home country and 100-150 jobs per company abroad. Over the next 3 to 5 years, investment in the travel industry will likely remain substantially lower than in other industries, with approximately 300 jobs created abroad and 400 at home per company. This highlights the significant challenges faced by the travel industry as a result of COVID-19 and suggests that the repercussions are likely to last for a significant period.

Functionally, companies are focusing their foreign investment activity on distribution, corporate headquarters and administrative functions, research and development (R&D) and shared service centers, and support functions, with more than 30% of respondents indicating that they have plans to make investments in these functions. Distribution investment plans are high across most goods industries, while the services industries, such as banking and financial markets and travel, focus on shared service centers, corporate headquarters, and administrative functions.

R&D investment plans are particularly high in the life sciences industry, with approximately 80% of respondents in that industry having plans to make international investments in this function. Manufacturing investment plans are more limited overall, with 16% of respondents indicating they have plans for international manufacturing investment, but prominent in select sectors such as electronics, industrial products, automotive, and life sciences.

#### Covid-19 impact on 2020 domestic investment

Our research indicates the greatest immediate disruption from the COVID-19 pandemic was to domestic investment projects within organizations' home countries. Approximately 70% of all leaders surveyed indicated they had new investment projects planned for 2020 in their home country. Of those with stated plans, 1 in 4 report canceling or postponing projects (see Figure 2).

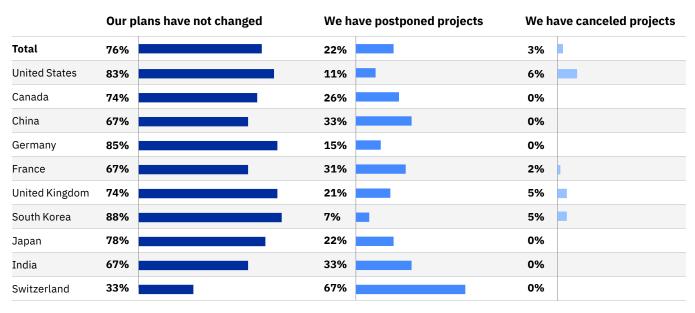
Just as the pandemic disproportionately wreaked havoc on the operations of organizations in different industries, so too has its impact on investment decisions varied significantly between industries. Nearly half of electronics industry respondents indicated their 2020 projects were canceled or postponed (see Figure 3).

And just as the pandemic brought global travel networks to a near standstill for months, travel-related investment projects also felt the pain. Nearly half of travel industry leaders reported that their 2020 domestic investment plans stalled or were canceled entirely, illustrating the significant challenges the industry is facing as a result of COVID-19 and associated restrictions to travel.

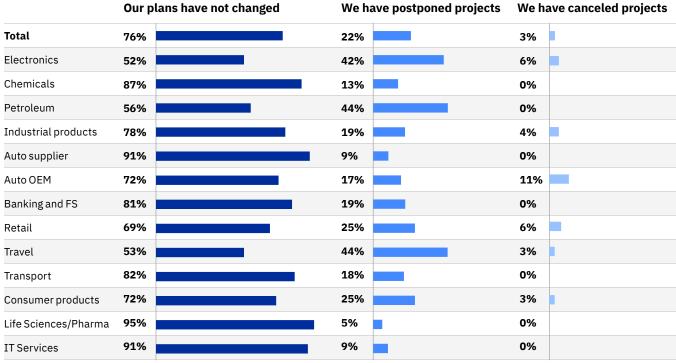
The least reported disruption to 2020 investment projects were in the life sciences/pharmaceuticals, automotive, and the information technology (IT) services industries. The limited impact on investment decisions in the automotive industry is particularly noteworthy, since this industry was severely affected by the COVID-19 crisis with considerable declines in sales. This may, in part, be explained by investment projects being linked to a more structural and strategic transformation of the automotive industry and therefore less impacted by the disruptions in 2020.

Cancellations and postponements had the greatest impact on jobs in manufacturing.

**Figure 2**COVID-19 impact on planned 2020 investment project in Home Country (by country of respondent)



**Figure 3**COVID-19 impact on planned 2020 investment project in Home Country (by industry)



## Only 3% of foreign country projects were canceled in 2020.

#### **COVID-19** impact on 2020 foreign investment

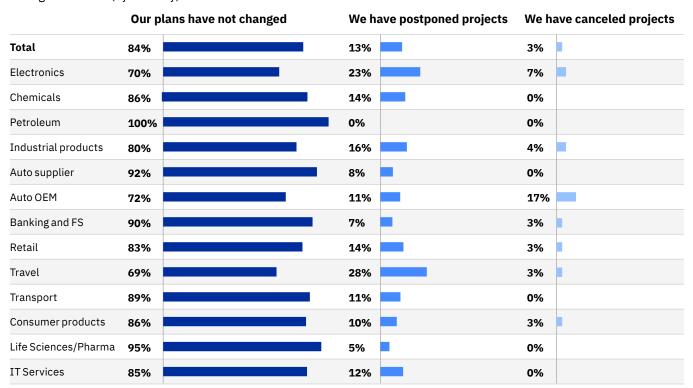
While not nearly as severe, 2020 foreign investment plans were also disrupted for some organizations. Nearly two-thirds (66%) of all surveyed leaders indicated they had planned investment projects in foreign countries in 2020. Of those, only 3% indicated they canceled projects while 13% indicated they postponed projects (see Figure 4).

The impact across industries on foreign investment project cancellations and postponements was not as dramatic as home country project abandonments. While travel and electronics companies reported the largest proportion of canceled or postponed international projects, there were still far fewer reported than domestic projects (see Figure 5).

**Figure 4**COVID-19 impact on planned 2020 investment project in Foreign Countries (by time horizon)

	Our plans have n	ot changed	We ha	ve postponed projects	We have canceled projects		
In 2020	84%		13%		3%		
Next 2 to 3 years	94%		4%		2%		
Next 3 to 5 years	98%		1%	I	2%		

**Figure 5**COVID-19 impact on planned 2020 investment project in Foreign Countries (by industry)



The automotive original equipment manufacturer (OEM) industry also had a significant cancellation or postponement of foreign investment plans in 2020 as a result of the COVID-19 disruption. Interestingly, the cancellation rate—as opposed to postponement—is highest in the automotive OEM industry.

Meanwhile, leaders in the petroleum industry report a much more favorable situation with foreign-based projects than domestic. Nearly half of the domestic 2020 petroleum industry projects were reported to be postponed or canceled while no foreign projects were reportedly impacted.

Project cancellations and postponements most impacted manufacturing, corporate administration/headquarters, distribution, logistics, and warehousing projects (see Figure 6). Only a few interruptions to data center and research and development (R&D) projects were reported.

Overall, reported postponed foreign projects outnumbered canceled foreign projects 4 to 1. The average job impact was greater for postponed projects as well which provides some degree of optimism for the future of those projects and associated job creation. Projects originating from India and the United States (US) had the highest number of reported cancellations and postponements.

**Figure 6**Types of projects canceled or postponed as a result of COVID-19 (by project type)

Manufacturing	26%	
Corporate administration/professional services	24%	
Distribution, logistics and warehousing	22%	
Backoffice support/Shared service center	19%	
Wholesale and retail sales	12%	
Data center/IT	2%	
Research and development	1%	

# Insight: Investment plans and COVID-19 impact varies by source country

The planned investment activity for 2020 and beyond has varied greatly by source country, with estimated job creation from domestic investment projects ranging from a low of 175 in Switzerland to more than 550 in Germany. These differences in the scale of domestic investment continue over the medium- and longer-term, with, for example, German companies expecting to create an average of almost 1,300 jobs, while US companies anticipate creating an average of only half that number of jobs in their home country.

For foreign investment, French and Chinese companies anticipate creating on average more than 300 jobs abroad in 2020, while UK- and India-based companies only expect to create around 130 jobs through international investment. The low level of outward investment by UK-and India-based companies continues over the mediumto longer-term, with each company expecting to create less than 350 jobs abroad over the next 3 to 5 years, while the equivalent number for German companies is close to a thousand jobs.<sup>2</sup>

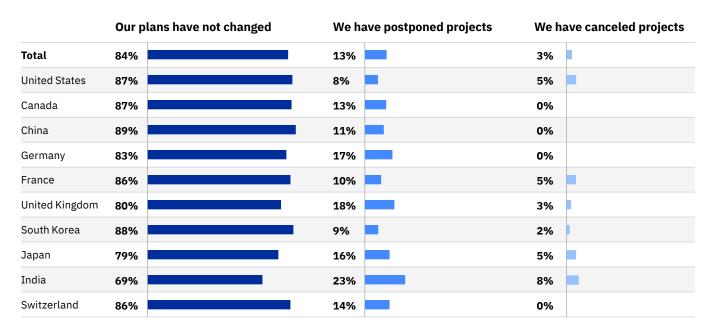
Coronavirus does not discriminate based on location and its impacts have been felt across the globe in terms of canceled or postponed projects. Interestingly, across the 10 source countries covered, respondents reported a greater cancellation or postponement of domestic rather than foreign investment projects. For example, among Swiss companies, two-thirds of companies with domestic investment plans going into 2020 saw them postponed or canceled while the equivalent figure for foreign investment projects is only 14%.

Meanwhile, a third of leaders surveyed in China, France, and India indicate they had canceled or delayed domestic investment projects in 2020 as a result of COVID-19. Korean companies reported the lowest rate of cancellation

or postponement of investment projects both at home and abroad as a result of COVID-19, which is perhaps indicative of this country having been relatively less severely affected by the disruption. In contrast, more than 30% of leaders in India with foreign investment plans going into 2020 indicate they canceled or postponed projects abroad.

Among US companies—the most important source of greenfield and expansion investment globally—17% of those with domestic investment plans for 2020 indicated that these would be either postponed or canceled and 13% indicated the same for foreign investment projects (see Figure 7).

**Figure 7**COVID-19 impact on planned 2020 investment project in Foreign Countries (by original country of investment)



# Only 49% of respondents believe cross-border trade will increase in the next 3 years.

### Chapter 3

#### A new world view

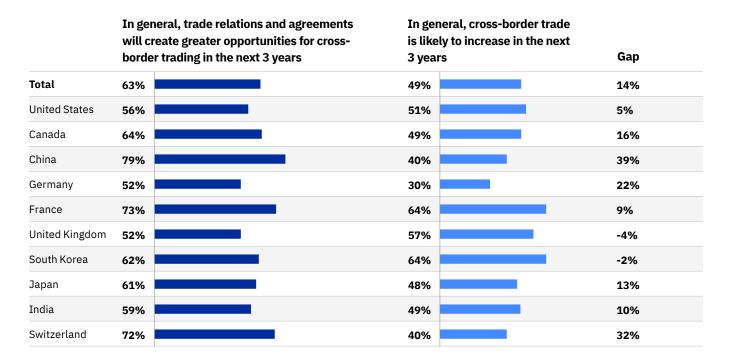
Despite the catastrophic impact of the pandemic on the global economy, short-term investment impacts were relatively minor, and many executives remain optimistic about the longer-term future of the global economy and their planned investment prospects. Indeed, there is an expectation that the future global economic order will be conducive to growth and trade.

### Perspectives on the future of cross-border trade and opportunities abroad

Leader views indicate relative confidence and a positive view on the current state of trade relations and agreements to facilitate opportunities for future cross-border trade,

with two-thirds of respondents expecting improved opportunities in the next 3 years. However, when asked whether they believe cross-border trade will increase in the next 3 years, only about half (49%) believe it will, while about 1 in 5 disagree. The remaining third were neutral in their opinions. These findings reflect the lingering uncertainty fueled both by the pandemic and the future global geopolitical landscape. Accordingly, in nearly all countries covered by our analysis—with the exceptions of the United Kingdom (UK) and South Korea—responses indicate that confidence in the mechanisms to enable opportunities outpaces confidence in those opportunities actually materializing in higher trade in the next 3 years (see Figure 8). This "gap" is greatest among respondents in China while the view is relatively balanced in the US.

Figure 8
Confidence in trade relations and agreements compared to expected outcomes in the next 3 years (by country)



Respondents in France and South Korea are the most bullish on future trade growth, with nearly two-thirds of respondents in both countries expecting cross-border trade to increase in the next 3 years. Meanwhile, approximately half of US and Japanese respondents expect an increase in global trade while 3 out of 10 leaders in Japan and more than a quarter (28%) of leaders surveyed in the US do not expect global trade to increase in the next 3 years.

The views of leaders surveyed in Germany and China reflect the greatest levels of uncertainty about the future of cross-border trade. A majority (62%) of leaders in Germany and slightly more than half of those in China were neutral in their opinions on whether trade will increase in the next 3 years.

The UK and the European Union (EU) have yet to reach a future trade deal and the Brexit transition period—which ends on December 31, 2020 and is unlikely to be extended—is still unresolved.<sup>3</sup> Interestingly, despite the uncertainty in their own country, more than half (52%) of UK respondents expressed confidence in existing trade agreements and relations. And not only are they confident in the mechanisms that enable trade, they are also optimistic of future outcomes, as a majority (57%) of executives indicate they believe cross-border trade will increase in the next 3 years.

The contrasting impact of the pandemic on industries is likely also influencing executive views on the future of trade (see Figure 9). More than three-quarters (78%) of respondents in the thriving life sciences/pharmaceuticals industry expressed optimism that cross-border trade would increase in the next 3 years and an astonishing 87% expressed confidence in trade relations and agreements to create future opportunities.

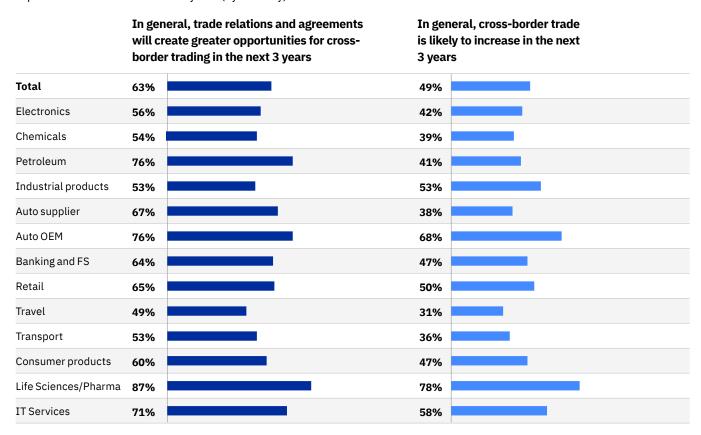
In contrast, less than half of the executives surveyed from the pandemic-ravaged travel industry indicated they were confident in trade enablers and less than a third expressed optimism in their ability to improve future outcomes. Many executives across countries and industries believe their organization will likely benefit from changing world trading patterns over the next 3 years—most indicating a positive impact on their ability to access customer markets, grow revenue, and improve resilience and business continuity.

Regionally, executives surveyed indicate the greatest levels of optimism for future growth opportunities in the EU, Association of Southeast Asian Nations (ASEAN), the UK, and North America. Less than 1 in 5 executives identified China and India as priority growth platforms (see Figure 10).

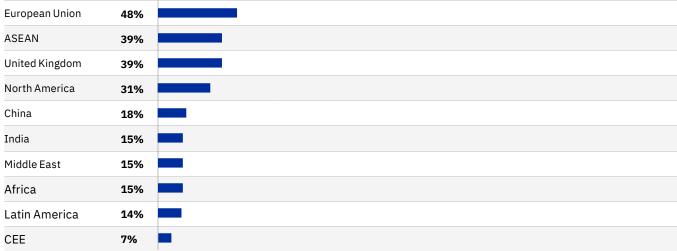
Despite Brexit uncertainty, 63% of UK executives identified the EU as a region for future growth opportunities. Meanwhile less than 1 in 4 (24%) UK executives express the same view of their own country. But the sentiment does not appear to be reciprocal among all EU nations as only a third (33%) of French executives see future promise in the UK as a trade platform.

# 63% of UK executives identified the EU as a region for future growth opportunities.

**Figure 9**Confidence in trade relations and agreements compared to expected outcomes in the next 3 years (by industry)



**Figure 10**Regions for growth opportunities in the next 3 years



### Perspectives on risks and opportunities in home countries

To better understand executive perspectives on the investment environments in their home countries and to help gauge the path forward for government and education leaders and policy makers, we asked the executives surveyed to share their insights into major economic risks and opportunities they see for their home nations in the next 5 years.

While the pandemic has placed tremendous pressures on national and regional economies, most of the executives surveyed view health risks and pandemics as one of the greatest strategic risks to their nation's economy in the next 5 years (see Figure 11). Concerns about future health events were extreme in Germany as 9 out of 10 executives identified it as a top risk for the nation's economy.

Health risks were identified as a top risk by a majority of executives in all countries with the notable exceptions of the US and South Korea—whose experiences in dealing with the pandemic have been as stark as night and day. Despite the US recording its steepest quarterly drop<sup>4</sup> in economic output on record (a decrease of 9.1%) in the second quarter of 2020 as a direct result of the pandemic, most executives surveyed in the country view trade issues as a greater risk in the long term.

This may suggest confidence in the nation's ability to address ongoing challenges related to the pandemic and return the economy to growth. Executives in the US appear to remain focused on pre-pandemic challenges as export restrictions was identified as one of the greatest challenges to doing business in the country in the past 2 years by more than a third of respondents.

Figure 11

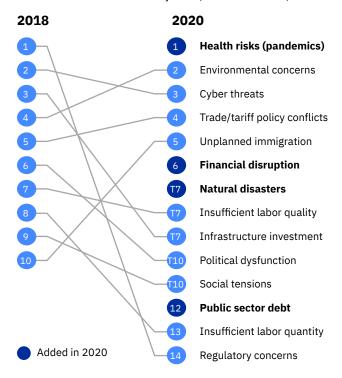
Executive views on biggest strategic risks to national economies over the next 5 years (2020) Total Unplanned immigration 32% 23% 18% 30% 20% 13% 35% Trade/tariff policy/conflicts 36% 47% 38% 19% 36% 37% 33% 28% 71% 92% 62% 59% 59% Health risks (e.g., pandemics) 61% 67% 80% 20% Cyber threats 38% 35% 27% 33% 35% 28% 62% Environmental concerns 39% 40% 31% 38% 58% 37% 28% 35% Natural disasters 27% 27% 21% 12% 31% 24% 16% 28% 33% 33% Financial disruption 31% 27% 38% 36% 20% 35% 31% 37% 24% 36% 20% Public sector debt 25% 25% 33% 18% 22% 24% 22% 22% 10% 28% Regulatory concerns 22% 29% 7% 9% 24% 36% 17% 22% 20% 16% Infrastructure investment, reliability, quality 27% 18% 16% 16% 22% 39% 18% 8% Political dysfunction 26% 35% 13% 13% 22% 35% 16% 6% 30% Insufficient labor quality 27% 35% 27% 33% 10% 13% 20% 28% 29% 32% Insufficient labor quantity 24% 39% 11% 24% 8% 38% 22% 31% 20% 22% 8% Social tensions 26% 28% 38% 10% 20% 26% 11% 17% 22%

# The perceived growth potential for global tech is waning.

The impact of the COVID-19 pandemic is weighing heavy on the psyche of many executives. In 2018, we asked a similar question of global executives about long-term risks to national economies with similar options<sup>5</sup> (see Figure 12).

Concerns over health events are hardly surprising; however, the shifting view of concerns over regulatory environments and illegal immigration are remarkable. Meanwhile, the environment and cyber threats continue to be long-term areas of concern for many executives.

**Figure 12**Executive views on biggest strategic risks to national economies over the next 5 years (2018 and 2020)



While most executives believe the risk of future health events are very real risks for their countries, executives across countries see various and myriad growth opportunities for their countries' in the global economy in the next 5 years (see Figure 13).

Foreign investment opportunities topped the list among executives in France, the UK, and Germany, and 60% of US executives view emerging industries and start-up entrepreneurs as a source of future growth. The latter is perhaps indicative of how US executives value the entrepreneurial elements of the US economy.

Even though we're living in a world where social distancing and self-quarantining are norms, executives surveyed in Canada and China remain optimistic about the sharing economy. Unlike other countries, most executives in South Korea and France are optimistic about the potential of their country to increase consumer spending.

Being a technology innovator to meet the needs of global markets was identified as a strategic growth opportunity by 45% of executives when we surveyed executives on the potential of these same opportunities in 2018<sup>6</sup>—tied for second among all options (see Figure 14). In this most recent survey, less than 1 in 5 executives identified this as a strategic growth opportunity for their economy—the largest decrease of any option.

Despite the increased need and demand for cross-border data flows and the critical role that new and emerging technologies have and continue to play in connecting the world and building resilience in organizations and economies during the pandemic, the perceived growth potential for global tech is waning. This may be due to increased concerns by governments and individuals—both perceived and real—about the safety, security, and use of data in the global digital economy and increasing calls for data sovereignty.<sup>7</sup>

However, it could also be the result of executives taking a more subtle view of innovation that sees the value of technological innovation as embedded within transformation and value creation efforts for entrepreneurship, the creation of high-value products and services or the development of new business models built around the principles of the sharing economy.

Figure 13

Executive views on biggest strategic opportunities for your nation's economy over the next 5 years (2020)  **Total State**    Canada China Centany   France Continued France Con							land				
	Total	United	Canadia	China	German	France	United	South	Japan	India	Switzerland
Being a leading producer of high-value-added products and services	51%	53%	33%	45%	62%	36%	52%	51%	70%	61%	52%
Collaborating more with global partners to increase business value	46%	48%	44%	40%	48%	42%	46%	47%	57%	47%	32%
Making significant investments in other countries	43%	37%	40%	32%	64%	62%	59%	42%	46%	33%	16%
Increased participation in sharing economy business models	39%	40%	51%	56%	34%	42%	35%	40%	22%	24%	44%
Being a provider of highly skilled labor to the world	39%	45%	44%	29%	14%	49%	33%	51%	57%	47%	8%
Being a leader in sustainability initiatives and helping other countries fulfill their sustainability objectives	35%	49%	18%	16%	32%	42%	35%	36%	52%	35%	32%
Being an incubation center for global emerging industries and start-up entrepreneurs	34%	60%	13%	11%	26%	36%	37%	44%	39%	43%	24%
Growing consumer spending as a percentage of GDP	33%	40%	29%	11%	26%	56%	35%	62%	24%	37%	16%
Being a global leader in research and development, leveraging its knowledge base and universities	26%	23%	11%	15%	20%	49%	41%	44%	35%	22%	8%
Being a technology innovator to meet the needs of global markets	19%	24%	20%	7%	24%	31%	20%	16%	28%	14%	8%

Figure 14 Executive views on biggest strategic opportunities for your nation's economy over the next 5 years (2018 and 2020)

	2018	2020	Change
Being a leading producer of high-value-added products and services	45%	51%	6%
Collaborating more with global partners to increase business value	56%	46%	-10%
Making significant investments in other countries	30%	43%	13%
Increased participation in sharing economy business models	27%	39%	12%
Being a provider of highly skilled labor to the world	21%	39%	18%
Being a leader in sustainability initiatives and helping other countries fulfill their sustainability objectives	41%	35%	-6%
Being an incubation center for global emerging industries and start-up entrepreneurs	26%	34%	8%
Growing consumer spending as a percentage of GDP	35%	33%	-2%
Being a global leader in research and development, leveraging its knowledge base and universities	38%	26%	-12%
Being a technology innovator to meet the needs of global markets	45%	19%	-26%

Many executives are placing more emphasis on creating global-operating footprints that are resilient and able to navigate an elevated risk environment.

### Chapter 4

### Plans and implications for the future

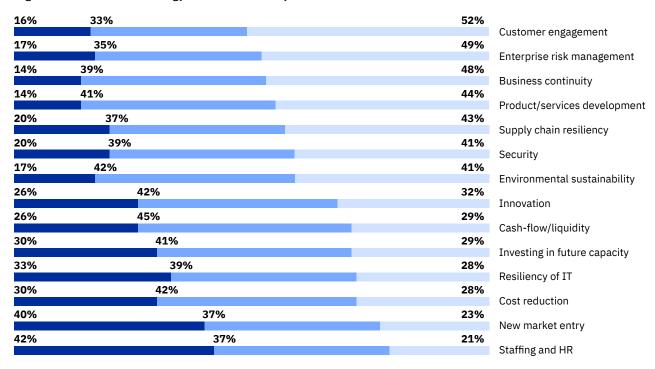
The dramatic disruption associated with COVID-19 is not only having an immediate impact on investment decisions but is likely to radically alter the strategic considerations that shape investment activity in the future. Our survey shows that many executives are re-evaluating the factors of importance for making investments, with a far greater emphasis on creating global-operating footprints that are resilient and able to navigate an elevated risk environment.

Accordingly, recent events have highlighted the importance of customer engagement as a critical success factor and companies indicate that the ability to engage effectively with customers is expected to also increasingly influence their location decisions. This applies across all industries but has been particularly pronounced in industries such as IT, life sciences, consumer products, and automotive.

In addition, the emphasis on resilience is reflected in the 3 categories (business continuity, enterprise risk management, and supply chain resiliency), which were all given greater priority for location decisions as a result of the COVID-19 disruption (see Figure 15). More than two-thirds of respondents in the banking and financial markets and life sciences industries anticipate that enterprise risk management may be a more important factor for their future location strategy.

In contrast, factors such as new market entry and staffing/ HR—factors that have typically been at front of mind for location decision makers—are expected to be given relatively less priority in the future as a result of COVID-19. These findings indicate a clear shift in thinking, brought about by a severe shock to operations across industries. A key question is whether such changes in priorities will remain in the longer term or if they indicate a shorter-term adjustment in response to the immediate crisis caused by COVID-19.

**Figure 15**Executive perspectives on how the pandemic has impacted their organization's location strategy in the next 1 to 3 years

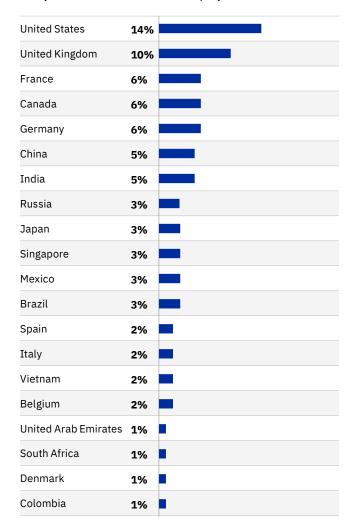


Much less/slight less important No change

Slightly/more important 15

The focus on business continuity, resilience, and access to markets is also affecting which countries are most likely to be considered for investment. The US is, unsurprisingly, the top country for potential investment, with 14% of respondents indicating that this would be a prime consideration for new projects (see Figure 16).

**Figure 16**Top countries executives indicate they are most likely to consider for investment projects



The large market opportunity associated with the US economy, coupled with a mature operating environment, continues to be a major attraction for companies. This continues a trend we've observed recently where the US has been the top destination country globally for foreign direct investment over the last 5 years.

The UK is second for potential investment, far ahead of other major European countries such as France, Russia, and Germany. It is noteworthy that the UK continues to be a major consideration as an investment destination, notwithstanding recent years' uncertainty over Brexit. In fact, as the UK has now withdrawn from the EU, it may increasingly be viewed as a market in its own right requiring a local UK footprint to serve this market, rather than an entry point for the larger European market.

While this would explain a continued high interest in the UK as an investment destination, it would also suggest a very different nature of investment, with more market driven investment for the UK and fewer contestable projects for facilities serving the larger European market. This is consistent with the findings on investment activity in the UK from last year's Global Location Trends 2019 report.

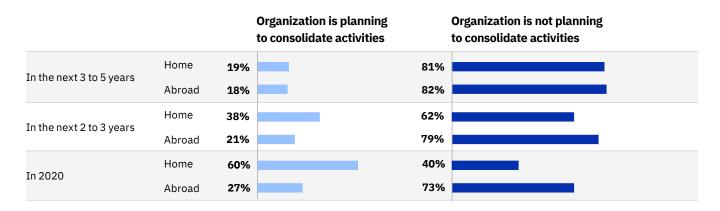
Japan, Mexico, and India make up the remainder of the global top 10 countries for potential investment. These findings clearly indicate that the major established and growing markets of the world in North America, Europe, and Asia are the main destinations considered for investment. With an emphasis on greater proximity to customers and new market opportunities, coupled with a reduced risk profile, the large mature economies are expected to be key beneficiaries of foreign investment in the near to medium term.

60% of respondents indicate they're planning to consolidate activities in their home country in 2020.

However, new investments and expansions only constitute one part of the adjustment to corporate footprints in response to recent turmoil. The other part that may shape where and how companies operate is linked to consolidation plans. From this perspective, we see a dramatically different picture with 60% of respondents indicating they are planning to consolidate activities in their home country in 2020, while only 27% of respondents expect to consolidate activities abroad (see Figure 17).

Looking further ahead over the next 2 to 3 years and 3 to 5 years, consolidation plans are markedly lower. The consolidation plans are in part focused on repositioning of market serving facilities such as distribution and logistics. However, there is also a significant consolidation of core capabilities such as R&D and corporate headquarters, suggesting that companies are going through more fundamental changes in their operating models, often triggered by the disruption and unprecedented circumstances they have experienced in recent months.

**Figure 17**Corporate consolidation plans (home country and abroad)

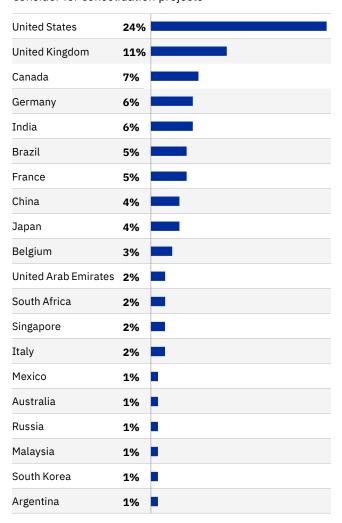


The country where consolidation is most likely to take place is the US, with 30% of respondents indicating this would be the first country affected (see Figure 18). The UK is a clear second, with 13% of companies indicating that country is a likely prime candidate for consolidation. This indicates that while the UK remains a key destination for new investment, the country is also subject to significant consolidation activity. The high level of consolidation may in part be explained by the country's exit from the EU, with companies repositioning their operations in the UK as a result.

In fact, the combined investment and consolidation data reveals that the disruption associated with COVID-19 is likely to trigger a significant re-evaluation of corporate operations in several countries. While the changes in strategic drivers and location criteria will benefit some countries, the restructuring may also bring challenges for countries that suffer from structural weaknesses in their competitive position. With a renewed focus on resilience, companies will look to reduce their exposure to locations that are less appealing in terms of the quality or cost of their operating environment.

The findings indicate marked transformations in future operating footprints as organizations seek to balance resilience and efficiency. While they are largely planning to maintain strategic investment in new or expanded facilities at home and abroad, organizations are expecting significant consolidation of existing facilities, notably in their home markets.

**Figure 18**Top countries executives indicate they are most likely to consider for consolidation projects



The intensification of digital transformation will be particularly pronounced for R&D, corporate headquarters, and distribution.

### Chapter 5

### Impact of digital technologies on location strategy

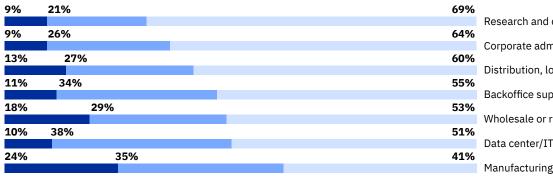
The transformation of global operating footprints in response to the COVID-19 disruption is taking place as companies are going through major transformation processes associated with digital technologies—processes that are intensifying in response to recent events. Across all functions, companies are planning to increase their use of digital technologies and automation in the next 3 years.

The intensification of digital transformation will be particularly pronounced for R&D (69%), corporate headquarters (64%), and distribution (60%) where respondents expect to increase the use of digital technologies and automation (see Figure 19). These are also the 3 activities for which new investment plans, as well consolidation activities, are expected to be greatest, indicating that adjustments to corporate footprints are possibly tied in with digital transformation efforts.

The digital transformation of R&D activities is particularly significant in the life sciences industry where almost all respondents indicate greater or much greater use of digital technologies and automation. The use of digital technologies and automation in manufacturing is very significant in select sectors, with, for example, more than 70% of respondents in industrial products and two-thirds of respondents in the automotive industry indicating greater digital transformation in this function.

For shared service centers and back-office functions, the use of digital technologies and automation is very high in banking and financial markets, where almost 90% of respondents anticipate greater use over the next 3 years. Similarly, this industry has the highest degree of anticipated digital transformation for corporate headquarters and administrative functions.

**Figure 19**Where executives indicate using digital technologies in the next 3 years



Research and development

Corporate administration/HQ

Distribution, logistics, and warehousing

Backoffice support/shared service center

Wholesale or retail sales

Data center/IT

Much less/somewhat less No change

Somewhat more/much more

The impact of digital transformation is also expected to be seen in the relative priority given to different location factors (see Figure 20). For example, as facilities become more digitized and automated, the initial capital investment is likely to increase, which in turn gives rise to a greater emphasis on access to capital with 68% of respondents indicating that this factor will become more important as a result of digital technologies and automation.

However, it is also noteworthy that two-thirds of respondents expect a greater focus on availability of skills as a location criterion, suggesting that digital technologies and automation are expected to change skills requirements rather than replace the need for talent. Indeed, more than half of respondents indicate that skills development will be required within their workforces as a result of digital technologies and automation. This will likely be the case across all functions, but in particular for R&D, corporate headquarters, and distribution activities. Again, this highlights the significant transformation expected for these 3 functions.

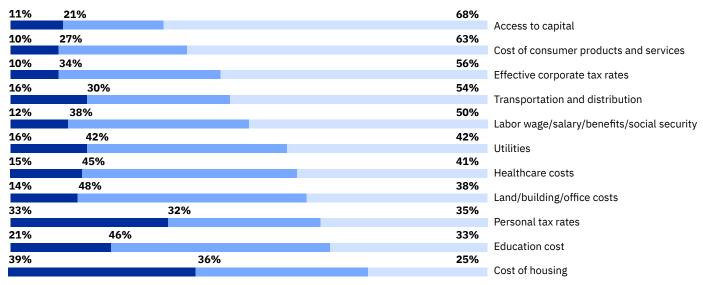
**Figure 20**Expected impact of digital technologies and automation on cost and quality-related investment factors

Moreover, 56% expect digital technologies and automation to increase employment and headcount, while only 24% expect a decrease, showing that digital transformation and automation is likely to increase and change jobs rather than result in reduced employment. More specifically, the automation of individual tasks is expected to result in a change in the make-up of tasks that constitutes a job and therefore lead to new skill requirements rather than a reduction in overall jobs.

This also means that labor costs will remain important considerations, with 50% of respondents expecting labor costs to become a more important location criteria and only 12% anticipating this to become less important. Accordingly, far from replacing the human factor in economic activity, digital technologies and automation will enhance the role of human capabilities and skills as a competitive advantage.

Taken together, the findings above indicate a considerable shift in corporate operations as companies adapt to the twin forces of elevated risk and digital transformation. In fact, rethinking your location strategy is expected to be a key lever for adapting to the strategic opportunities and challenges of digital transformation as well as the more immediate disruption resulting from COVID-19 and its aftermath.





Not at all/very little | Slightly | Somewhat/to a great extent

The changes needed to deal with COVID-19 and its repercussions could set us on a very long path to stronger growth and productivity improvement.

We are likely to see a rebalancing of corporate footprints with a greater emphasis on being closer to key markets, with 61% of respondents indicating this will be the case (see Figure 21). This may in turn lead to more near-shoring of activities, with 41% of respondents indicating this is more likely to occur as a result of digital transformation.

As companies move to a more fragmented footprint of activities closer to key markets, each facility will be less labor intensive, suggesting a move away from the corporate footprint of the past characterized by centralized, large, offshored facilities. These trends will likely manifest themselves differently within individual industries, with near-shoring and proximity to markets being very pronounced among respondents in the life sciences and automotive industries, while off-shoring will remain a relatively more important feature in the electronics, consumer products, and petroleum industries.

Over the longer term, the move to a "new normal" and consequent need for business innovation may lead to a fundamental global economic transformation. As a result of COVID-19, a significant portion of the global economy has

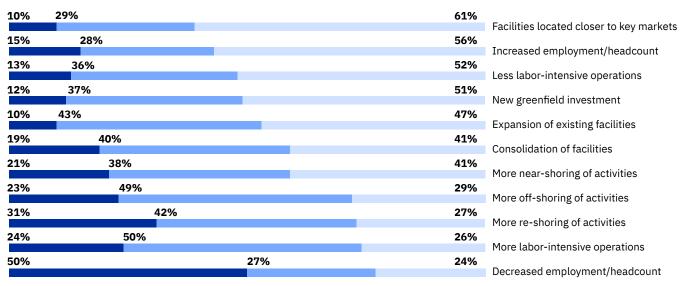
become disrupted, and some industries shattered. As the world seeks to either learn to live with the pandemic, or more hopefully, defeat it, the economy will not easily be reconstructed.

Considerable unemployment, companies with severely impacted balance sheets and possible bankruptcies, will not be easy to recover from. The global economy that follows will likely have to look very different. New businesses, new business models, new operating models, and new technologies will appear.

While a solid recovery for the global economy may be long in the making, the changes needed to deal with COVID-19 and its repercussions could set us on a very long path to stronger growth and productivity improvement. As such, the current crisis holds within it the possibility of shifting the global economy to a new "long wave" of innovation and growth.

Such an outcome and silver lining to current challenges is by no means a given. Rather, the future is more uncertain than ever. But it would be a mistake for companies to believe the future will not be fundamentally different and not prepare accordingly.

**Figure 21**Extent you anticipate that changes in your operational footprint as a result of the use of digital technologies and automation



Not at all/very little | Slightly | Somewhat/to a great extent

## Chapter 6 Action guide

In order to position your organization for growth in a rapidly changing business environment characterized by elevated risk and disruption, it will be necessary to move toward an elastic operating model that provides agility as well as efficiency. Rather than optimize the operational footprint for optimum efficiency within a given set of assumptions, companies must make sure they have the required capacity to adapt and respond to unforeseen events.

As noted in our recent paper "Resilience in the new age of risk," there will likely be a premium on the ability to succeed in different futures, known as "option-value," with greater value attached to agility and flexibility in a company's business and operating model. This may not only apply to their own internal operations, but also to the way the enterprise leverages its ecosystem of partners and suppliers. Such efforts will in turn have significant implications for location strategies and require companies to transform their operating footprints. Here's how:

 Use scenario envisioning to develop your location strategy. Scenario envisioning provides a rigorous and structured framework for defining scenarios and ascertaining their potential impact on your organization. It is based on defining the key dimensions that will likely shape different potential future outlooks and analyzing the implications for your business and operating footprint in each scenario. Importantly, scenario envisioning is often less about selecting one particular scenario than it is about preparing your organization for different possible outcomes.

- Move toward a future footprint that provides the right balance between resilience and efficiency. Allow for buffers in your footprint, even at the cost of lower efficiency. This includes a greater emphasis on business continuity planning when assessing your overall footprint.
- Rethink how you prioritize cost and quality for key functions. While cost will likely remain important, it may be important not to compromise on quality for critical operations.
- Target investment and expansion in locations that are able to add value to your new business priorities and transformation efforts. Ascertain if locations have the required capabilities and resources to effectively address sudden disruption to the economy, society, and critical infrastructure.
- Leverage data and digital technologies for insights to action across your operating footprint and ecosystem in support of greater agility and responsiveness. This includes infusing data into key business processes for intelligent workflows and connected supply chains to drive flexibility and resilience.

The transformation of corporate activity will have significant implications for economic development efforts seeking to foster business growth, investment, and job creation. It will be critical for the business environment to respond to the new priorities, strategic drivers, and location factors of importance for companies as they seek to reposition their operations for a different future. This will require strategic, as well as tactical, changes to economic development efforts. As such, economic developers and public policy makers must:

- Focus on supporting existing investors/businesses and help them through current disruption. Ensuring that companies can continue to operate and succeed as they navigate sales volatility, depleted balance sheets, and shattered supply chains should be at the forefront of current economic development activities. This includes operational support to facilitate working from home as well as matchmaking activities with suppliers and customers for new opportunities. To thrive in the "new normal," you must harness the capabilities and insight of all relevant stakeholders.

- Assess impact of disruption and the emerging "new normal" on priority industries. Industries have been impacted differently during the disruption and it is important to understand the immediate implications for each of the industries that are important for your local economy. In addition, you must ascertain if there are longer-term ramifications resulting from the new ways of working for some industries that require you to rethink the role and requirements of each industry.
- Identify new opportunities in existing priority industries that are emerging either in the short- or longer-term as a result of the disruption. Understand which industries will likely have new growth opportunities or if there are elements of your location's value proposition that are becoming more important for certain industries. This can lead to new investment or expansion opportunities.
- Identify new priority industries with growth potential for your location. Will the economic landscape that emerges from COVID-19 give rise to investment and job creation opportunities in new industries for your location that were not on your radar prior to the disruption? If so, do you need to rethink your inward investment strategy and efforts going forward?
- Prepare your location for the new ways of working and digital transformation. Reassess your economic development efforts in view of the more fundamental changes to the way companies operate and value is created. Focus on creating the right conditions for companies to thrive and enable the transformation they are going through. This should include creating the right conditions for digital transformation, notably by providing the required digital infrastructure to enable more working from home and virtually enabled value creation.

- Assess if there are new skills requirements emerging, not just as a result of the disruption caused by the pandemic, but also due to more structural changes in production processes and value creation. If anything, the recent disruption has accelerated the pace of structural transformation that industries were experiencing prior to COVID-19 and reinforced the need for adapting talent development. In particular, you need the right skills in your workforce for people to be able to tap into the opportunities offered by digital transformation.
- Engaging your stakeholders and ecosystem of partners in economic development efforts is more important than ever. To thrive in the "new normal," you must harness the capabilities and insight of all relevant stakeholders to address the right pain points and identify new opportunities. The way you support your businesses and wider community during this period of crisis will be crucial for your ability to succeed in the future.

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### Notes and sources

- 1 Connor, P. (2020, July 27). "More than nine-in-ten people worldwide live in countries with travel restrictions amid COVID-19." Pew Research Center. April 1, 2020. https://www.pewresearch.org/fact-tank/2020/04/01/more-than-nine-in-ten-people-worldwide-live-in-countries-with-travel-restrictions-amid-covid-19/
- 2 It is noteworthy that these differences between source countries are so marked notwithstanding a similar sectoral distribution of respondents across countries. However, the high job creation for Germany may in part be explained by a greater share of respondents from very large companies (annual revenue above \$20 billion)
- 3 Edgington, T. "Brexit: All you need to know about the UK leaving the EU." BBC News. September 23, 2020. https://www.bbc.com/news/uk-politics-32810887
- 4 Bauer, L., K. Broady, W. Edelberg, and J. O'Donnell. "Ten Facts about COVID-19 and the U.S. Economy." Brookings. September 17, 2020. https://www.brookings.edu/research/ ten-facts-about-covid-19-and-the-u-s-economy/
- 5 Ikeda, Kazuaki, Anthony Marshall, and Dave Zaharchuk. "Agility, skills and cybersecurity: Three keys to competitiveness in an era of economic uncertainty." IBM Institute for Business Value. February 2019. https://ibm.co/econcomp
- 6 Ibid.
- 7 DiPaula-Coyle, M. "Bold Ideas for a Digital Society." IBM Think Policy Blog. September 13, 2020. https://www.ibm.com/blogs/policy/ digital-trade-principles/

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