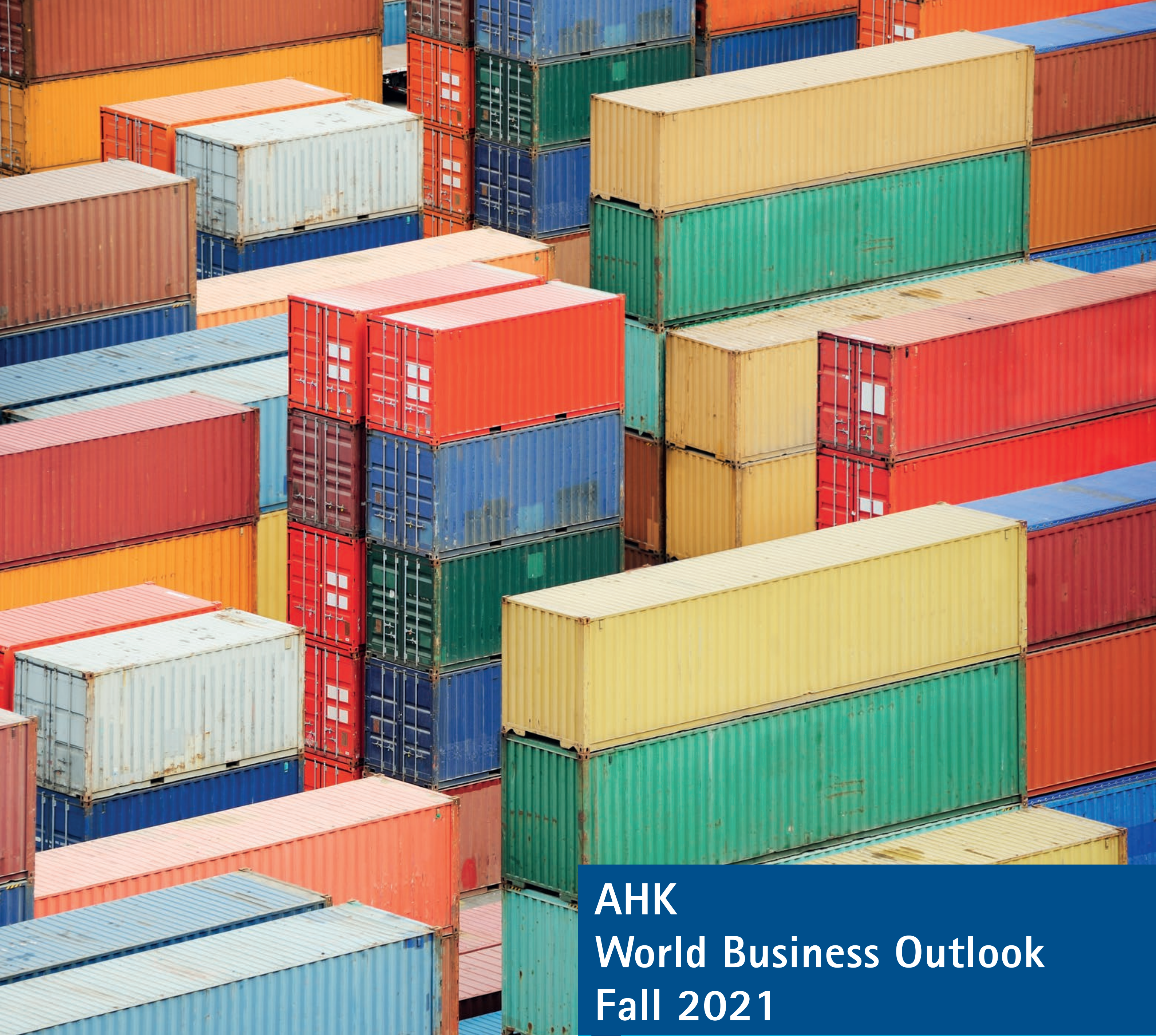


AHK
World Business Outlook
Fall 2021

Results of the Survey by the Network of German Chambers of Commerce Abroad (AHKs)

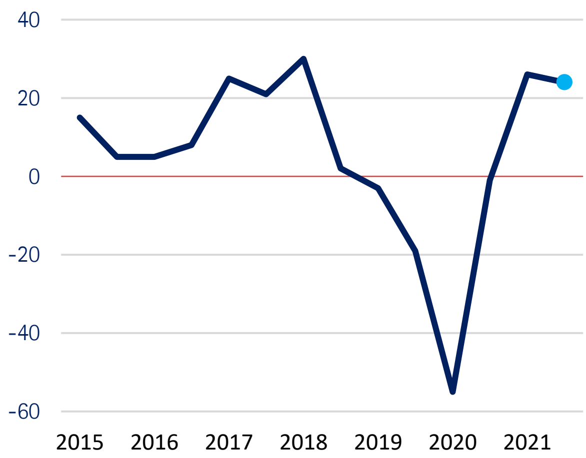
DIHK Deutscher Industrie- und Handelskammertag

AHK Deutsche Auslandshandelskammern

Summary

The challenges for German companies abroad are numerous more than a year and a half after the start of the coronavirus pandemic. Most recently, the economic recovery has lost pace in parts of the world: Only two out of five of the more than 3,200 companies surveyed worldwide still expect the economy in their respective countries to develop better over the next twelve months. This means that expectations are more subdued than they were in spring 2021. While German companies expect the economy to improve compared with the previous survey, particularly in the Asia-Pacific region (excluding China), Africa and the Middle East, as well as in the European Union (EU), expectations in China, North America and South and Central America have fallen significantly. In terms of their own businesses, however, companies in their international locations are proving resilience. In many places, for example, companies expect a further revival of their own activities despite the cooling economy. Significantly more companies than in the spring therefore intend to increase staff and investment expenditures at their foreign locations over the next twelve months.

Economic expectations of the companies worldwide Balance in points



However, given the existing challenges posed by the coronavirus pandemic, companies are on a rocky road. Travel restrictions and problems in the supply chains and logistics are preventing smooth business operations and an overall self-sustaining, investment-driven upturn in international business. In this context, the proportion of companies reporting a lack of goods and services as well as their own production stoppages has once again increased significantly compared to the previous survey.

Irrespective of the immediate effects of the coronavirus pandemic, raw material prices currently represent the greatest business risk for German companies abroad. The shortage of skilled workers has once again gained in importance and represents a considerable risk for companies' employment plans outside Germany as well.

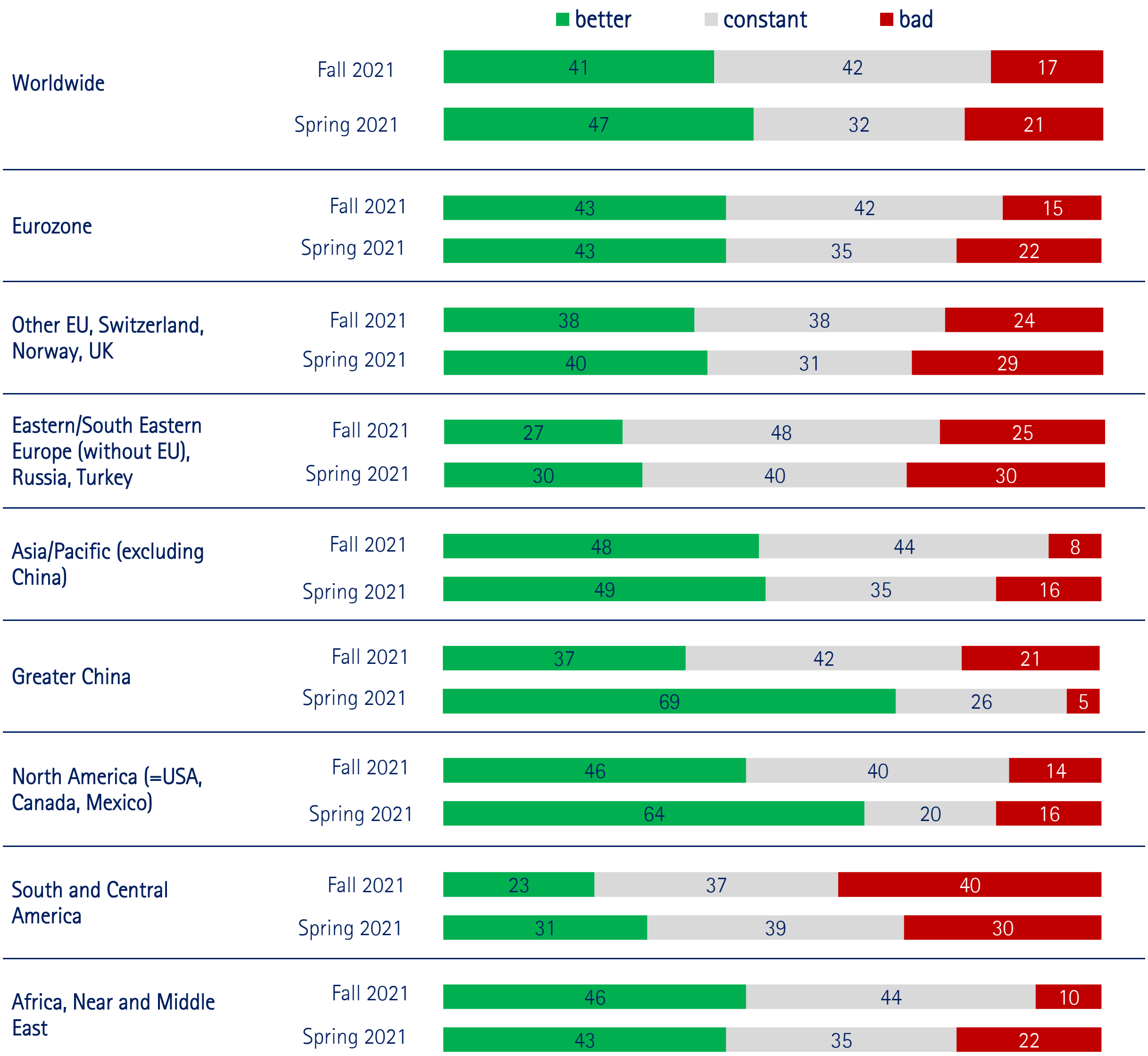
The AHK World Business Outlook is based on a regular DIHK survey of member companies of the German Chambers of Commerce Abroad, Delegations and Representative Offices (AHKs). In autumn 2021, it collected feedback from more than 3,200 German companies, branches and subsidiaries worldwide, as well as companies with close ties to Germany.

41 percent of the responding companies are from the industry and construction sector, 37 percent from the service sector and another 22 percent are trading companies. Smaller companies with fewer than 100 employees account for 46 percent of the responses. Twenty-three percent of businesses employ 100 to 1,000 people. Large companies with more than 1,000 employees worldwide account for 31 percent of respondents.

Development of the global economy

The recovery of the global economy is losing momentum - that is the view of foreign trade. 41 percent of the more than 3,200 companies surveyed by the AHKs worldwide expect the economic situation in their respective countries to improve over the next twelve months. 17 percent expect the economic situation to deteriorate. Most companies (42 percent) do not expect any change in the economic development at their international locations. The resulting balance of better and worse assessments amounts to 24 points. This means that expectations are more restrained overall than in the previous survey (spring: 26 points). The catch-up process following the decline in global economic output last year thus appears to be losing momentum. The outlook for the coming twelve months differs significantly between the world regions. In North America (USA, Canada, Mexico) and especially in China, the hitherto extremely strong economic recovery is slowing down, while in Europe and the Asia-Pacific region things are continuing to run smoothly.

Economic expectations of the companies
Share in percent



Economic expectations of the companies Balance of better minus worse responses	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Change vis-à-vis Pre-survey
Eurozone	-8	-19	-63	-14	21	28	7
Other EU, Switzerland, Norway, UK	-16	-28	-64	-24	11	14	3
Eastern/Southeastern Europe (without EU), Russia, Turkey	-3	-13	-71	-35	0	2	2
Asia/Pacific (excluding China)	17	-11	-62	-1	33	40	7
Greater China	18	-34	-29	34	64	16	-48
North America (USA, Canada, Mexico)	-4	-9	-78	5	48	32	-16
South and Central America	20	-4	-64	13	1	-17	-18
Africa, Near and Middle East	-13	-7	-43	1	21	36	15
World total	-3	-19	-55	-1	26	24	-2

Mixed outlook in Europe

Within Europe, most companies expect the economy to improve over the next twelve months. Overall, expectations have risen slightly compared with the previous survey in the Eurozone, other EU countries and Eastern and Southeastern Europe outside the EU. In some countries, however, there are already signs of a cooling of the economy.

In the Eurozone, expectations have increased since the spring and have reached a level above the global average (balance of 28 points compared with 21 points previously): 43 percent of companies expect the economy to improve, while 15 percent expect it to deteriorate. In spring, expectations there were still below the global average. Within the Euro zone, the economic outlook is improving particularly markedly in Italy, Portugal and Slovakia. By contrast, the proportion of companies in Spain expecting a slowdown is rising. Economic development in the rest of the EU is also expected to be better than recently, especially in the Czech Republic and Hungary (balance of 36 and 26 points, respectively, after two and 17 points previously).

In Switzerland, fewer companies than before expect the country's economic development to improve (balance 34 points, down from 48 points). In the United Kingdom, the negative outlook predominates (balance minus twelve points after 28 points previously). This means that a large proportion of companies expect the economy to weaken in the coming months, after positive expectations had still predominated in the spring. This is where the effects of Brexit, such as problems in logistics or the shortage of skilled workers, come into play. Trade barriers are cited as the second most common risk in the UK (43 percent) after the shortage of skilled workers (55 percent) - significantly more than in the rest of the region (17 percent).

Expectations in Eastern and Southeastern Europe (excluding the EU) also improved only slightly from a low level: 27 percent expect economic performance to improve, 25 percent to deteriorate (balance of two points after previously zero points). The improvement is mainly due to higher expectations in Serbia and Bosnia and Herzegovina. In Turkey, on the other hand, companies predominantly expect a decline in economic performance in the coming twelve months (balance minus eight points after minus six points previously). In addition to the economic policy framework conditions (62 per cent), companies here are particularly concerned about the exchange rate risk (73 per cent). Companies in Russia are also scaling back their expectations (balance of twelve points, down from 20 points).

Companies in the Asia-Pacific region confident

In a global comparison, companies at locations in Asia and the Pacific (excluding China) are the most confident about economic developments in the coming twelve months. 48 percent of companies there expect the economy to improve, while only eight percent expect it to worsen. At 40 points, the balance of better minus worse assessments for the region altogether is well above the global average of 24 points and has reached its highest level since the survey began.

In India in particular, companies are expecting an economic upswing. Improvements compared to the previous survey are also expected in Indonesia, Japan and the Philippines. Companies in Southeast Asian countries such as Malaysia, Singapore, South Korea, Thailand and Vietnam have significantly fewer positive expectations than recently. In spring, expectations in these locations were still significantly higher than current economic expectations.

Significant damper in China

In contrast to the Asia-Pacific region in total, the positive economic expectations seen in China in the spring have not been sustained. Significantly fewer companies than last year expect an improvement in the coming twelve months at their locations in Greater China: 37 percent expect a better development, 21 percent a worse one (balance 16 points after 64 points previously). The economic upswing that was still expected in the spring thus does not appear to be sustainable. In autumn 2020 and spring 2021, the expectations of companies in China were still far above the global average. China's economy had recovered faster and more strongly than other countries and was one of the few economies worldwide to close the past year with economic growth.

Currently, energy-intensive industries are affected by bottlenecks in energy supply. Other possible reasons for the current development include high raw material prices, which represent the greatest business risk for 61 percent of companies in China. This is closely followed, at 45 percent, by the business risk posed by the economic policy framework. Another important issue is the impact of the coronavirus pandemic: 85 percent of companies in China are affected by travel restrictions in place to contain the pandemic. 69 percent complain about problems in their supply chains or logistics.

Outlook in North America less optimistic than before

Companies in North America are more cautious about the economic development at their locations than they were in the spring (balance 32 points after 48 points previously). After a strong recovery at the beginning of the year, boosted by extensive economic stimulus packages in the first half of the year, expectations for economic growth in the USA in the coming twelve months have fallen significantly (balance 36 points compared with 66 points previously. Currently, 60 percent of companies see the shortage of skilled workers as a business risk. Supply chain problems are also having an impact: 73 percent of companies are affected by travel restrictions and problems in the supply chain or logistics as a result of the coronavirus pandemic.

In Mexico, companies have raised their expectations significantly compared with the previous survey (balance of six points compared with minus 13 points previously). The Mexican economy has so far – among other things – benefited from the economic recovery in the US in the first half of the year. Companies in Canada are the most optimistic in the region but are also more cautious than in spring.

Negative outlook in South and Central America

In South and Central America, companies predominantly anticipate a deterioration in economic development over the next twelve months: 23 percent of companies with positive expectations contrast with 40 percent with negative expectations (balance minus 17 points after one point previously). This is the second time in a row that companies have significantly lowered their expectations. In autumn 2020, companies expecting economic growth at their locations were still in the majority (balance 13 points). Overall, the South and Central America region was hit harder than average by the coronavirus pandemic and economic recovery is slow. In Argentina, Brazil, Chile and Peru, expectations have fallen significantly compared to the previous survey. Only in Ecuador are companies significantly more optimistic about the country's economy than in the spring.

As a tangible impact of the coronavirus pandemic, companies in the region are more affected by liquidity constraints (26 percent), less demand for their products and services (41 percent) and increased legal uncertainty (25 percent) compared to the rest of the world.

Rising expectations in Africa, Near and Middle East

In Africa and the Near and Middle East, companies have significantly raised their economic expectations compared to the previous survey: 46 percent expect a stronger, ten percent a weaker economic development in the coming twelve months (balance 36 points compared to 21 points previously). This is the highest value since the survey began. The resource-rich countries in the region are benefiting in part from the increased global demand for commodities and the recovery in world trade.

Starting from a high level, expectations in Egypt are rising again. Although more companies in sub-Saharan Africa, such as Kenya and South Africa, are expecting an economic upswing than in spring, companies that expect the economy to cool down are still in the majority.

Companies in Iran are more pessimistic than in the last survey (balance minus eleven points after minus three points previously). Expectations in the United Arab Emirates have also fallen - albeit from a high level (balance 56 points after 65 points previously).

Business situation and expectations of German companies abroad

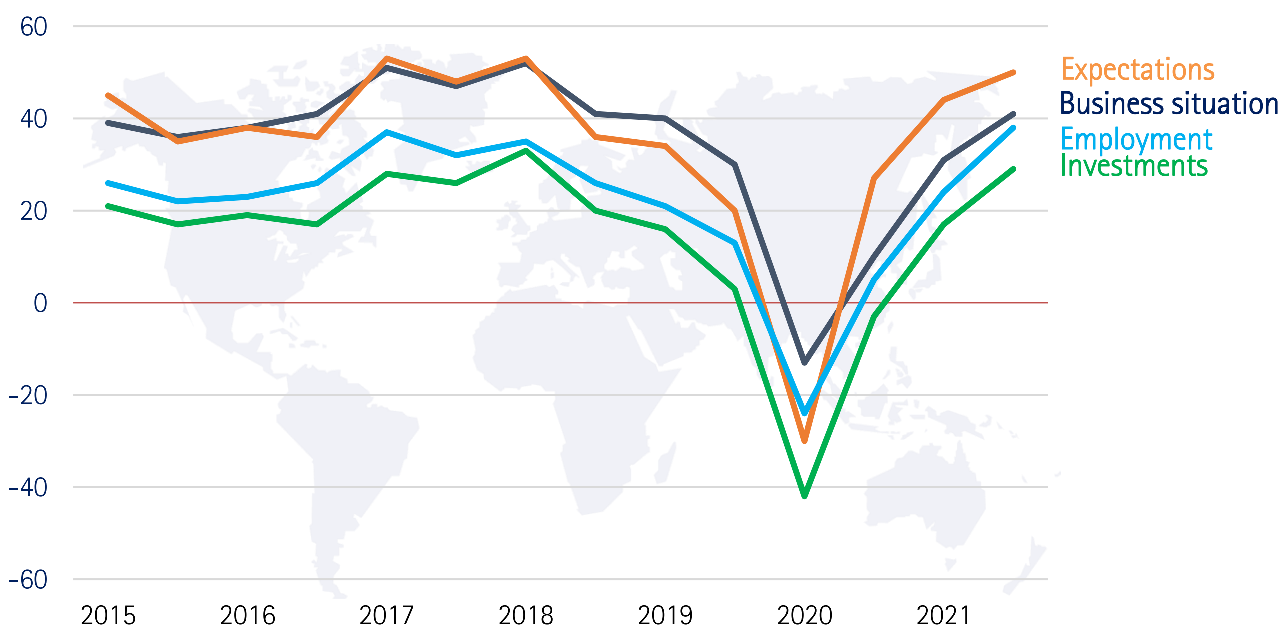
Business situation improves in many places - with one important exception

The economic catch-up process has continued over the course of the year in that German companies abroad assess their current business situation more positively than in the spring survey. More than half of the companies (52 percent) describe their situation as good, 11 percent as poor. The resulting balance of good minus bad assessments of 41 points is 10 points higher than in the previous survey. In view of the existing challenges and the effects of the coronavirus pandemic, companies in many places are showing resilience.

In all regions of the world, the business situation of companies is improving compared to spring - with one important exception. In China, the business situation has deteriorated significantly in comparison. At 27 points, the resulting balance of better minus worse assessments is below the level of autumn 2020 (balance 31 points) and far below the level of the previous survey in spring 2021 (balance 50 points). In addition to global transport problems and supply bottlenecks, China recently experienced power shortages, which in some cases led to sudden production stoppages lasting several days. In addition, the existing travel restrictions are dampening the mood of German companies on site.

German companies abroad

Balance in points



The business situation of German companies in Europe is improving strongly. With an assessment of the situation of 46 balance points (Euro area), 53 balance points (other EU, Switzerland, Norway, UK) and 63 balance points (Eastern/Southeastern Europe excluding EU, Russia, Turkey), current business is better in Europe than in the rest of the world. Companies in North America are similarly positive about their current business situation as in the Eurozone (balance 45 points).

In Asia and the Pacific (excluding China) (balance 34 points), South and Central America (balance 26 points) and Sub-Saharan-Africa and the Middle East (balance 33 points), companies assess their current business situation as somewhat less good than the global average. However, there have also been some significant improvements in these regions compared with the previous survey.

Business expectations increase slightly

Contrary to what the global decline in the economic expectations of German companies abroad would suggest, companies are more optimistic about the development of their own business. 56 percent expect an improvement in the next twelve months, only six percent expect a deterioration. The balance of better minus worse assessments amounts to 50 points and is slightly higher than in the previous survey (spring 2021: 44 points).

It is true that companies are more confident about the development of their own business than about the economic development in the country in general. However, in view of the necessary economic catch-up process following last year's downturn, expectations are cautious. One possible explanation for the different assessments of the development of their own businesses and the development of the economy in total is that German companies operating internationally are often able to compensate for disadvantages in one location by doing better business in other locations, thus minimizing their business risks through diversification. These companies therefore assess their business expectations partly decoupled from the local economy.

The discrepancy between economic and business expectations is most evident in South and Central America. Here, business expectations have stagnated at the same level as in the previous survey (balance of 42 points), but economic expectations have fallen significantly (balance of minus 17 points).

In China and North America, fewer companies than in the previous survey expect business to improve in the coming twelve months (balance deterioration of six points in China and ten points in North America). Compared with the other regions of the world, business expectations in China are also the lowest (balance of 38 points). While companies in North America still had the highest expectations in the spring, they are now in the middle of the pack (balance 53 points).

In Asia and the Pacific (balance 58 points) and Africa and the Middle East (balance 57 points), companies have the highest expectations in comparison to other regions. In the Euro area (balance 52 points) and the EU, Switzerland, Norway and the United Kingdom (balance 47 points), companies are raising their business expectations the most compared with the previous survey.

Planned investment expenditures by companies increase significantly

Based on the improved business situation as well as the increased business expectations, companies are planning higher investment expenditures in the coming twelve months. 42 percent of the companies plan to make higher investments, 13 percent want to reduce them. The balance of higher and lower investment plans is 29 points. The only time companies have had higher investment plans since the start of the survey was in spring 2018 (balance of 33 points).

Despite the overall increase in investment plans, one third of companies still report having to postpone or cancel investment plans altogether due to the existing effects of the coronavirus pandemic. Among companies planning to invest less than recently, as many as 40 percent report having to postpone or cancel investments. Of the companies planning to invest less, 22 percent complain about liquidity bottlenecks and 25 percent about financing problems - significantly more than in the overall economy (where 14 percent cite liquidity bottlenecks and 20 percent financing as a business risk).

In view of the lower economic and business expectations in China, companies in these locations are planning to invest less than in spring (balance 19 points after 30 points last time). In the other regions of the world, companies are raising their investment plans. The increase is strongest in the Eurozone (balance 35 points after eleven points most recently).

Companies intend to hire more employees

As companies primarily expect their own business to improve, many are expanding their employment plans for the coming twelve months. 46 percent - and thus 11 percent more than in the previous survey - want to hire more staff, while eight percent want to reduce staff. The balance of higher minus lower employment plans reaches 38 points, the highest value since the survey began. However, the shortage of skilled workers has gained in importance worldwide. This could stand in the way of companies expanding their workforce. At 48 percent (37 percent overall), the shortage of skilled workers poses the greatest challenge to companies planning to increase their workforce.

Companies in all regions of the world are planning to hire more staff in the future. Compared with the previous survey, companies in the Asia-Pacific region (excluding China) are raising their employment plans the most (balance of 40 points compared with 18 points previously). Only in North America do companies express somewhat lower employment plans than in the previous survey (balance of 40 points, down from 43 points).

Impact of the coronavirus pandemic

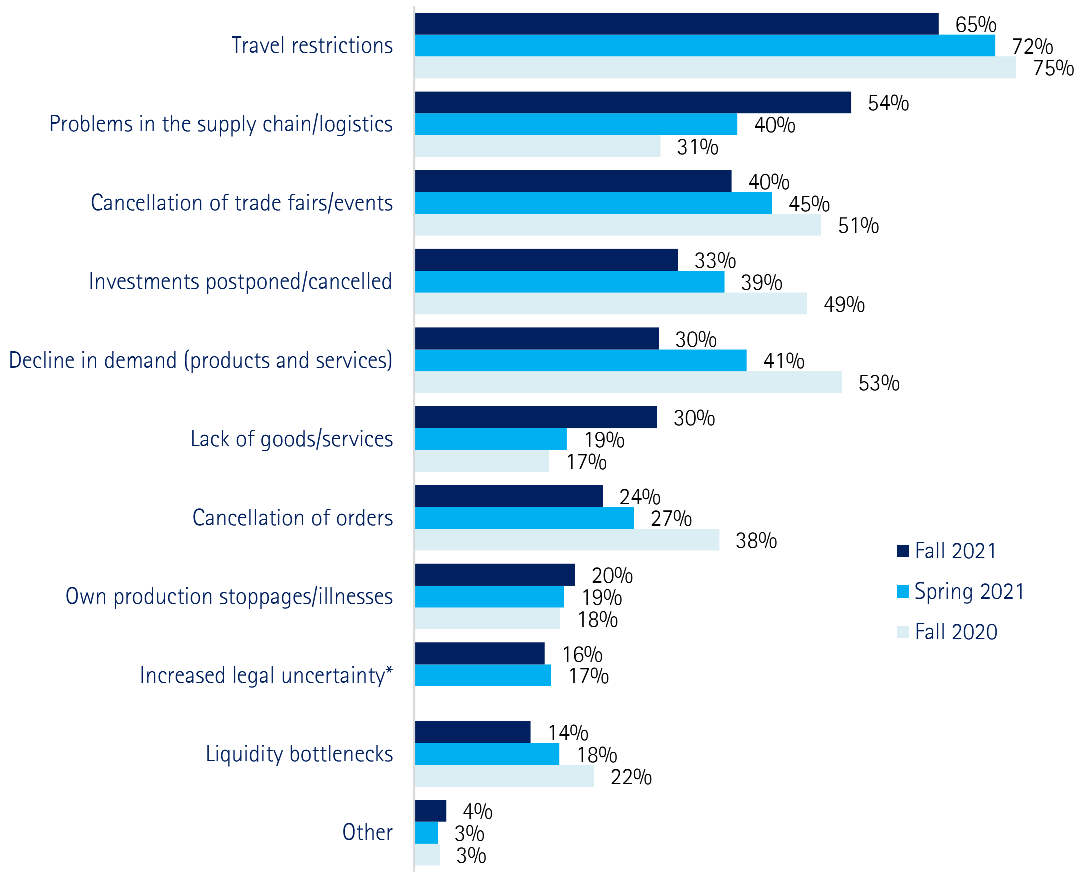
The effects of the coronavirus pandemic continue to pose major challenges for German companies in many places more than a year and a half after the crisis began. Problems in the supply chain and travel restrictions are causing disruptions to operations.

Travel restrictions weigh on international business

For two thirds of companies (65 percent), travel restrictions are still an obstacle, especially at locations in China (85 percent) and the Asia-Pacific region (82 percent). Worldwide, around the same number of companies are currently citing this obstacle as at the start of the pandemic in April 2020. The lack of personal contact means that business deals cannot be concluded or installation and maintenance work on machinery cannot be carried out.

Impact of the coronavirus pandemic on companies

Multiple answers possible, *asked for the first time



Supply chain problems come to a head

More than half of German companies abroad (54 percent) report supply chain and logistics problems because of the coronavirus pandemic. Compared with spring 2021, the figure rises by 14 percentage points and reaches an all-time high. Companies in North America cite supply chain problems most frequently (66 percent).
30 percent of companies worldwide report a lack of goods and services - another effect that has never been mentioned so frequently. In addition, companies are reporting their own production stoppages more frequently than last

time (20 percent, up from 19 percent). This, too, may be an impact of supply chain disruptions. For example, companies experiencing supply chain and logistics issues are more likely than average to report missing goods and services (42 percent) and loss of production (24 percent).

Industrial and construction companies are particularly affected by supply chain disruptions and their impact. Three out of four companies in this sector have problems in their supply chains or logistics, one in four reports loss of production and 38 percent complain about missing goods or services.

The problems in the international supply chains have already been continuing for several months. In addition to increased demand on the one hand and insufficient production capacities on the other, companies see transport problems, here in particular due to a lack of containers and freight capacities on ships, and production stoppages at suppliers as the main causes of the supply chain disruptions. [1]

Challenges remain numerous

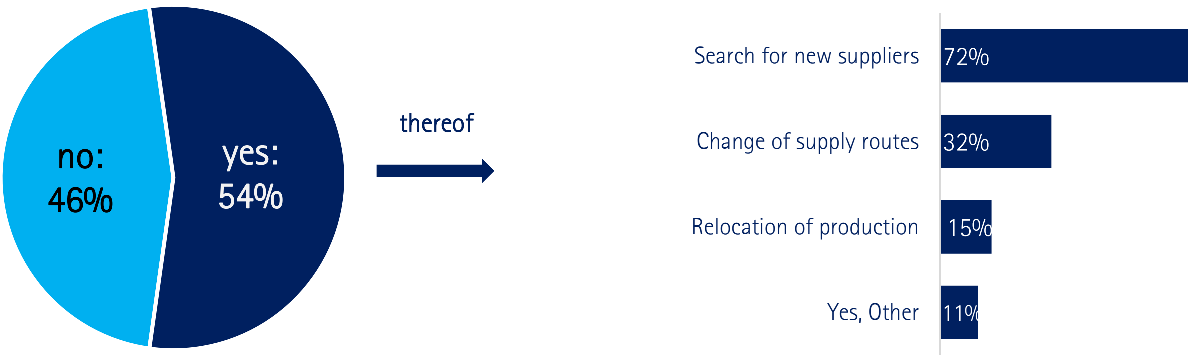
In addition to the exacerbated supply chain problems, companies are confronted with other challenges. Trade fairs and events continue to take place only to a limited extent, which has a negative impact on two out of five companies. Due to existing uncertainties, one third of the companies report postponed or cancelled investments, 14 percent report liquidity bottlenecks. A quarter of the companies report cancelled orders. 16 percent continue to report increased legal uncertainties because of the coronavirus pandemic.

Compared to the previous surveys, fewer and fewer companies report a pandemic-related decline in demand (30 percent). Thus, the current challenges are not primarily on the demand side but on the supply side.

Companies are adapting their supply chains

Faced with the challenges in international business, companies are adapting their supply chains. 54 percent of companies want to diversify their supply chains. For companies reporting supply chain problems as a result of the impact of the pandemic, this figure is as high as 67 percent.

Among the companies that want to adjust their supply chains, 72 percent are looking for new suppliers, and 32 percent are planning to change or shorten supply routes. It is striking that 15 percent of the companies want to relocate their production or parts of their production to new locations.



[1] This is shown by a DIHK survey on supply bottlenecks and shortages of raw materials among German companies in Germany and abroad.

Risks for German companies abroad

In addition to the direct effects of the measures to contain the coronavirus pandemic, other factors are creating risks in the day-to-day business of German companies abroad.

Two out of five companies are concerned about the economic policy framework conditions at their locations. Nevertheless, this is the lowest figure worldwide since the survey began. In South and Central America, however, the economic policy framework represents the greatest business risk (63 percent) - the proportion is similarly high in Turkey (62 percent). Financing risk has also fallen to its lowest level since the survey began but is still cited by a fifth of companies. Companies in Africa and the Middle East have more difficulties with financing (34 percent) than companies in other locations. A lack of legal certainty is rated as a business risk by fewer companies than in the spring survey (18 percent, down from 23 percent) - but more frequently in countries in South and Central America (36 percent).

For 23 percent the risk of foreign exchange rate and for 22 percent of companies, trade barriers and preference for domestic companies create uncertainty in their business. In Turkey, the risk of foreign exchange rate is seen as the greatest business risk (73 per cent). Trade barriers, on the other hand, affect companies in Iran (60 percent) and the United Kingdom (43 percent) in particular.

Raw material prices are a stumbling block

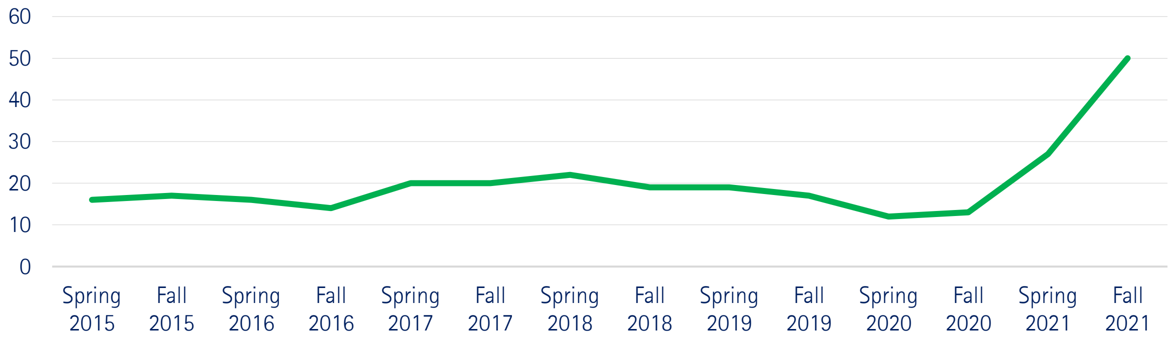
44 percent of companies cite increased raw material prices as a business risk - no risk is currently cited more frequently. In the industrial and construction sector, more than two-thirds of companies are affected. Although higher prices are a burden for companies worldwide, the risk of raw material prices is reported particularly frequently at locations in China (55 percent) and in the Asia-Pacific region (49 percent), as well as in the Eurozone (47 percent).

In recent months, there have been significant price increases for numerous raw materials and intermediate products. Following the decline in global economic output last year, production and thus demand for raw materials have increased significantly. As a result, there are supply bottlenecks and increased prices worldwide. Companies that cite the level of raw material prices as a business risk are most affected by problems in the supply chain or logistics (76 percent).

The level of energy prices is cited as a business risk by 23 percent of companies. In addition to higher prices for raw materials and intermediate products, numerous energy sources have also become much more expensive in recent months. Companies in the EU cite this risk more frequently than the global average (Eurozone: 31 percent; other EU countries: 28 percent). There, in contrast to other regions, energy costs have risen significantly in the past year, partly due to the CO_2 charges that companies have to pay as part of emissions trading within the EU.

For the first time, energy and raw material prices were surveyed separately. Cumulatively, half of the companies (50 percent) see energy and raw material prices as a risk to their future business development. Compared to the previous survey (27 percent), the proportion has again increased significantly.

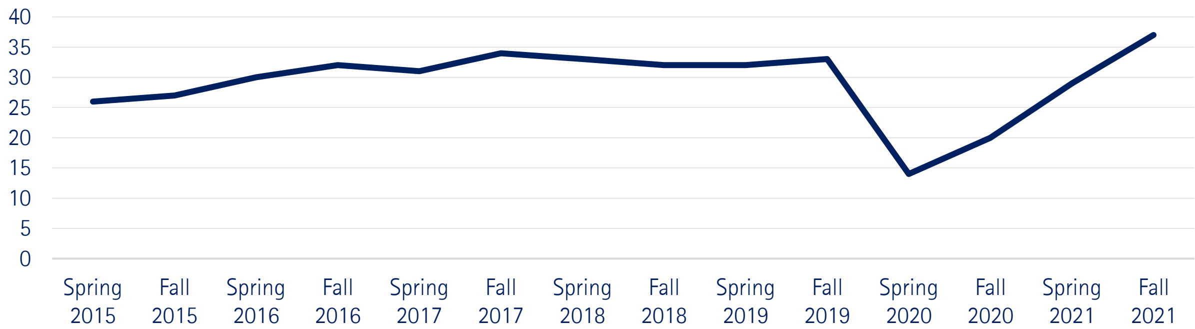
Business risk energy and raw material prices
in percent



Shortage of skilled workers gains importance

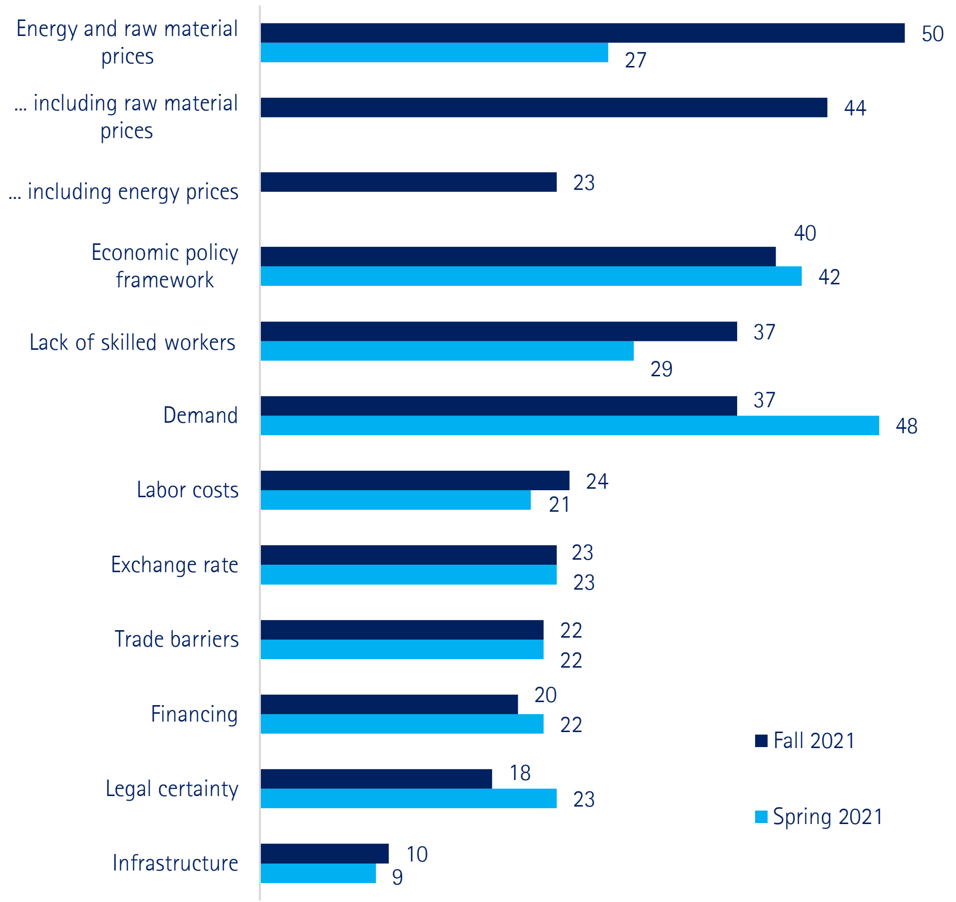
For 37 percent of German companies abroad, the shortage of skilled workers represents a business risk. Since the beginning of the survey this is the highest proportion of companies to report difficulties in finding and recruiting skilled workers. In the spring survey, 29 percent had already cited this hurdle. Labor costs are also on the rise again and will put a strain on the economic development of just under a quarter of the companies (24 percent) in the coming twelve months. Skilled labor shortages and rising labor costs could dim companies' increased employment plans. Among companies planning to hire more staff in the coming months, the shortage of skilled workers is the most frequently cited business risk at 48 percent. Companies in the US (60 percent) and the UK (55 percent) are particularly affected by skilled workers shortages.

Business risk lack of skilled workers
in percent



Risks for the global economy in the coming twelve months

in percent, multiple answers possible,
*Energy and raw material prices were asked as one category in the spring.



Statistical annex

Analysis of results by country

Balance of good/better answers minus bad/less answers in each case

	Current business situation	Business expectations	Economic expectations on site	Investment plans	Employment plans
World total	**41**	**50**	**24**	**29**	**38**
Eurozone	**46**	**52**	**28**	**35**	**36**
Finland	49	54	27	23	51
France	61	54	32	29	32
Greece	46	71	42	57	44
Ireland	61	61	39	44	54
Italy	47	55	46	33	48
Portugal	36	46	21	26	32
Slovakia	45	20	20	0	30
Slovenia	60	40	30	-5	55
Spain	41	43	13	47	38
Other EU, Switzerland, Norway, UK	**53**	**47**	**14**	**29**	**41**
Bulgaria	60	30	-10	5	25
Denmark	64	68	41	25	48
Romania	57	33	-10	21	24
Sweden	62	62	58	42	52
Switzerland	69	34	34	25	24
Czech Republic	64	41	36	50	45
Hungary	50	38	26	35	39
United Kingdom	45	48	-12	23	43
Eastern/South Eastern Europe (without EU), Russia, Turkey	**63**	**40**	**2**	**22**	**41**
Bosnia and Herzegovina	67	50	4	9	29
North Macedonia	33	45	-30	17	30
Russian Federation	69	35	12	20	42
Serbia	32	63	12	48	46
Turkey	68	52	-8	31	47
Belarus	33	-7	-54	-31	22
Asia/Pacific (excluding China)	**34**	**58**	**40**	**27**	**40**
India	56	68	67	45	44
Indonesia	42	70	39	32	38
Japan	17	56	45	13	36
Malaysia	28	61	25	18	35
New Zealand	25	63	-13	17	56
Philippines	12	54	22	1	19
Singapore	55	30	25	26	50
South Korea	29	56	31	20	38
Thailand	14	48	6	19	40
Vietnam	-21	42	7	9	18

	Current business situation	Business expectations	Economic expectations on site	Investment plans	Employment plans
Greater China	**27**	**38**	**16**	**20**	**41**
China	26	36	14	19	42
Hong Kong	27	36	14	5	-5
Taiwan	38	49	34	29	47
North America	**45**	**53**	**32**	**37**	**40**
Canada	75	58	50	17	29
Mexico	10	54	6	17	17
USA	50	52	36	44	48
South and Central America	**26**	**42**	**-17**	**16**	**19**
Argentina	13	10	-55	5	23
Bolivia	-6	42	-23	-20	-13
Brazil	50	53	-8	26	28
Chile	36	33	-48	0	14
Ecuador	-21	62	43	34	7
Peru	35	39	-68	-15	10
Venezuela	-31	10	-21	5	-14
Africa, Near and Middle East	**33**	**57**	**36**	**34**	**34**
Egypt	49	64	52	47	50
Iran	14	26	-11	-3	3
Kenya	14	50	-14	17	21
Saudi Arabia	36	77	50	47	23
South Africa	7	38	-7	0	17
Tunisia	6	40	7	28	27
United Arab Emirates	32	59	56	32	27

Imprint

Association of German Chambers of Industry and Commerce e. V.
International Economic Policy, Foreign Trade Law

Publisher and Copyright

Postal address: 11052 Berlin | House address: Breite Straße 29 | Berlin-Mitte
Phone 030 20308-0 | Fax 030 20308-1000

DIHK Brussels
Representation of the Association of German Chambers of Industry and Commerce to the European Union
19 A-D, Avenue des Arts | B-1000 BruxellesTelephone : +32 2 286-1611 | Fax +32 2 286-1605

DIHK Online
Homepage | Facebook | Twitter | Linkedin | Instagram | Youtube

Editorial
Carolin Herweg, Lola Machleid, Melanie Vogelbach

Graphic
Friedemann Encke, Sebastian Titze

Photo credits
https://www.gettyimages.de/

Date
November 2021