



The impact of the Covid-19 pandemic: evidence from a new establishment survey

Lutz Bellmann, Patrick Gleiser, Christian Kagerl, Eva Kleifgen, Theresa Koch, Corinna König, Ute Leber, Laura Pohlan, Duncan Roth, Malte Schierholz, Jens Stegmaier, Armin Aminian

The Covid-19 pandemic has so far had a sizeable impact on the German economy: gross national product fell by 5.3 percentage points in 2020 and by December, the number of unemployed had risen by approximately 480,000 compared to 2019. A new high-frequency survey conducted by the IAB since August 2020 sheds light on how establishments have adapted to the pandemic. Results show that the share of establishments that laid off workers has been limited. However, short-term work schemes are being used extensively as well as other personnel measures. Despite initial concerns, the vocational training system has remained robust.

The Covid-19 pandemic has precipitated an economic crisis that shares certain similarities with [the Great Recession](#), not least the wide-spread use of short-term work schemes. However, there are also important differences. The Great Recession was primarily driven by a decline in the demand for goods in export-intensive sectors such as the automotive industry, mechanical engineering and chemistry, which was caused by a global collapse of banking

Quelle:

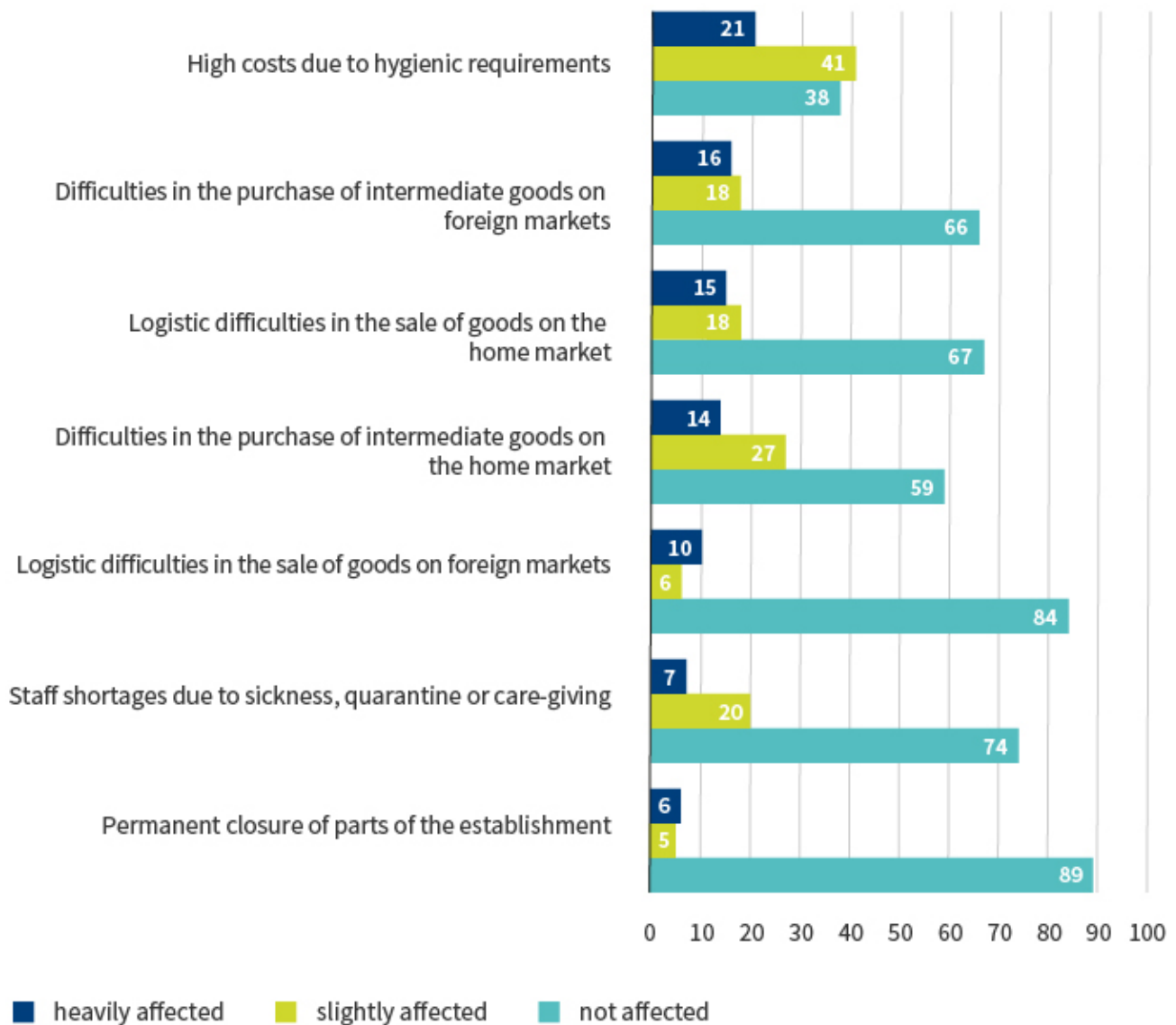
<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 1

and finance companies. By contrast, the need to reduce personal contacts – at home as well as at the workplace – that has characterised the current crisis, also means that a wider range of sectors has been affected.

In light of a rapidly evolving situation, timely information about the pandemic's impact on businesses and their responses is of prime importance. To address this need, the IAB has implemented the new high-frequency survey "Establishments during the Covid-19-crisis". After having been conducted for the first time in August 2020, the survey has been repeated approximately every three weeks. Results indicate that the Covid-19 pandemic had an impact on businesses along various dimensions. Based on responses that were given in the first wave of the survey at the beginning of August, Figure 1 shows that establishments were not only confronted with higher costs due to hygiene requirements (21 % were heavily affected). They also experienced difficulties purchasing intermediate goods and services from abroad (16 % heavily affected) or on the home market (14 % heavily affected). Many establishments also faced logistic difficulties in the sale of goods on the home market (15 % heavily affected) or on foreign markets (10 % heavily affected). By contrast, staff shortages due to sickness, quarantine or care duties as well as permanent closure of (parts of) the establishments occurred less often.

Figure 1: Different impacts of the Covid-19 pandemic

Share of establishments in percent (N = 1,723)



Note: The results are based on 1,723 establishments.

Source: First wave of the "Establishment during the Covid-19-crisis" survey (3–18 August 2020). Own calculations.

© IAB

The Covid-19 pandemic has not led to widespread

layoffs

A major concern associated with the Covid-19 pandemic is that it might lead to widespread layoffs. However, results from the survey suggest that the fraction of establishments that laid off workers was comparatively small in the aftermath of the first wave of the pandemic (see Table 1). When asked in August 2020 about their recruitment activities since the start of the pandemic, about 9 in 10 establishments reported that they have neither laid off nor hired workers (71 %) or that they exclusively recruited new workers (17 %). By contrast, only 9 percent of establishments stated that they exclusively laid off workers and a further 3 percent both recruited and laid off workers.

An assessment of these values is complicated by the fact that it is unknown to what extent establishments would have hired or laid off workers, had the Covid-19 pandemic not occurred. Results from [a recent IAB publication](#), however, show that the net flows from employment into unemployment have been higher in 2020 than in 2019. This increase in net flows occurred mainly during April and May 2020 and was driven both by larger flows from employment to unemployment and by fewer transitions out of unemployment into employment. However, in June and July 2020, net flows into unemployment were again close to their 2019 values.

Table 1: Development of establishments' hiring and layoff behaviour

Share of establishments in percent

	Wave 1: 03.08.– 18.08.2020 ¹ (N = 1,721)	Wave 2: 24.08.– 04.09.2020 (N = 1,551)	Wave 3: 14.09.– 25.09.2020 (N = 1,727)	Wave 4: 05.10.– 19.10.2020 (N = 1,785)	Wave 5: 26.10.– 09.11.2020 (N = 1,756)	Wave 6: 16.11.– 27.11.2020 (N = 1,995)	Wave 7: 07.12.– 18.12.2020 (N = 1,507)
Neither layoffs nor hires	71	78	80	79	82	85	84
Only layoffs	9	3	2	5	4	3	5
Only hires	17	17	17	14	11	10	9
Layoffs and hires	3	1	1	2	2	1	2

Notes: ¹ In the first wave, values refer to the period since the start of the pandemic.

Source: Various waves of the "Establishment during the Covid-19-crisis" survey. Own calculations.

© IAB

Beginning with wave 2 in August/September 2020, establishments were asked about their

recruitment behaviour during the three-week period preceding the interview. Between August and October, the share of establishments that recorded neither hires nor layoffs remained roughly constant at approximately 80 percent. Coinciding with an increase in the number of infections and a discussion about renewed lockdown measures, this share started rising from late October/early November (wave 5) onwards, reaching a value of about 85 percent in November and December. At the same time, fewer establishments reported to be exclusively hiring new workers, the corresponding share dropping to 10 percent in December. By contrast, the share of establishments reporting layoffs increased only slightly.

While these findings do not provide information about how many workers have been made redundant by those establishments that reported layoffs, they suggest that redundancies have, so far, not been the primary response to the crisis.

Recruiting and layoff behaviour varies between sectors

The Covid-19 pandemic has affected sectors differently. One reason for this are the lockdown measures that have been put in place to contain the spread of the pandemic. These measures have had a larger impact on the ability of establishments to conduct business in some sectors than in others. Establishments from more affected sectors may also display different reactions in terms of hires and layoffs. A recent study has shown that regions with a larger share of employees in severely affected sectors, including accommodation and food services, experienced a larger increase in the net flows from employment into unemployment.

The results from the employment survey also show that hires and layoffs are different in the accommodation and food services sector. From the start of the pandemic until August, the fraction of establishments that either recruited new workers or that have neither laid off nor hired workers is smallest in the accommodation and food services sector (82 %) – a finding that is also supported by results from the IAB vacancy survey. At the same time, this sector also reports the largest fraction of establishments that have exclusively laid off workers (17 %). This result is in line with the fact that more than three quarters of establishments from this sector (78 %) reported to have been strongly negatively affected by the pandemic until the end of May (compared to an average of 33 %). From the end of October onwards, the share of establishments in that sector that reported redundancies continues to be among the highest.

The share of establishments who have laid off workers at the beginning of the pandemic is also comparatively high in the transportation and storage as well as the information and

Quelle:

<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 5

communication sector (15 % in both cases). This share continues to be comparatively high from October onward, reaching a value of 15 percent in December. At the other end of the spectrum, the share of establishments reporting layoffs has been relatively low in the construction sector as well as in the education, health and social work sector.

Short-time work schemes dampened the impact of the Covid-19 pandemic

One reason that the extent of layoffs has so far been limited is the use of publicly subsidised short-time work. This instrument gained prominence during the Great Recession where it contributed to curtailing the number of redundancies. However, the number of workers covered by short-time work schemes has reached a new level during the pandemic. According to current estimates by the Federal Employment Agency, approximately 2.6 million workers were on short-time work in August 2020 (down from almost 6 million employees in April 2020). The establishment survey provides information from which the share of establishments that use short-time work can be estimated.

Table 2 shows that up to November approximately one in five establishments reported to have adopted short-time work schemes. Results from the most recent survey wave indicate that this fraction increased to a quarter of all establishments in December. This increase may reflect the fact that the second lockdown, which was put in place in December following a limited set of restrictions in November, put pressure on establishments.

Table 2: Adoption of short-time work – over time and by sector

Share of establishments in percent

	Wave 3: August 2020 (N = 1,732)	Wave 3: 14.09.– 25.09.2020 (N = 1,732)	Wave 4: 05.10.– 19.10.2020 (N = 1,787)	Wave 5: 26.10.– 09.11.2020 (N = 1,757)	Wave 6: 16.11.– 27.11.2020 (N = 1,999)	Wave 7: 07.12.– 18.12.2020 (N = 1,509)
Manufacturing	33	33	34	30	21	26
Construction	9	9	11	10	9	11
Wholesale and retail trade; repair of motor vehicles and motorcycles	24	22	21	18	22	22
Transportation and storage	31	29	26	32	32	61
Accommodation and food services	40	38	35	55	78	74
Other services	21	16	19	19	21	25
Education, medical services and welfare	23	18	20	18	14	16
Total	22	20	21	21	22	26

Notes: Results for the sectors “Agriculture, forestry, mining and energy” as well as “Information and communication” are not shown due to the limited number of establishments in these sectors. Two values are shown for the third survey wave. The first value refers to the share of establishments that report, retrospectively, having used short-time work schemes in August, while the second refers to the use of short-time work at the time of the survey.

Source: Various waves of the “Establishment during the Covid-19-crisis” survey. Own calculations.

© IAB

The use of short-time work differs considerably between sectors. The use of such schemes is particularly pronounced in the accommodation and food services sector, especially during the two most recent survey waves. During November and December, almost three quarters of all establishments in this sector reported to be using short-time work. A comparatively high incidence can also be found among establishments in the transportation and storage sector where the share of establishments using short-time work increased to 61 percent in the most recent wave. Until November, the use of short-time work is also comparatively widespread among establishments in the manufacturing sector. By contrast, the use of short-time work appears to be relatively limited in the construction sector, with only about 10 percent of establishments reporting to be making use of it.

Quelle:

<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 7

A variety of additional personnel measures have been adopted in response to the crisis

While short-time work continues to be intensively used, establishments have also adopted other personnel measures (see Table 3). By the beginning of August, the use of short-time work coincided with establishments asking their employees to reduce holiday credits (32 %) and time credits (19 %) in order to avoid short-time work as much as possible. Furthermore, working hours were reduced by 16 percent on average over all establishments – a phenomenon that is in line with international empirical evidence as shown by the [OECD Economic Outlook 2/2020](#). 23 percent of establishments introduced working-from-home opportunities and 17 percent extended already existing schemes. The proportion of establishments that delayed the granting of tenure or suspended the hiring of apprenticeship graduates are much lower. In contrast, some establishments reported the accumulation of overtime (13 %), working time extensions (9 %) and the use of further training (9 %) to adjust the workforce to the changing economic situation.

Table 3: Personnel measures adopted in response to the crisis

Share of establishments in percent (multiple answers possible, N = 1,723)

	A	B	C	D	E	F	G	H	I	J	K
Agriculture, forestry, mining and energy	10	15	13	5	12	5	5	3	1	15	9
Manufacturing	22	10	29	38	15	2	3	6	7	17	9
Construction	12	8	10	23	11	1	2	4	12	15	10
Wholesale and retail trade; repair of motor vehicles and motorcycles	15	11	18	32	19	1	5	1	6	14	9
Transportation and storage	14	7	31	41	23	7	6	3	5	5	5
Accommodation and food services	7	7	17	47	23	4	5	5	3	15	9
Information and communication	44	52	19	27	11	2	1	5	7	10	9
Other services	36	29	16	27	12	2	3	1	13	11	10
Education, medical services and welfare	26	13	38	47	22	0	3	1	11	16	7
1–9 employees	17	14	13	26	14	1	3	1	7	9	9
10–49 employees	31	21	33	42	19	2	4	3	13	21	8
50–249 employees	50	32	43	53	16	5	10	12	20	23	18
250+ employees	66	48	39	50	18	16	19	21	16	34	16
Total	23	17	19	32	16	2	4	2	9	13	9

A: Working-from-home newly introduced; B: Working-from-home extended; C: Reduction of time credits; D: Reduction of holiday credits; E: Reduction of working hours; F: Delay in granting tenure; G: No hiring of apprenticeship graduates; H: Reduction of temporary employment; I: Further training of employees; J: Accumulation of overtime; K: Extension of working times

Notes: The results are based on 1,723 establishments.

Source: First wave of the "Establishment during the Covid-19-crisis" survey (3–18 August 2020). Own calculations.

© IAB

The use of these personnel measures differs across economic sectors and establishment sizes: home office arrangements are much more prevalent in sectors such as information and communication, other services, education, medical services and welfare. In comparison, they are less prevalent in accommodation and food service, agriculture, forestry, mining and energy as well as construction. Delayed tenure and the reduction of temporary employment both occur more often in larger establishments.

Quelle:

<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 9

Health and safety regulations

The Covid-19 pandemic has led to an adjustment in health and safety regulations at the workplace with the aim of protecting workers and slowing the spread of the corona virus as presented in a [publication by the Federal Institute for Occupational Safety and Health in 2020](#). These adjustments are at least partly associated with higher organisational demands and additional costs as presented in a publication by the Federal Institute for Occupational Safety and Health in 2020: slightly more than half of the establishments that were contacted during the fourth wave of the survey reported that hygienic regulations meant that they faced either slightly or considerably higher costs. A more detailed treatment of the issue of health and safety regulations was the subject of the second wave of the survey, which was conducted in cooperation with the Federal Institute for Occupational Health and Safety.

The results show that about 80 percent of establishments have put new measures into place, with 3 out of 4 establishments also having put these regulations into writing. Out of the 14 measures that were listed in the survey, establishments implemented 8 measures on average. Moreover, the data reveal a clear distinction between differently sized establishments: while establishments with less than 10 employees implemented 7 measures on average, this quantity increases to 11 in the case of establishments with 250 or more employees. This finding is in line with the fact that a greater share of large establishments stated to have incurred higher costs due to hygienic requirements than is the case for smaller establishments. A possible explanation for the difference in the number of measures is that larger establishments already made use of schemes such as working-from-home before the crisis and found it easier to implement them during the pandemic. Another reason might be that larger establishments are more likely to have the resources to coordinate and implement health and safety regulations. Finally, ensuring a safe working environment might be more difficult in large establishments as the possible number of contacts increases with the number of employees.

A core set of measures have been implemented in most sectors. These include providing information concerning coughing and sneezing guidelines, asking employees who display symptoms not to come to the workplace, providing general information, increasing hand washing opportunities and implementing distancing rules. The use of additional measures, however, appears to be more sector-specific. For example, the share of establishments allowing employees to work from home is especially high in the information and communication sector (72 %). Adjustments to working schedules and break times have been carried out in the education sector (53 %) as well as in manufacturing (47 %). Establishments in the retail sector as well as in the health and social services sector use protective screens

Quelle:

<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 10

relatively often (52 % in both cases).

Initial vocational training system more robust than expected

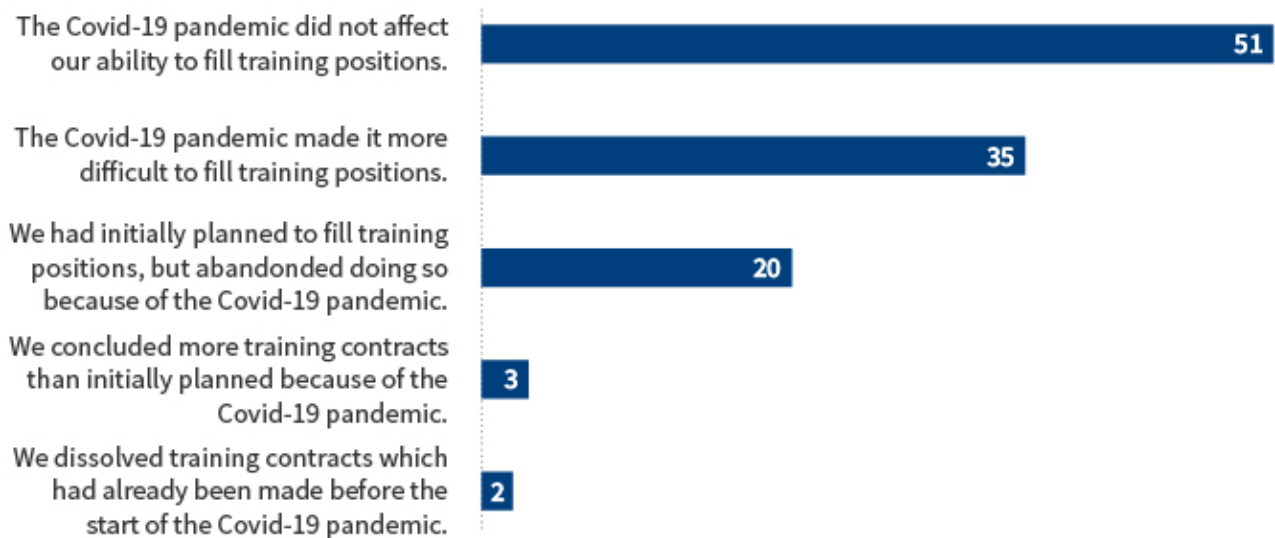
If parts of an establishment have to be closed temporarily or employees are placed on short-time work schemes, it is challenging to adequately provide establishment-based vocational training. The same holds for school-based training. Many establishments who were conducting vocational training during spring and summer are confronted with a number of challenges: half of the establishments reported to have to postpone examinations. Approximately every third establishment stated that vocational training could not take place as planned and every fifth reported that supervising and coaching of apprenticeship trainees was not possible because of short-time work, while working-from-home (13 %) and the absence of persons responsible for apprentices (10 %) were further obstacles.

A comparison of sectors shows that the accommodation and food services sector was particularly affected with 60 percent of establishments indicating that training could not take place as planned. Moreover, every second establishment in this sector adopted short-time work schemes which limited the ability to supervise and coach trainees. Above-average adverse effects on vocational training also occurred in the finance and insurance sector.

A particular concern is that the Covid-19 pandemic could lead to frictions in the transition from training into employment if establishments faced limited capacities to provide apprenticeship positions or potential trainees decided not to take up such positions due to concerns over limited training conditions or workplace safety. However, according to the results of the survey's third wave, every third establishment planned to fill apprenticeship positions. As Figure 2 shows, every second establishment within this group did not report any pandemic-induced effects.

Figure 2: Responses of apprenticeship training establishments to the Covid-19 pandemic

Share of establishments in percent (multiple answers possible)



Notes: The results are based on 774 establishments that planned to fill apprenticeship places in the training year 2020/21.

Source: Third wave of the "Establishment during the Covid-19-crisis" survey (14–25 September 2020). Own calculations.

© IAB

Every third establishment indicated that filling training places proved to be more difficult than expected. Although every fifth establishment had to abandon the initially scheduled filling of training positions for different reasons, only 2 percent dissolved training contracts that had been made before the pandemic. In contrast, 3 percent of the establishments concluded more training contracts than planned. Again, the accommodation and food services sector as well as establishments delivering other services reported more severe conditions. In contrast, establishments in construction as well as trade and repair services see themselves confronted with fewer problems because the Covid-19 pandemic has affected these establishments to a smaller extent. The proportion of establishments that suspended the hiring of trainees stood at 7 percent. In contrast, 1 percent of the establishments hired more training graduates than planned. In light of the severe recession in the second quarter of 2020, the immediate impact on vocational training was relatively limited.

Quelle:

<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 12

Conclusion

Our article summarises a number of results from IAB's new high-frequency establishment survey which shows the dynamic development of the German labour market during the Covid-19 pandemic so far. According to the results, the challenges that establishments are confronted with are due to high costs of hygienic requirements as well as difficulties purchasing and selling goods and services. However, the findings also suggest that establishments have not responded to the pandemic by instituting widespread layoffs. Instead, short-time work and working-from-home have increased. Although establishments faced obstacles in providing initial vocational training, the apprenticeship system has been more robust than expected.

How establishments will be able to deal with the pandemic during the next months will also depend on the roll-out of vaccines and on the extent to which measures aimed at the containment of the corona virus can be loosened. In light of the uncertainty surrounding these developments, an ongoing monitoring of the dynamics of employment, unemployment and short-time work is indispensable. The survey produces up-to-date information on how establishments adjust to these developments and as such can contribute to addressing this need. While previous waves of the survey have focussed on the adoption of working-from-home schemes as well as on-the-job training, future waves will be devoted to the impact of the Covid-19 pandemic on digitalisation as well as on apprenticeship training.

The survey

The survey "Establishments during the Covid-19-crisis" is based on a representative sample of all private-sector establishments in Germany. Potential survey participants are drawn from the entirety of establishments that are registered with the Federal Employment Agency (establishments from the public sector are excluded and so are private-sector establishments that did not record a single employee subject to social security contributions eight months before the survey).

Establishments are then selected using stratified random sampling. This means that potential sample participants are drawn randomly within pre-defined groups of establishments (where groups are determined by sector and establishment size). This ensures that establishments from all subpopulations are interviewed and that sampling error is reduced. The resulting sample is representative of all private-sector establishments in Germany.

Quelle:

<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 13

The number of establishments that is initially drawn is considerably larger than the number of eventual participants. This is the case because establishment records, while including an address, do not always provide a telephone number or because establishments decline to take part in the survey. The survey institute KANTAR researches telephone numbers, contacts establishments by telephone and conducts an interview of approximately 10 minutes among those establishments willing to participate. Interviews consist of questions that are asked repeatedly (e.g., concerning the overall impact of the pandemic or whether establishments have hired or laid off workers), while other questions are wave-specific (e.g., questions concerning health and safety regulations constituted a focus topic of the second wave). Interview partners are preferably persons in a management capacity and, when possible, the same person is interviewed again, if the establishment is contacted during a subsequent wave. Each wave contains between about 1,500 and 2,000 establishments.

The first wave was carried out between 3 August and 18 August 2020. The subsequent waves were conducted approximately every third week (wave 2: 24 August – 4 September, wave 3: 14 – 25 September, wave 4: 5 – 19 October, wave 5: 26 October – 9 November, wave 6: 16 – 27 November, wave 7: 7 – 18 December). The results from all waves will be made available on the IAB homepage immediately.

Literature

Bellmann, Lutz; Fitzenberger, Bernd; Gleiser, Patrick; Kagerl, Christian; Kleifgen, Eva; Koch, Theresa; König, Corinna; Leber, Ute; Pohlen, Laura; Roth, Duncan; Schierholz, Malte; Stegmaier, Jens; Aminian, Armin (2020): [Betriebliche Ausbildung trotz Erschwernissen in der Covid-19-Krise robuster als erwartet](#). In: IAB-Forum, 5 November 2020.

Bellmann, Lutz; Fitzenberger, Bernd; Gleiser, Patrick; Kagerl, Christian; Kleifgen, Eva; Koch, Theresa; König, Corinna; Leber, Ute; Pohlen, Laura; Roth, Duncan; Schierholz, Malte; Stegmaier, Jens; Aminian, Armin (2020): [Im Oktober war weiterhin ein Drittel der Betriebe im Verarbeitenden Gewerbe und im Gastgewerbe in Kurzarbeit](#). In: IAB-Forum, 6 November 2020.

Bellmann, Lutz; Kagerl, Christian; Koch, Theresa; König, Corinna; Leber, Ute; Schierholz, Malte; Stegmaier, Jens; Aminian, Armin (2020): [Was bewegt Arbeitgeber in der Krise? Eine neue IAB-Befragung gibt Aufschluss](#). In: IAB-Forum, 25 September 2020.

Böhme, Stefan; Burkert, Carola; Carstensen, Jeanette; Eigenhüller, Lutz; Niebuhr, Annekatriin;

Quelle:

<https://www.iab-forum.de/en/the-impact-of-the-covid-19-pandemic-evidence-from-a-new-establishment-survey/> | 14

Roth, Duncan; Siegl, Georg; Wiethölter, Doris (2020): [Die Bedeutung der regionalen Wirtschaftsstruktur für die Arbeitsmarkteffekte der Corona-Pandemie – Eine erste Einschätzung](#). IAB-Forschungsbericht 2020, No. 15.

Gürtzgen, Nicole; Kubis, Alexander; Küfner, Benjamin: [Grossbetriebe haben während des Covid-19-Shutdowns seltener als kleine Betriebe Beschäftigte entlassen](#). In: IAB-Forum on 3 July 2020.

[OECD Economic Outlook Volume 2020](#), No. 2, accessed on 25 February 2021.