

2.3 The ifo Business Survey in the Manufacturing Industry

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2.3.1 Beginnings and Development of the Panel

The manufacturing industry is the economic sector that sets the pace for economic activity in Germany and, therefore, is one of the main drivers for the business cycle. Thus, information about current developments in this sector is valuable for business cycle analysis. The ifo Institute started its survey activity with this sector and introduced the monthly ifo Business Survey in the manufacturing industry in 1949.

Initially it only covered a few industrial sectors, such as mechanical engineering and manufacturing of motor vehicles. In 1968, the chemical industry, manufacturing of iron and steel, mineral oil processing, and non-ferrous metal industries were added. Over the years, the food and beverage industry and all other subdivisions of the manufacturing industry were added to the survey, so that it now covers the whole sector.

Sufficiently high numbers of participants made it possible to publish results not only for Germany but also for some federal states as a subset of the survey. In 1979, Bavaria was the first of these federal states to have its results published, followed by Baden-Württemberg in 1996. After the reunification of Germany, the new federal states were also included in the survey. Therefore, since 1991, the results of the survey have referred to Germany as a whole.

2.3.2 Descriptive Statistics

The classification of the companies participating in the ifo Business Survey is based on the classification of economic activities of the German Federal Statistical Office (German version of the European classification NACE). Currently, the classification of the year 2008 applies, the so-called WZ08. It identifies sections with letters; the manufacturing industry corresponds to the letter C. For further subdivisions, up to six digits are used. With each successive digit that is not zero, a subordinate level is indicated. Using this six-digit level, the ifo Institute assigns each individual participant to its main product or product group. This precise allocation even allows a company to obtain several questionnaires. For instance, specialised divisions of a company can participate in the survey while being assigned to different products.

If the German Federal Statistical Office updates the economic sector classification, these changes are promptly adopted by the ifo Institute. After an update of the classification, the ifo Institute calculates its time series back to the reunification of Germany, so that structural breaks can be excluded. By using the current economic sector classification, the results of the ifo Business Survey are closely linked to the official figures and are highly comparable.

Currently, there are about 3,100 participants in the ifo panel “Manufacturing industry”, distributed among 495 active products or product groups in the sector. In 2021, the response rate was 66.9% on average. About 80% of the answers are submitted via the online platform, the other respondents still prefer the paper questionnaire. Most of the answers come from companies belonging to the smallest employment size class. Table 2.8 gives an overview of the composition of the panel by firm size. However, if the answers are weighted according to the respective number of product-related employees, the top size category has the biggest influence on the overall result.

Table 2.8: Panel according to firm size

Firm size	Employees	Share
1	1-99	53%
2	100-249	21%
3	250-499	11%
4	500-999	7%
5	> 1,000	8%

Due to voluntary participation, the ifo Business Survey is a partial survey, which means drawing a random sample is not possible. For this reason, special attention is paid to maintaining representativeness. Regarding professional representativeness, care is taken to ensure that all relevant areas of manufacturing are covered sufficiently. The subdivisions at the two-digit level are listed in Table 2.9. Due to their high number, the product groups cannot all be listed individually here, but results can be provided for all sub-areas with sufficient representation. Measured by the weighting variable “product employees”, the representativeness of the entire panel is currently around 25%.

2.3.3 Questionnaire

In general, the ifo Business Survey asks qualitative questions. Instead of asking for exact figures, (subjective) estimates are usually requested. Only the questions on capacity utilization and return on sales require quantitative information. The main advantage of asking for opinions and assessments instead of statistics is the reduced effort. Participants can complete the questionnaire in a relatively short time without having to look up exact numbers.

In general, the ifo Business Survey distinguishes between standard questions and special questions. Standard questions are those that are asked in the same form every month. A large part of the standard questions has been harmonized by EU requirements, with the aim of improving comparability across Europe. In contrast, special questions are asked at longer intervals. They can be divided into regular special questions and one-time supplementary questions: Regular special questions follow a fixed cycle, i.e. they are usually asked semi-annually or quarterly, so

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that time series are also available for analysis. One-time supplementary questions deal with current topics. If necessary, they are supplemented by a follow-up question in a later survey (Section 4.13). The Figures 2.7, 2.8 and 2.9 show the regular standard and special questions. The standard questions can be divided into three categories according to their time horizon: current situation, developments in the previous month and expectations for the next three or six months. Analogous to the respective categories, the focus is on the current state of knowledge, the past month, or future development.

The Corona crisis increased the need for data on its impact on businesses. This led to the creation of one-off as well as recurring Corona special questions. In particular, the effect on the business situation was surveyed monthly for almost two years, with a few exceptions. The same applies to the question about the estimated duration of the Corona restrictions. The information on working from home as well as on problems and possible threats for the companies' existence also became very relevant. Moreover, the already established regular special question on short-time work was expanded.

2.3.4 Methodology

2.3.4.1 Hierarchies

As mentioned above, each participant is assigned to the product or product group that it produces primarily. The aggregation of these products is defined in an aggregation hierarchy including the structure of the manufacturing sector based on the WZ08 and so-called industry weights. The aggregation always proceeds from the finest subdivision to broader areas. At the lowest level, the individual reports are combined into product group results. Table 2.9 lists all groups represented in the ifo Business Survey Manufacturing. These groups are aggregated to Section C "Manufacturing" using industry weights. Subsequently, the aggregate manufacturing industry is included in the ifo Business Climate Index Germany. For a detailed description of the aggregation of micro data into time series, see Section 2.2.3.

2.3.4.2 Weighting

Before the aggregation, each participant receives a participant weight, based on the number of employees. To ensure that the answers from large companies do not have an excessive impact, the weighting points increase disproportionately with the number of employees (x). These weights are calculated according to the formula $(\log(x))^e$. Table 2.10 shows an example of how the weighting points increase disproportionately due to the logarithm function.

In addition to the participant weights, so-called industry weights are used for the aggregation of higher hierarchy levels. The industry weights correspond to the gross value-added shares (at factor cost) of the individual industry. Thus, industries with a higher gross value added (e.g., manufacturing of motor vehicles, manufacturing of machinery) receive a higher weight than other industries. The industry weights are listed in Table 2.9.

Table 2.9: Covered branches in manufacturing with the respective weights

Aggregate number	Aggregate name	Relative weight
C100000	Manufacture of food products	6.8
C110000	Manufacture of beverages	1.1
C120000	Manufacture of tobacco products	0.2
C130000	Manufacture of textiles	0.8
C140000	Manufacture of wearing apparel	0.5
C150000	Manufacture of leather and related products	0.2
C160000	Manufacture of wood and of products of wood and cork (except furniture)	1.4
C170000	Manufacture of paper and paper products	2.1
C180000	Printing and reproduction of recorded media	1.8
C190000	Manufacture of coke and refined petroleum products	1.4
C200000	Manufacture of chemicals and chemical products	8.4
C210000	Manufacture of basic pharmaceutical products and pharmaceutical preparations	3.5
C220000	Manufacture of rubber and plastic products	5.0
C230000	Manufacture of other non-metallic mineral products	3.1
C240000	Manufacture of basic metals	4.1
C250000	Manufacture of fabricated metal products (except machinery and equipment)	9.6
C260000	Manufacture of computer electronic and optical products	5.3
C270000	Manufacture of electrical equipment	8.4
C280000	Manufacture of machinery and equipment	16.0
C290000	Manufacture of motor vehicles trailers and semi-trailers	15.3
C300000	Manufacture of other transport equipment	0.6
C310000	Manufacture of furniture	1.5
C320000	Other manufacturing	2.8
C332000	Installation of industrial machinery and equipment	0.2

Table 2.10: Firm weights in manufacturing

Employee (x)	Points $(\log(x))^e$ rounded
10	1
20	2
30	3
50	4
200	10
500	15
1000	20
5000	35

2.3.5 Results

The ifo Business Survey in the manufacturing sector covers the whole of Section C (except of C331000 Repair of fabricated metal products, machinery, and equipment). In principle, all subgroups are published where sufficient representation is guaranteed. However, this is not always the case, especially at the product level, which is why the depth of the publications varies.

Figure 2.4 shows the development of the business situation as well as the business expectations and the climate indicator for the manufacturing industry from 2000 to 2021. At this point it should also be mentioned that the business climate is not derived from a separate question, but is calculated as a transformed mean of the balances of the business situation and the expectations. In the illustration the regular business cycles can be seen as well as the financial crisis in 2009 and the Corona crisis with its start in Europe in March 2020.

A similar development can be seen in Figure 2.5 that shows export expectations and production plans for the next three months as well as the development of demand in the previous month. The synchronization of export expectations and production plans is an indication of the strong dependence of German industry on exports. Demand follows the same cyclical movements but has a certain lag. The reason for this is that the demand assessment looks at the previous month, while the other two questions have forecasting properties. In some cases, lead times of one quarter and more are achieved.

Figure 2.4: ifo Business Climate and its sub-indicators for the manufacturing sector

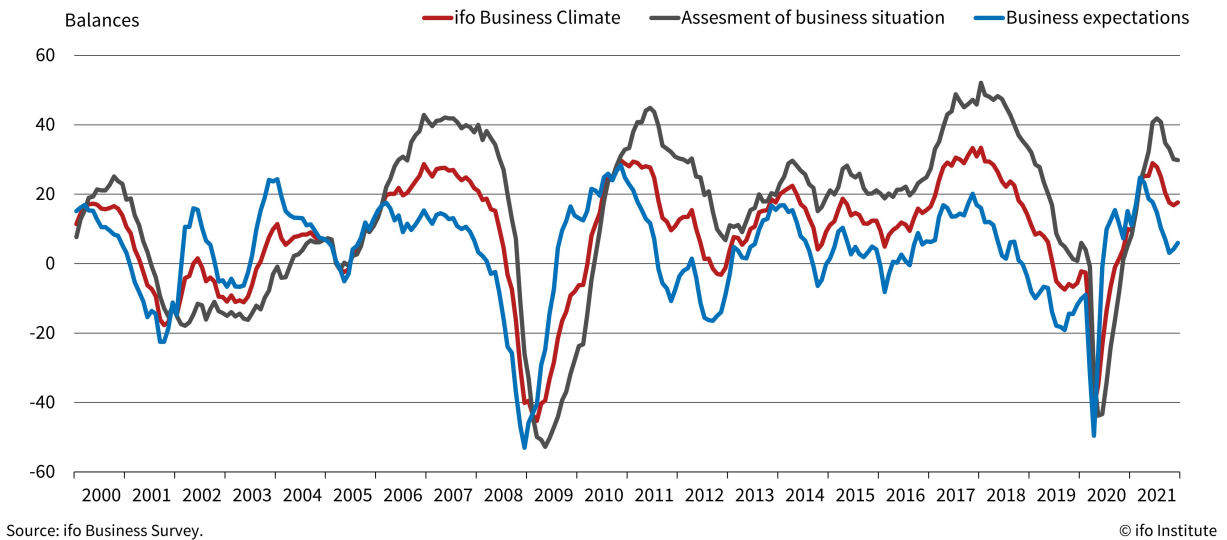


Figure 2.5: Export expectations, production plans, and demand (previous month) for the manufacturing sector

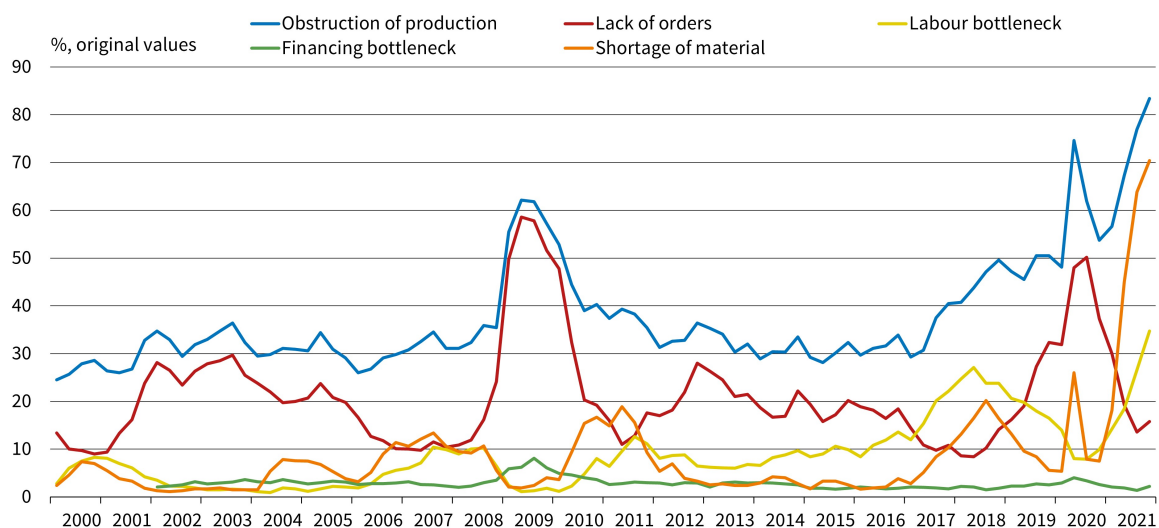


Figure 2.6 illustrates the quarterly questions on production constraints in manufacturing and their causes: lack of orders, labour bottlenecks, and material shortages. The time series for production constraints – like the business climate – clearly reflect the business cycles and crises. Lack of orders has been the main production constraint over most of the period shown. With one exception: the Corona crisis led to a so-called bottleneck recession. Companies

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were faced with many orders but lacked the necessary production resources. In particular, the Corona crisis was characterized by disrupted supply chains which lead to a lack of semi-conductors, plastics, and metals, affecting industry across all sectors. Even wood and paper were in short supply, leading to a lack of packaging material in many places. In addition, the shortage of skilled workers has recently intensified. With the looming retirement of the baby boomer generation, this will become an even more serious problem.

Figure 2.6: Production constraints



Source: ifo Business Survey.

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2.3.6 Comparing ifo Time Series to Official Statistics

This section compares the results of the ifo Business Survey for the manufacturing industry to the official figures of the Federal Statistical Office. With the help of a cross-correlation analysis, it is shown that the results of the ifo Business Survey are not only suitable for tracing the development of central economic indicators ex-post but can also be used for short-term forecasts. This study is limited to a comparison of the official figures on production. The analysis shows that the correlations of the official time series with the results of the ifo Business Survey for manufacturing turn out to be very high and can thus trace or forecast its actual developments well.

Table 2.11 shows the cross-correlations between the different monthly standard questions in the manufacturing industry, where zero stands for “no” and one for “perfect” correlation. Overall, it can be noted that many of the standard questions show a high correlation. The business climate shows the highest and almost perfect positive correlation with the assessment of the business situation (0.92) and the assessment of the order backlog (0.91). The business situation also correlates highly with employment plans (0.95). Both business climate and business situation reveal a very strong negative correlation with the assessment of unsold

goods and inventories. Business expectations correlate most strongly with the development of demand in the previous month and production plans.

Table 2.11: Cross-correlations between the standard questions in the manufacturing industry

	BC	BS	BE	IA	OA	OD	DD	QD	PD	PE	QP	XE	EP
BC	1.00												
BS	0.92	1.00											
BE	0.75	0.44	1.00										
IA	-0.93	-0.89	-0.64	1.00									
OA	0.91	0.98	0.46	-0.92	1.00								
OD	0.86	0.67	0.87	-0.84	0.71	1.00							
DD	0.75	0.50	0.91	-0.69	0.53	0.95	1.00						
QD	0.86	0.70	0.83	-0.81	0.71	0.95	0.93	1.00					
PD	0.71	0.74	0.38	-0.80	0.82	0.62	0.44	0.58	1.00				
PE	0.64	0.64	0.39	-0.75	0.74	0.61	0.45	0.56	0.95	1.00			
QP	0.88	0.68	0.89	-0.83	0.71	0.94	0.90	0.92	0.64	0.65	1.00		
XE	0.87	0.67	0.88	-0.77	0.68	0.89	0.86	0.88	0.57	0.54	0.91	1.00	
EP	0.90	0.95	0.47	-0.91	0.94	0.70	0.55	0.74	0.73	0.70	0.76	0.68	1.00

BC: Business climate, BS: Business situation, BE: Business expectations, IA: Unsold goods inventory assessment, OA: Order backlog assessment, OD: Order backlog development, DD: Demand development, QD: Production development, PD: Price development, PE: Price expectations, QP: Production plans, XE: Export expectations, EP: Employment plans.

For the correlation analysis, annual and monthly growth rates were calculated from the seasonally adjusted values of the Federal Statistical Office and then compared with the results of the ifo Business Survey in the manufacturing industry. The correlation coefficients determined reflect the strength of the correlation. In addition, the time series were shifted in relation to each other to determine whether the correlation measure is higher if a time lead or lag of the ifo time series compared to the official data is assumed. This is examined both at the aggregate level for manufacturing and at the two-digit level. In this way, leads and thus forecast qualities can be precisely identified.

Table 2.12 lists the correlations between the annual growth rate of the production index and the ifo main indicators for manufacturing. The highest correlation of 0.83 is achieved with export expectations at a lead time of one month. For business expectations and the development of production, high correlations were also achieved at a lead time of four months and one month, respectively.

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Table 2.12: Correlations between the annual growth rate of the production index and the ifo time series for manufacturing

lead/lags	-6	-5	-4	-3	-2	-1	0	1	2
BC	0.42	0.50	0.58	0.63	0.69	0.73	0.75	0.73	0.68
BS	0.16	0.25	0.34	0.41	0.49	0.56	0.63	0.56	0.49
BE	0.70	0.74	0.77	0.77	0.76	0.74	0.67	0.74	0.76
IA	-0.38	-0.45	-0.52	-0.56	-0.61	-0.65	-0.68	-0.64	-0.60
OA	0.19	0.28	0.36	0.43	0.50	0.56	0.61	0.56	0.49
OD	0.64	0.68	0.71	0.72	0.72	0.74	0.72	0.73	0.71
DD	0.68	0.71	0.73	0.73	0.71	0.71	0.68	0.71	0.71
QD	0.57	0.63	0.67	0.70	0.72	0.76	0.75	0.75	0.72
PD	0.09	0.18	0.26	0.33	0.41	0.47	0.52	0.46	0.38
PE	0.09	0.17	0.25	0.33	0.40	0.46	0.49	0.44	0.36
QP	0.58	0.63	0.67	0.70	0.73	0.75	0.71	0.74	0.72
XE	0.59	0.65	0.71	0.76	0.80	0.83	0.81	0.83	0.80

BC: Business climate, BS: Business situation, BE: Business expectations, IA: Unsold goods inventory assessment, OA: Order backlog assessment, OD: Order backlog development, DD: Demand development, QD: Production development, PD: Price development, PE: Price expectations, QP: Production plans, XE: Export expectations, EP: Employment plans.

Finally, the correlations between the time series on the ifo Business Climate Indicator and the production growth rate are also tested at the two-digit level. The annual production growth rate is shown in Table 2.13, the monthly growth rate in Table 2.14. The highest correlation coefficient of 0.51 is achieved for the annual growth rates for the sectors manufacture of wood and of products of wood and cork (except furniture) and manufacture of chemicals and chemical products – in each case without an index lag. In general, the analysis of the annual growth rates shows that the correlations are highest with no time lag across all two-digit groups. When analyzing monthly growth rates, this applies to a development of one month or also to no time lag. This shows that the ifo Business Climate is a powerful indicator for determining the economic situation in the manufacturing sector as well as at its two-digit level.

Table 2.13: Correlations between the annual growth rate of output and the ifo time series of the ifo Business Climate

lead/lags	-6	-5	-4	-3	-2	-1	0	1	2
C1000000	-0.29	-0.26	-0.25	-0.23	-0.21	-0.20	-0.12	-0.16	-0.19
C1100000	0.01	0.02	0.02	0.04	0.06	0.10	0.38	0.21	0.10
C1300000	-0.28	-0.26	-0.23	-0.21	-0.19	-0.17	-0.14	-0.16	-0.16
C1400000	-0.24	-0.24	-0.23	-0.24	-0.24	-0.23	-0.21	-0.22	-0.22
C1500000	-0.29	-0.28	-0.26	-0.23	-0.21	-0.17	-0.12	-0.15	-0.15
C1600000	0.00	0.06	0.14	0.21	0.29	0.37	0.51	0.45	0.44
C1700000	0.00	0.05	0.08	0.13	0.17	0.21	0.29	0.26	0.25
C1800000	0.25	0.28	0.30	0.34	0.37	0.41	0.48	0.46	0.47
C2000000	-0.10	-0.05	0.01	0.06	0.11	0.15	0.22	0.19	0.19
C2200000	-0.02	0.02	0.06	0.09	0.12	0.17	0.22	0.19	0.18
C2300000	-0.03	0.01	0.05	0.09	0.16	0.22	0.39	0.27	0.28
C2400000	-0.02	0.08	0.18	0.27	0.36	0.43	0.51	0.49	0.47
C2500000	-0.02	0.02	0.07	0.10	0.14	0.17	0.21	0.21	0.21
C2600000	-0.04	-0.02	0.01	0.03	0.05	0.07	0.10	0.10	0.11
C2700000	-0.01	0.05	0.10	0.15	0.19	0.23	0.28	0.27	0.28
C2800000	0.00	0.05	0.10	0.15	0.19	0.23	0.29	0.28	0.30
C2900000	0.00	0.03	0.04	0.03	0.04	0.08	0.11	0.06	0.04
C3100000	-0.13	-0.12	-0.10	-0.08	-0.07	-0.04	0.03	-0.01	0.00
C3200000	0.13	0.15	0.16	0.17	0.20	0.21	0.26	0.23	0.23

For the aggregate names of the two-digit groups see Table 2.9.

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Table 2.14: Correlations between the monthly growth rate of output and the ifo time series of the ifo Business Climate

lead/lags	-6	-5	-4	-3	-2	-1	0	1	2
C1000000	-0.04	-0.04	-0.06	-0.03	-0.05	-0.11	0.06	-0.01	-0.04
C1100000	0.03	0.00	-0.02	0.02	-0.09	-0.30	0.29	0.09	-0.02
C1300000	-0.08	-0.10	-0.09	-0.08	-0.09	-0.12	0.01	-0.03	-0.03
C1400000	-0.04	-0.05	-0.05	-0.05	-0.06	-0.07	-0.02	-0.04	-0.05
C1500000	-0.06	-0.08	-0.09	-0.09	-0.12	-0.18	0.02	-0.03	-0.05
C1600000	-0.06	-0.11	-0.08	-0.09	-0.10	-0.22	0.21	0.10	0.09
C1700000	-0.06	-0.04	-0.08	-0.07	-0.06	-0.12	0.11	0.06	0.07
C1800000	0.01	0.01	0.00	-0.01	-0.03	-0.08	0.14	0.09	0.08
C2000000	-0.10	-0.12	-0.11	-0.11	-0.09	-0.14	0.11	0.05	0.07
C2200000	-0.07	-0.06	-0.06	-0.07	-0.08	-0.10	0.08	0.06	0.05
C2300000	-0.01	-0.04	-0.06	-0.08	-0.08	-0.24	0.23	0.07	0.08
C2400000	-0.18	-0.18	-0.21	-0.18	-0.15	-0.18	0.16	0.12	0.15
C2500000	-0.09	-0.09	-0.08	-0.07	-0.07	-0.08	0.06	0.06	0.05
C2600000	-0.06	-0.05	-0.06	-0.04	-0.03	-0.05	0.03	0.01	0.01
C2700000	-0.11	-0.09	-0.08	-0.07	-0.05	-0.08	0.07	0.05	0.06
C2800000	-0.07	-0.07	-0.06	-0.03	-0.04	-0.10	0.09	0.04	0.03
C2900000	0.00	0.00	0.02	0.00	-0.11	-0.21	0.02	0.06	0.04
C3100000	-0.03	-0.04	-0.05	-0.04	-0.04	-0.14	0.08	-0.01	0.00
C3200000	0.01	0.01	0.00	0.00	-0.01	-0.05	0.09	0.04	0.03

For the aggregate names of the two-digit groups see Table 2.9.

Figure 2.7: Standard questions in manufacturing

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Please respond by ...

ifo INSTITUTLeibniz-Institut für Wirtschaftsforschung
an der Universität München e.V.
Postbox 86 04 60
81631 Munich**Your current information status November 2021**Please base responses only on domestic locations, stated sector/product,
and disregarding purely seasonal fluctuations.Sector/product: **123456 Manufacture of xxx**
Sector designation (if applicable)

ID No. 8123456-12.34/12-1234

CURRENT SITUATION	PLANS AND EXPECTATIONS FOR THE NEXT 3 MONTHS	SPECIAL QUESTIONS
<p>1. We characterize our current business situation as</p> <p><input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> poor</p> <p>2. We characterize our inventories of unsold manufactured goods as</p> <p><input type="checkbox"/> too low <input type="checkbox"/> sufficient <input type="checkbox"/> too high <input type="radio"/> warehousing not customary</p> <p>3. Our order backlog (if customary) is</p> <p>a) overall b) for export</p> <p><input type="checkbox"/> comparatively large <input type="checkbox"/> <input type="checkbox"/> sufficient <input type="checkbox"/> <input type="checkbox"/> too low <input type="checkbox"/> we don't export <input type="radio"/></p>	<p>9. We expect our production activity to</p> <p><input type="checkbox"/> increase <input type="checkbox"/> remain roughly the same <input type="checkbox"/> decrease <input type="radio"/> no significant domestic production</p> <p>10. We expect our prices to</p> <p><input type="checkbox"/> rise <input type="checkbox"/> remain roughly the same <input type="checkbox"/> fall</p> <p>11. We expect the scope of our export business to</p> <p><input type="checkbox"/> widen <input type="checkbox"/> remain roughly the same <input type="checkbox"/> decrease <input type="radio"/> we don't export</p> <p>12. We expect our workforce to</p> <p><input type="checkbox"/> increase <input type="checkbox"/> remain roughly the same <input type="checkbox"/> decrease</p>	
REVIEW – TRENDS IN OCTOBER	EXPECTATIONS FOR THE NEXT 6 MONTHS	
<p>4. Compared to September, the demand situation has</p> <p><input type="checkbox"/> improved <input type="checkbox"/> not changed <input type="checkbox"/> worsened</p> <p>5. Compared to September, our order backlog has</p> <p><input type="checkbox"/> increased <input type="checkbox"/> remained roughly the same <input type="checkbox"/> decreased</p> <p>6. Compared to September, our production activities have</p> <p><input type="checkbox"/> increased <input type="checkbox"/> remained roughly the same <input type="checkbox"/> decreased <input type="radio"/> no significant domestic production</p> <p>7. Compared to September, our prices have</p> <p><input type="checkbox"/> risen <input type="checkbox"/> not changed <input type="checkbox"/> fallen</p> <p>8. Compared to September, our workforce has</p> <p><input type="checkbox"/> increased <input type="checkbox"/> remained roughly the same <input type="checkbox"/> decreased</p>	<p>13. We expect our business situation to</p> <p><input type="checkbox"/> become more favorable <input type="checkbox"/> remain roughly the same <input type="checkbox"/> become less favorable</p> <p>14. The future development of our business situation is currently</p> <p><input type="checkbox"/> easy to predict <input type="checkbox"/> moderately easy to predict <input type="checkbox"/> moderately difficult to predict <input type="checkbox"/> difficult to predict</p>	

Your responses will be handled in strictest confidence. Legal data protection is fully guaranteed.
Privacy policy: www.ifo.de/en/Datenschutz-Umfragen

Thank you for your input!

Figure 2.8: Special questions in manufacturing, part 1

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Please respond by ...

ifo INSTITUT

Leibniz-Institut für Wirtschaftsforschung
an der Universität München e.V.
Postbox 86 04 60
81631 Munich

Your current information status 2021

Please base responses only on domestic locations, stated sector/product, and disregarding purely seasonal fluctuations.

Sector/product: **123456 Manufacture of xxx**
Sector designation (if applicable)

ID No. 8123456-12.34/12-1234

SPECIAL QUESTIONS																																																														
QUARTERLY		ANNUALLY																																																												
JANUARY - APRIL - JULY - OCTOBER	FEBRUARY - MAY - AUGUST - NOVEMBER	MARCH																																																												
<p>A) Our order backlogs currently correspond to our average production in _____ month(s)</p> <p>B) Capacity utilization of our facilities is currently at (standard full utilization = 100%)</p> <p><input type="checkbox"/> 30 % <input type="checkbox"/> 70 % <input type="checkbox"/> 90 % <input type="checkbox"/> 40 % <input type="checkbox"/> 75 % <input type="checkbox"/> 95 % <input type="checkbox"/> 50 % <input type="checkbox"/> 80 % <input type="checkbox"/> 100 % <input type="checkbox"/> 60 % <input type="checkbox"/> 85 %</p> <p>exceeds 100%, namely: _____ %</p> <p>C) Taking into account our current order backlog and our projected order intake for the coming 12 months, we consider our current technical capacity to be</p> <p><input type="checkbox"/> more than sufficient <input type="checkbox"/> sufficient <input type="checkbox"/> insufficient</p> <p>D) Our production activity is currently impeded</p> <p><input type="checkbox"/> yes <input type="checkbox"/> no</p> <p>If yes, by the following factors:</p> <p><input type="checkbox"/> too few orders <input type="checkbox"/> lack of skilled workers <input type="checkbox"/> lack of low-skilled workers <input type="checkbox"/> financial constraints <input type="checkbox"/> lack of raw / input materials <input type="checkbox"/> insufficient technical capacity <input type="checkbox"/> other factors</p> <p>E) Our competitiveness has, in the past 3 months (compared to the previous 3 months)</p> <p>a) in the domestic market</p> <p><input type="checkbox"/> improved <input type="checkbox"/> not changed <input type="checkbox"/> worsened</p> <p>in foreign markets</p> <p>b) within the EU c) outside the EU</p> <p><input type="checkbox"/> improved <input type="checkbox"/> <input type="checkbox"/> not changed <input type="checkbox"/> <input type="checkbox"/> worsened <input type="checkbox"/> <input type="radio"/> we don't export <input type="radio"/></p>	<p>A1) We are currently logging overtime</p> <p><input type="checkbox"/> yes <input type="checkbox"/> no</p> <p>If yes, more than usual</p> <p><input type="checkbox"/> yes <input type="checkbox"/> no</p> <p>B1) We currently have short-time work</p> <p><input type="checkbox"/> yes <input type="checkbox"/> no</p> <p>B2) Over the next 3 months, we expect to have short-time work</p> <p><input type="checkbox"/> yes <input type="checkbox"/> no</p> <p>MARCH - JUNE - SEPTEMBER - DECEMBER</p> <p>C) In the past 3 months, we have held loan negotiations with banks.</p> <p><input type="checkbox"/> yes</p> <p>If yes, the banks were:</p> <p><input type="checkbox"/> accommodating <input type="checkbox"/> normal <input type="checkbox"/> less accommodating</p> <p><input type="checkbox"/> no</p> <p>If no:</p> <p><input type="checkbox"/> bank loan not required <input type="checkbox"/> other reasons</p> <p>ANNUALLY</p> <p>FEBRUARY</p> <p>A1) Number of employees</p> <p>In the company overall, we employ (domestic operations only) _____ people</p> <p>A2) Of that number, the following work in manufacturing _____ people (or estimate based on sales share)</p>	<p>B1) Our investments in the past year were (2020 compared to 2019)</p> <table border="1"> <thead> <tr> <th>2020</th> <th>+</th> <th>=</th> <th>-</th> </tr> </thead> <tbody> <tr> <td>overall investment</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- buildings</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- equipment</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- software / databases</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- research / development</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p>B2) We expect our investments in the current year to be (2021 compared to 2020)</p> <table border="1"> <thead> <tr> <th>2021</th> <th>+</th> <th>=</th> <th>-</th> </tr> </thead> <tbody> <tr> <td>overall investment</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- buildings</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- equipment</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- software / databases</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>- research / development</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p>MAY</p> <p>A1) Our company's earnings situation* - 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Your responses will be handled in strictest confidence. Legal data protection is fully guaranteed.
Privacy policy: <https://www.ifo.de/en/Datenschutz-Umfragen>

Thank you for your input!

** Or in the financial year that fell predominantly in the year 2020.

Figure 2.9: Special questions in manufacturing, part 2

ifo - Business survey for manufacturing sector
ifo Institute – Center for Macroeconomics and Surveys

Please respond by ...

ifo INSTITUT

Leibniz-Institut für Wirtschaftsforschung
an der Universität München e.V.
Postbox 86 04 60
81631 Munich

Your current information status 2021

Please base responses only on domestic locations, stated sector/product, and disregarding purely seasonal fluctuations.

Sector/product: **123456 Manufacture of xxx**
Sector designation (if applicable)

ID No. 8123456-12.34/12-1234

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Thank you for your input!

Manufacturing sector – Special questions 2021 (reverse)