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Data Observer

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Beyond the Business Climate: Supplementary Questions in the ifo Business Survey

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Abstract: In the monthly ifo Business Survey, around 9000 companies answer questions about their current business situation, expectations, and plans for the near future as well as on other business variables. Beyond the regular questions, ifo has also the possibility to include supplementary questions into the survey. These questions may be prompted by the intention to obtain an ad hoc picture of the effects of certain developments in economic policy on the companies and their reactions to them (e.g. the Covid-19 pandemic or the war in Ukraine). Another reason is the collection of data for research projects. This article gives an overview of all supplementary questions since 2009 through May 2022. It intends to show examples of the use of the obtained data and can be used as a guide for future research projects. Researchers can work with the firm-level microdata of supplementary and regular survey questions at the LMU-ifo Economics & Business Data Center.

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JEL Classification: C80, C81, C83

1 Introduction

Since 1949, the ifo Institute has been conducting the monthly ifo Business Survey by asking German companies about various relevant variables regarding their

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economic activity (Anderson 1952; Langelütke and Marquardt 1951).[1] The obtained data proved to be very valuable for empirical economic research and business cycle analysis on the country level as well as at the economic sector and regional level. The advantages of the microdata sets that are most worthy pointing out are the high number of about 9000 monthly responses from a set of firms that are representative for the German economy, the extensive set of questions answered by every firm, and the large number of observations by firm (on average, firms are observed more than 70 times) as response rates are uncommonly high and attrition is low compared to other business surveys (Link 2020). Moreover, the questionnaires of the monthly ifo Business Survey are mostly answered by people in management positions within the participating companies. This means the requirements for reliable reporting are fulfilled (Sauer and Wohlrabe 2019).

As a main result of the ifo Business Survey, the ifo Business Climate Index Germany is one of the most important leading economic indicators in Germany (Abberger and Wohlrabe 2006; Lehmann 2020). In addition, numerous other indicators are calculated and published from the data material of the ifo Business Survey. Among them, for instance, are the overall indicators on employment plans (ifo Employment Barometer), export expectations, or uncertainty in the German economy. An overview of all questions and indicators are shown in Demmelhuber et al. (2022). In addition to the aggregated results, the disaggregated microdata are an enormous data treasure for diverse types of analyses (Becker and Wohlrabe 2008).

The inclusion of supplementary questions has further increased the survey's potential for economic research. Some of these supplementary questions are surveyed irregularly or only once. Their focus usually is on current economic topics or firm-specific information of interest for research projects.

The scope of this article is to emphasize the enormous possibilities for all kinds of research projects. We give a tabular overview of all supplementary questions from 2009 until May 2022. Moreover, we present selected results. Subsequently, we outline the data access for researchers. We conclude by providing a brief outlook on possible further developments.

2 Supplementary Questions in the ifo Business Survey

In the past few years, supplementary questions became more and more part of the ifo Business Survey. These questions are mainly prompted by the intention to

1 Starting year of Business Surveys by sector: Manufacturing in 1949, retailing in 1950, wholesale trade in 1951, construction in 1956, and service sector in 2001.

obtain an ad hoc picture of the effects of certain developments in economic policy or in the world economy on the companies, and the firms' reactions to them (e.g. the Covid-19 pandemic or the war in Ukraine). The other reason is the collection of firm-specific data for various research projects. Since the ifo survey is a panel survey, these questions can also be linked to other survey variables. Additionally, they can serve either as control, group, explanatory, or dependent variables in statistical or econometric analyses. Supplementary questions not only provide information at the current survey period, but also offer the possibility for ex-post evaluations.

We provide in Tables 1–5 an overview of the various topics and contents covered by the supplementary questions that have been surveyed in the ifo Business Surveys from 2009 until May 2022. Furthermore, the tables show the survey date for each question, the sector in which it was asked, and references to selected results. The exact wording of all supplementary questions as well as more results and applications are given in Demmelhuber et al. (2022).

Table 1: Economic policy questions.

Topics	Content	Date	Surveyed sectors	Selected results
Introduction of the minimum wage in Germany	A priori and ex-post assessments of companies: Affectedness by the minimum wage, planned/taken measures, and changes of employment structure within the company.	11/2014, 03/2016	All sectors	Link (2019)
Refugee crisis	Potential of hiring asylum seekers in specific positions and hindrances for hiring asylum seekers in specific positions.	10/2015	All sectors	Battisti et al. (2015)
Brexit	Impact of a possible Brexit, impact of a hard Brexit, probabilities for a hard Brexit, percentage of sales affected by a hard Brexit, and impact of hard Brexit on this percentage of sales.	06/2016, 12/2018	Manufacturing sector	ifo Institute (2018)
US trade policy under President Trump	Expectations on changes in trade policy, impact on operations in the U.S., expectations on the company's sales development in the U.S., and economic relations with the U.S.	02/2017	Manufacturing sector	Braml and Felbermayr (2017)

Table 1: (continued)

Topics	Content	Date	Surveyed sectors	Selected results
Negative interest rates	Confrontation with negative interest rates, measures to avoid negative interest rates, effects on earning situation, and number of company's main banks.	06/2017	All sectors	Hainz et al. (2017)
EU-Mercosur free trade agreement	Exports to the Mercosur region, prerequisites for starting export business with Mercosur, and reactions on a possible trade agreement with Mercosur.	08/2017	Manufacturing sector	
US tax reform	Percentage of turnover in the U.S., competition from companies in the U.S., development of tax burden (short and long term), reactions on the tax reform, and probability of relocation of intellectual property to the U.S.	03/2018	Manufacturing, trade, and service sector	Boumans et al. (2020) and Krolage and Wohlrabe (2018)
Tax incentives for R&D in Germany	Share of R&D expenditures, received funding by specific institutions, and acceptance and effect of planned tax incentives on R&D activity.	09/2019	Manufacturing sector	
Current European economic policy topics	Agreement on various statements about European economic topics and knowledge about topics (minimum wage, immigration, robots/artificial intelligence, retirement age, free choice of residence/place of work, and European champions).	02/2020	All sectors	
Supply chain act	Changes in procurement strategy, and impact and effects of a national supply chain law on company.	05/2021	Manufacturing, trade, and service sector	

Table 2: Company- or respondent-specific questions.

Topics	Content	Date	Surveyed sectors	Selected results
Export markets	Share of exports on total sales and world regions with biggest export share.	06/2011	Manufacturing sector	
Family business	Self-classification as family business.	02/2014	All sectors	Stiftung Familienunternehmen (2020)
Characteristics of medium-sized companies	Number of general managers, company shareholding of general managers, and self-classification as "medium-sized" enterprise.	08/2016	All sectors	
Online shops and market places	Existence of sales via own online store/other online platforms, type of online sales channels, share of online trade, and expected development of online trade.	08/2016, 08/2019	Trade sector	Rumscheidt (2020)
Export of services	Existence currently/ planned of service offerings abroad and barriers for company's activities abroad.	08/2018	Service sector	
Outsourcing of business processes	Share of processes in specific areas provided by external service providers and expected developments for the next years.	08/2018	Manufacturing sector	
Share of foreign turnover	Percentage of the company's turnover generate abroad.	09/2018	All sectors	
Year of company foundation	Year of company foundation	09/2018	All sectors	
Characteristics of the respondent(s)	Department and position of the respondent(s), highest educational	11/2018 02/2020 11/2021 03/2022	All sectors	Sauer and Wohlrabe (2019)

Table 2: (continued)

Topics	Content	Date	Surveyed sectors	Selected results
	attainment, interest in economic policy, trust in experts (policy issues, Covid-19 pandemic), and risk aversity.			
Importance of logistics services	Business constraints by specific factors of logistics and online business constraints regarding customer delivery (only trade sector).	06/2019	Manufacturing, trade	Brandt et al. (2019)
Decisions regarding production and price setting	Significance of factors influencing decisions on pricing and production (manufacturing, construction)/orders (trade)/human resources (service).	10/2020	All sectors	

Table 3: Other research questions.

Topics	Content	Date	Surveyed sectors	Selected results
Innovation	Rating of various factors for the company's innovation climate.	01/2009	Manufacturing sector	
Main bank relations	Intensive and long-standing business relations with a bank and types of banks.	06/2009	Manufacturing, trade, and construction	Abberger et al. (2009)
Effects of extreme weather events	Effects of heat waves/ cold waves/drought/ heavy rain/storms on specific company areas, occurrence of extreme weather in the region of the company, expectations for extreme weather in the future, and preparations for consequences of extreme weather.	11/2010 02/2013 05/2019 05/2022	All sectors	Berlemann and Lehmann (2020)

Table 3: (continued)

Topics	Content	Date	Surveyed sectors	Selected results
Importance of flight connections	Significance of available flight connections for company to destinations: Germany, Europe, and worldwide.	03/2013	All sectors	
Bank credits	Credit agreements with banks in the last year, conditions of the agreements as expected, reasons for nonoccurrence, and purpose of credits.	06/2016	All sectors	Hainz and Hristov (2017)
GDP expectations of companies	Estimation of change of GDP in Germany in % for the current and following year, and importance of general economic developments in Germany for the business situation (only 08/2018).	08/2018 03/2019 08/2019 08/2020	All sectors	Dovern et al. (2020)
Capacity utilization	Annual average of the capacity utilization of plants/machines in a normal economic situation.	01/2019	Manufacturing, services, and construction	
Uncertainty about demand	Uncertainty regarding various factors for future demand.	12/2019	Manufacturing, services, and trade	Lautenbacher (2020)
Satisfaction with institutions and administration	Satisfaction with local government and administration, and satisfaction with social security institutions.	09/2021	All sectors	
Supplies from China	Dependency on supplies from China, future strategies regarding supplies from China, and reasons for reductions of imports from China.	02/2022	Manufacturing, trade	Baur and Flach (2022)

Table 4: Supplementary questions on the Covid-19 crisis.

Topics	Content	Date	Surveyed sectors	Selected results
Effects of the outbreak of the pandemic	Business impact of the outbreak and determination of negative effects.	03/2020	All sectors	Dorn et al. (2020)
Current effects of the crisis and expectations	Effect on the business situation, expectations on duration of the pandemic effects, problems in specific company areas, and current threat to the company's existence.	04/2020–03/2022	All sectors	Balleer et al. (2020) and Buchheim et al. (2022a,b)
Short-time work	Current share of employees in short-time work and average reduction in working hours for these employees.	05/2020–05/2022	All sectors	Link and Sauer (2020)
Working from home	Share of employees working at least partly from home (starting 02/2021) and long-term effects of the pandemic on working from home (04/2020–07/2020).	04/2020–04/2022	All sectors	Alipour et al. (2021a,b)
Number of employees	Number of employees in the company.	05/2020-ongoing	All sectors	
Short-term effects of the crisis	Measures taken as a reaction on the pandemic, problems and needs, effects on sales, and expected survival time (specific periods) if pandemic continues.	04/2020–11/2020	All sectors	Litsche et al. (2020)
Long-term effects of the crisis	Permanent changes in specific areas of the company and investment in specific areas.	05/2020–07/2020	All sectors	
Liquidity situation	Estimated time range of liquidity reserves, development of capital ratio, availability of credits, change of lending rates,	05/2020–02/2021	All sectors	Peichl et al. (2021)

Table 4: (continued)

Topics	Content	Date	Surveyed sectors	Selected results
	cash and cash equivalents in % of total assets, development of specific financing options, and development of equity capital ratio.			
Governmental pandemic assistance programs for companies	Use of tax deferrals, application for specific liquidity assistance programs, and assessment of the programs.	04/2020–05/2020	All sectors	
Supply bottlenecks	Affection of supply bottlenecks, changes in procurement, assessment of price developments for products and materials, indication of the products/materials concerned, and expected duration of supply bottlenecks.	04/2020-ongoing	Manufacturing, trade, and construction	Wohlrabe (2021) and Leiss and Wohlrabe (2021)

We divided the supplementary questions into different thematic blocks. Most commonly, "*current economic policy questions*" (Table 1) are used for the evaluation of consequences of political decisions or other important (geopolitical) events for the German economy. "*Company- or respondent-specific questions*" (Table 2) can be used for research projects, where it may be important to have specific information about the responding company or personally about the respondent. This information can also be matched with other variables of the Business Survey or used as control variables. Therefore, some supplementary questions were asked to create control variables or group variables (e.g. family businesses vs. other businesses). "*Other research questions*" cover a wide topical range. Table 3 gives an overview of these questions surveyed since 2009. Starting March 2020, the Covid-19 crisis overshadowed the German and the World economy. For this reason, numerous supplementary questions have been included in the survey every month dealing with the current economic impact of the pandemic and the reactions of the companies. These questions mainly focus on short- and long-term effects of the

Table 5: Supplementary question on the economic effects of the war in Ukraine.

Topics	Content	Date	Surveyed sectors	Selected results
Sanctions against Russia after the annexation of Crimea	Existence and nature of specific economic relations with Russia, and current and expected constraints because of the conflict.	05/2014	Manufacturing sector	Grimme et al. (2014)
Consequences of the outbreak of war	Expected negative effects on the company.	03/2022	Manufacturing sector	Sauer and Wohlrabe (2022)
Economic relations with Russia	Existence and nature of specific economic relations with Russia before the war and in the future.	03/2022 04/2022	Manufacturing, services, and trade	
Problems because of the war	Effects of the war regarding supply shortages, demand and sales, logistics and financing: Relevance and importance of these effects for the company.	04/2022	Manufacturing, services, and trade	
Supply shortages	Assessment of the substitutability of products from Russia, Belarus, or Ukraine.	04/2022	Manufacturing, services, and trade	
Energy	Energy intensity of the company, shares of specific energy sources in energy costs of the company, price developments, percentage of price increases passed on to customers, and effects of possible gas shortages (only manufacturing).	04/2022 05/2022	All sectors	
Expected effect on sales	Expected effect on sales for the year 2022 because of the war.	04/2022	Manufacturing, services, and trade	

pandemic on companies and cover topics such as short-term work, remote working from home, governmental pandemic assistance programs, or internal company problem areas during the crisis (Table 4). As of the date of this article, also various supplementary questions focus on the economic effects of the war in Ukraine (Table 5).

3 Data Access

Researchers can access data from the ifo Business Survey on the microdata level at the LMU-ifo Economics & Business Data Center (EBDC) under strict nondisclosure agreements free of charge for noncommercial and scientific usage (Seiler 2012). This provision of data is intended to increase synergies between empirical and theoretical research. The EBDC provides external databases in combination with innovative data sets on German firms. These company panels include both survey data of the ifo Institute as well as external accounting data or other structural enterprise information concerning corporate finance, investment activity, or corporate governance (e.g. from the company databases Amadeus, Orbis, and Hoppenstedt).

The microdata panel from the ifo Business Survey includes both historical and current data starting from 1980. The EBDC anonymizes the data and continuously expands the data sets both in terms of time and content. The website of the EBDC (https://www.ifo.de/en/EBDC) provides a comprehensive overview and description of the data sets that are hosted at the ifo Institute. Access to the EBDC Business Panels (including a detailed documentation of all variables) can be requested via the online research application.

4 Summary and Outlook

Supplementary questions in the ifo Business Survey offer a large potential for all kinds of economic research and analyses. For instance, they can be very useful for analyzing current developments in the German economy and can also serve as input for various research projects. For the future, ifo intends to use supplementary questions for the introduction of new survey methods. Randomized questions are an example for such a new field. Therefore, it is possible to randomly divide the panel in different groups and ask the participants slightly different questions or give them different texts or information as introduction before the questions. Analyses of the influence of the wording or of the order of the answer categories can be valuable results for the future design of new standard or supplementary questions.

Beyond the ifo Business Survey, ifo has a lot more survey activities. There are among others, the quarterly ifo Personnel Manager Survey that surveys companies from all sectors on HR questions and staff deployment, and the ifo Management-Survey that surveys a selected group of decision-makers in German on current economic policy issues and changes in the macroeconomic environment. Sauer and Wohlrabe (2020) present a detailed description of all ifo surveys. These surveys also have the possibility for supplementary questions and offer a big potential for research projects and economic analyses. The microdata from these surveys can be accessed by researchers at the EBDC.

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