ETH zürich

KOF Konjunkturforschungsstelle

KOF Retail Trade Survey
Metainformation

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History of KOF Business Tendency Surveys

Before, during and after the Second World War, the business situation of Swiss companies was rather unstable due to their dependence on foreign business partners. It was difficult to obtain swift information on current economic and political developments. In 1937, companies in trade and industry therefore set up a group to promote the exchange of information. A complementary economic research institute (today's KOF Swiss Economic Institute) was established a year later.

1955 saw the introduction of written standardised questionnaires, which were given out before meetings to survey the attending companies in regard of their business situation. The surveys were modelled on the predominantly qualitative surveys conducted by INSEE in Paris and Ifo Institute in Munich. This was the beginning of the monthly and quarterly self-administered KOF Business Tendency Surveys with written questionnaires.

The early range of sectors - industry, retail and wholesale - was again expanded from 1988 on. Initially, the focus was on the accommodation and food service activities and the construction industry, two particularly cyclical sectors. The expansion was completed in 2006 with the introduction of private sector service industries that had previously not been covered. From 1999 onwards, the KOF Business Tendency Surveys were successively adapted to EU survey standards.

Concept of Qualitative Business Tendency Surveys

In contrast to the common official statistics, which are based on quantitative data with delayed availability, the business tendency surveys contain qualitative questions and data are quickly available. The questions on the historical development of key business parameters such as incoming orders, production, inventories, prices and employment, can be answered with the help of categories (e.g. higher, same, lower). Hence, there is no need to wait for accounting, statistical or inventory data. In addition, the businesses are asked about the future development of certain business activity parameters (e.g. expected incoming orders: will go up, will remain unchanged, will go down) and for assessments of the current situation (e.g. finished goods inventory: too high, normal, too low).

General Information on the Retail Trade Survey

The KOF Retail Trade Survey uses a dedicated questionnaire on turnover, inventory and price trends. The survey has been carried out monthly since 1966. Since 1994 the survey has been conducted in German, French and Italian and the analysis has been based on the three size categories. The voluntary online survey was introduced

in 2000. In 2004, few extra questions were introduced for the quarterly questionaires. From April 2005 on, the survey became a joint-venture between the Swiss Federal Statistical Office (FSO) and KOF. Next to the qualitative questions, also the quantitative figures were collected. Yet, the FSO was responsible for the publication of the official quantitative results. In 2015, the FSO started to collect the data (both quantitative and qualitative questions) and deliver KOF the qualitative data. KOF still ask some participants directly who are not part of the official FSO sample. At this point, the quantitative questions were revised and all of the questions were switched to a monthly rhythm.

The questionnaire is available at the surveys KOF website (KOF Surveys). Interviews with respondents show that on average the questionnaire can be completed in approximately 10 - 15 minutes.

At the moment, the firm panel of the KOF Retail Trade Survey comprises 4269 firms that participate on a monthly basis. Among those, we find 93 large firms (more than 250 employees), 261 medium-sized firms (more than 50, but less than 250 employees) and 3939 small firms with less than 50 employees.

Description of Aggregation Procedure

For results at NOGA 3-digit level the responses are weighted by turnover measured through the turnover category which is derived from the average of the previous year's monthly turnover (categories). At the 2-digit level (47) in addition to firm size weighting, population information is used for aggregation. In a first step firms are separated in three size classes (small, medium, large) and size weighted results for each size class are calculated. The three size class results are aggregated to the 2-digit level by use of the respective share of employed in the population.

Response Rates and Non-Response

During the last complete survey wave, i.e. in November 2018, the response rate amounts to 56.7%. The average response rate during the last 12 months, i.e. from October 2017 to November 2018, was 55%. In order to reduce non-response, KOF Swiss Economic Institute reminds missing respondents by telephone. In order to mitigate the effect of non-response on the results, we carry forward missing observations for period. That is, we replace the missing value with the response of the previous survey.

Quantification, Seasonal Adjustment, MCD and Standard Errors

We quantify survey questions with a categorical response scales using the balances method. That is, we calculate the net balance that is defined as the percentage share of (+) responses minus the percentage share of (-) responses.

Certain sectors display seasonal patterns in their answers. In order to correct for seasonal movements in the aggregated series, we seasonal adjusted and smoothed results using the CENSUS-X13ARIMA-SEATS procedure.

In order to validate the quality of our aggregate series we compute the MCD (Months of Cyclical Dominance). We report this measure in Table 1.

While MCD indicates the average signal in our time series, it does not say anything about the precision of these estimates. In order to provide a general idea of the precision of our estimated time series, KOF computes standard errors (s.e.) and the interquartile range (IQR) for the main statistic of all series. Generally, analytical formulas for the standard errors and the interquartile range around these statistics might not be available or might be hopelessly difficult to evaluate. Fortunately, bootstrapping is a very general method for estimating s.e. and IQR. Furthermore, bootstrapping does not require any assumptions about how our data are distributed. Finally, we know that standard errors of any sample statistic is the standard deviation of the sampling distribution for that statistic. Hence, we bootstrap (500 iterations) the distribution for the main statistics of all questions and use it to calculate the standard errors and the interquartile range for each statistic. Due to the high computational burden, we bootstrap standard errors and IQR only once a year. Table 1 reports the average standard error of each survey question over the last ten years. Currently, we display average values from November 2008 to November 2018.

Description	Frequency	MCD	s.e.	IQR
Assessment Business Situation	monthly	4	3.42	4.57
Assessment Number of Employees	monthly	4	1.60	2.13
Assessment Stock	monthly	4	1.96	2.64
Change Customer Frequency (Y/Y)	monthly	5	4.63	6.20
Change Earnings (last 3 months)	monthly	5	3.68	4.90
Change Quantity of Goods Sold (last 3 months)	monthly	4	4.32	5.81
Change Quantity of Goods in Stock (Y/Y)	monthly	3	3.76	5.09
Expected Change Business Situation (next 6 months)	monthly	6	3.17	4.24
Expected Change Employment (next 3 months)	monthly	12	3.28	4.39
Expected Change Selling Prices (next 3 months)	monthly	4	2.50	3.36
Expected Change Orders (next 3 months)	monthly	2	3.35	4.49
Expected Change Turnover (next 3 months)	monthly	3	4.23	5.64

Table 1: MCD (Months of Cyclical Dominance)

Notes: This table displays various statistics for each monthly survey question of the KOF Retail Trade Survey. MCD shows the months of cyclical dominance (MCD). In order to calculate the MCD, we confine the data sample to the last years, i.e. from April 2011 to November 2018. s.e. reports the average standard error of each survey question over the last ten years. IQR shows the interquartile range (IQR) of the sampling distribution for each statistic. We obtain both, standard errors as well as IQR using bootstrap methods (500 iterations). Due to the high computational burden, we bootstrap standard errors and IQR only once a year. Currently, we display average values from November 2008 to November 2018.

International comparability and Publication

The survey contains most of the questions contained in the harmonized survey program of the Directorate General for Economic and Financial Affairs of the European Commission. The harmonized program is implemented in almost all member and candidate countries of the European Union and forms an important international standard.

The results of the KOF Business Tendency Surveys are used to construct indicators which are published regularly. The main indicator for the Swiss business cycle is the KOF Economic Barometer. There is a fixed calendar for the publication of the indicator. This calendar is available at the KOF website. Media agencies can get the media release with an embargo 10 minutes before its publication. Other indicators grounding on the surveys include the KOF Employment Indicator and the KOF Business Situation, which is published in the KOF Bulletin. Detailed results of the surveys are presented on quarterly press conferences.

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