

Federal Department of Economic Affairs, Education and Research EAER

State Secretariat for Economic Affairs SECO Economic Policy Directorate Short Term Economic Analyses

Consumer sentiment: experimental data – methodology

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1 Consumer sentiment

General information on the consumer sentiment survey can be found at <u>www.seco.ad-</u> <u>min.ch/consumer-confidence</u> under the 'Documents' tab. Information on the additional data collected since 2023 in the form of experimental statistics² can be found below.

2 Experimental data

Experimental statistics are produced using new methods and/or data sources and are a focal point of the Confederation's 2024–2027 multi-annual programme for federal statistics.³ They are published at an early stage to meet users' needs regarding the efficiency, quality and availability of new data. However, these statistics are still in development regarding their methodology.

As part of a fundamental redesign of the 2023 survey, two experimental questions were added to the consumer sentiment questionnaire to best respond to the needs of data users. These questions ask households about their price expectations in numerical terms. The wording or assessment of the questions is subject to change in the future.

3 Interpretation of the results

In general, surveys of numerical price expectations focus on changes over time. It is widely known from international research that the absolute level of expected prices in surveys is not very meaningful and tends to be significantly higher than actual measured prices, especially in household surveys.⁴

² See <u>https://www.experimental.bfs.admin.ch/en.</u>

¹ For more information: SECO, Short Term Economic Analyses Unit, e-mail: <u>conjoncture@seco.admin.ch</u>.

³ See <u>https://www.bfs.admin.ch/bfs/en/home/fso/official-statistics/multi-annual-programme.assetde-tail.30127368.html</u>.

⁴ See also Weber et al. (2022) and Hepenstrick, Pirschel and Scheufele (2024).

4 Questionnaire

Price outlook, 12 months, in per cent (since 2023)

Question: By what percentage, in your view, will prices [rise] / [fall] in the next 12 months? / [You stated earlier that prices will remain virtually unchanged in the next 12 months. Do you mean that prices will remain exactly the same or do you expect a small change? Please indicate your estimate of the percentage change in prices over the next 12 months.]

If you think that prices will fall slightly, please use a minus (-) sign.

Answer: Specified in %. Number with one decimal place.

Price outlook, 5 years, in per cent (since 2023)

Question: In your view, how much will prices [rise] / [fall] in [current year +5] compared to the previous year [current year +4]? / [You stated earlier that prices in [current year + 5] will remain virtually unchanged compared to the previous year [current year + 4]. Do you mean that prices will remain exactly the same or do you expect a small change? Please indicate your estimate of the percentage change in prices in [current year + 5] compared to the previous year [current year + 4].

If you think that prices will fall slightly, please use a minus (-) sign.

Answer: Specified in %. Number with one decimal place.

5 Analysis

Data on households' price and inflation expectations are routinely collected and published in many countries. However, a standardised approach has not yet been established internationally, neither in terms of the specific questions asked nor in the evaluation of the results. Similar to other institutions, SECO publishes three different measures of the experimental results on expected price trends:⁵ the interpolated median, the arithmetic mean of the responses between -50% and +100%, and the interquartile range (IQR). These measures are among the most commonly used internationally. In order to correct for outliers, only responses between -50% and +100% are taken into account.

For the (symmetrically) interpolated median of a variable X, the cumulative proportions are first calculated with the adjusted cumulative distribution function for all observed values of X according to the approach of Cox (2009):

$$CDFS(x) = Pr(X < x) + 0.5 * Pr(X = x) = Pr(X \le x) - 0.5 * Pr(X = x).$$

The two nearest observed values just below and above the median (q=0.5) or the first or third quartile (q=0.25 or q=0.75) are then determined. The linear interpolation between these two values *L* (lower value, below *q*) and *H* (higher value, above *q*) results in the interpolated median or the interpolated quartile:

 $q_{interpol} = L + (H - L) * [q - CDFS(L)] / [CDFS(H) - CDFS(L)].$

⁵ See Abberger et al. (2024).

The interpolated IQR is calculated from the difference between the interpolated third quartile and the interpolated first quartile.⁶

Literature

Abberger, K. et al. (2024). Studie zur Erhebung der Inflationserwartungen in der Umfrage der Schweizer Konsumentenstimmung. Grundlagen für die Wirtschaftspolitik Nr. 51. Staatssekretariat für Wirtschaft SECO, Bern, Schweiz.

Armantier, O. et al. (2017). An Overview of the Survey of Consumer Expectations. FRNBY Economic Policy Review, 23: 51–72.

Cox, N. (2009). IQUANTILE: Stata Module to Calculate Interpolated Quantiles.

Hepenstrick, Ch., Pirschel I. and R. Scheufele (2024). Inflationserwartungen: Ein wertvoller Indikator für die Geldpolitik. Die Volkswirtschaft, 11. März.

Weber, M. et al. (2022). The Subjective Inflation Expectations of Households and Firms: Measurement, Determinants, and Implications, Journal of Economic Perspectives, 157–184.

⁶ See Cox (2009) and Armantier et al. (2017).