

Documentation of statistics for Consumer Expectations Survey 2015



1 Introduction

The purpose of the survey is to analyze the consumer climate through questions about the economic situation as perceived by consumers at a given time concerning both the general economic situation in Denmark and the financial situation of the family. The main results are coordinated in the so-called consumer confidence indicator. The Danish surveys have been conducted since 1974. From 1996 data is collected in all 12 months of the year.

2 Statistical presentation

Consumer monthly questions for: financial situation, general economic situation, price trends, unemployment, major purchases and savings. Consumer quarterly questions for: intention to buy a car, purchase or build a home, home improvements.

Each month the net figures for following consumer confidence indicators are published:

- How is the financial situation of your household today compared with one year ago?
- How do you think the financial situation of your household will be in a year compared with today?
- How do you think the economic situation in Denmark is today compared with one year ago?
- How do you think the economic situation in Denmark will be in a year compared with today?
- Seen in the light of the economic situation do you think it is at present an advantage to make major purchases, such as TV sets, washing machines or similar, or it is better to wait?
- How do you think the prices are today compared with one year ago?
- Compared with the present situation how do you think the prices will develop during the next 12 months?
- How do you think the level of unemployment will be in a year compared with today?
- In the next 12 months how much will your household spend on major purchases compared with the last 12 months?
- Do you consider it to be reasonable to put money aside in order to save up in the present economic situation?
- Do you expect to put money aside in order to save up over the next 12 months? (Excluding savings such as repayments on priority loans and other loans)
- How is the present financial situation of your household, or in other words: Do you spend
 more than you earn, or do you find it difficult to make ends meet, or are you able to put
 money aside?

Alternatives of answers and weights:

- How has the financial situation of your household changed over the last 12 months?
- Got a lot better 100
- Got a little better 50
- Stayed the same o
- Got a little worse -50
- Got a lot worse -100
- How do you expect the financial position of your household to change over the newt 12 months? It will?
- Get a lot better 100
- Get a little better 50
- · Stay the same o
- Get a little worse -50
- Get a lot worse -100



- How do you think the general economic situation in the country has changed over the past 12 months? It has?
- Got a lot better 100
- Got a little better 50
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- Got a little worse -50
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- How do you expect the general economic situation in the country to develop over the next 12 months? It willić
- Got a lot better 100
- Got a little better 50
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- Got a lot worse -100
- In view of the general economic situation, do you think that now it is the right moment for people to make major purchases such as furniture, electrical/electronic devices, etc.?
- Yes, it is the right moment now 100
- It is neither the right moment nor the wrong moment o
- No, it is not the right moment now -100
- How do you think that consumer prices have developed over the last 12 months? They have ¿
- Risen a lot 100
- Risen moderately 50
- · Risen slightly o
- Stayed about the same -50
- Fallen -100
- By comparison with the past 12 months, how do you expect that consumer prices will develop in the next 12 months? They will?
- Increase more rapidly 100
- Increase at the same rate 50
- Increase at a slower rate o
- Stay about the same -50
- Fall -100
- How do you expect the number of people unemployed in this country to change over the next 12 months? The number will \(\delta \)
- Increase sharply 100
- Increase slightly 50
- Remain the same o
- Fall slightly -50
- Fall sharply -100
- Compared to the past 12 months, do you expect to spend more or less money on major purchases (furniture, electrical/electronic devices, etc.) over the next 12 months?
- Much more 100
- A little more 50
- About the same o
- A little less -50
- Much less -100
- In view of the general economic situation, do you think that now is?
- A very good moment to save 100
- · A fairly good moment to save 50
- Not a good moment to save -50
- A very bad moment to save -100



- Over the next 12 months, how likely is it that you save any money?
- Very likely 100
- Fairly likely 50
- Not likely -50
- Not at all likely -100
- Which of these statements best describes the current financial situation of your household?
- We are saving a lot 100
- We are saving a little 50
- · We are just managing to make ends meet on our income o
- We are having to draw on our savings -50
- We are running into debt -100

2.1 Data description

General method: The information is collected through the so-called omnibus surveys. At present an omnibus survey consists of a sample of about 1,500 persons, drawn from a population of persons age 16-74 years residing in Denmark.

As it is not possible to interview all 1,500 persons, each completed interview is given a personal weight, which partly corrects the effects of non-sampling and non-response and partly ensures that if you sum up all completed interviews you end up with a number of persons in tables and analyses corresponding to a number of persons of the age between 16 and 74 years. The questions asked to the persons are being enumerated with this weight, as well as weighted figures are being used at calculations of percentages.

However, a number of variables do not concern the individual person, but the family he/she is living with.

In these cases each respondent who is answering is being given a family weight, which ensures that the families with different numbers of persons aged 16 years or over are represented in the sample with varying probability. A family is defined as one or several persons between 16 and 74 years who live in the same accommodation and are related (includes also cohabiting couples) and their children, though there can only be one married or cohabiting couple in the family. The sum of the family weight for all completed interviews, gives the number of families in Denmark that have persons aged between 16 and 74 years. The number of families is thus an estimate for the random test

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- Over the next 12 months, how likely is it that you save any money?
- Very likely 100



- Fairly likely 50
- Not likely -50
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Net figures:

The answers are being weighted into a net figure.

Consumer confidence indicator:

The consumer confidence indicator is calculated as a simple average of the net figures for the questions 1-5.

Decimals: Until December 2004 the net figure for the various parts of the consumer confidence survey has been calculated and published as whole figures. But in accordance with a request from the EU-commission the net figures of the consumer expectations survey and the consumer confidence indicator are being calculated and delivered with one decimal as from January 2005.

Seasonal adjustment

The consumer expectation survey is not seasonal adjusted as it has been checked for its suitability to be seasonal adjusted with a negative result.

2.2 Classification system

Respondents are categorized according to five criteria: income, occupation, education, age and sex.

2.3 Sector coverage

Consumer survey is compiled for consumers' sector.

2.4 Statistical concepts and definitions

Consumer Confidence Indicator: The economic situation as perceived by consumers at a given time, concerning both the general economic situation in Denmark and the financial situation of the family.

Net Figure: An arithmetic average of balances i.e. the difference between positive and negative answers. The answers are weighted into a net figure.

2.5 Statistical unit

Net figures.



2.6 Statistical population

Persons in the age group from 16-74 years residing in Denmark.

2.7 Reference area

Denmark.

2.8 Time coverage

Statistics covers the period from 1974 henceforward.

2.9 Base period

Not applicable.

2.10 Unit of measure

The information is collected through the so-called omnibus surveys. The data are compiled as arithmetic average of balances i.e. the difference between positive and negative answers. The answers are being weighted into a net figure.

2.11 Reference period

The reference period is the survey month, where the data collection takes place in the first two weeks of the month. A few additional questions are added every quarter to the survey.

2.12 Frequency of dissemination

Monthly.

2.13 Legal acts and other agreements

The Act of Statistics Denmark. The work is carried out in accordance with contract with the EU (ECFIN).

2.14 Cost and burden

A sample of 1,500 persons is questioned each month over the telephone. The interviews are fully conducted with approx. 67 %.

2.15 Comment

Additional information can be obtained by Statistics Denmark.



3 Statistical processing

This survey are sample surveys, where a representative sample of persons 16-74 years are asked among other things about the consumer expectations. The results are corrected from the effects of non-sampling and non-response and then enumerated so that the figures can directly be classed with the population of adult persons and families in Denmark. Data are validated using logical validation rules. A seasonal pattern could not be identified in the series and no seasonal adjustment was undertaken.

3.1 Source data

The data is collected through Statistics Denmark's omnibus surveys. The information used for the purpose of the consumer expectations survey has always been collected as part of Statistics Denmark's omnibus surveys. These surveys are sample surveys, where a representative sample of persons 16-74 years are asked among other things about the consumer expectations. The results are corrected from the effects of non-sampling and non-response and then enumerated so that the figures can directly be classed with the population of adult persons and families in Denmark.

3.2 Frequency of data collection

Monthly.

3.3 Data collection

Omnibus survey.

3.4 Data validation

In the frame of data validation the check of the data correctness is conducted by checking the consistency of the responses by every single respondent, comparison of the results with the results of the previous month, as well as comparison of the non-response rate are also undertaken. There is also a built in formulae in Excel to check whether the results comply with the output from SAS program. Otherwise data are validated using logical validation rules.



3.5 Data compilation

As it is not possible to interview all 1,500 persons, each completed interview is given a personal weight, which partly corrects the effects of non-sampling and non-response and partly ensures that if you sum up all completed interviews you end up with a number of persons in tables and analyses corresponding to a number of persons of the age between 16 and 74 years. The questions asked to the persons are being enumerated with this weight, as well as weighted figures are being used by calculations.

However, a number of variables do not concern the individual person, but the family he/she is living with.

In these cases each respondent who is answering is being given a family weight, which ensures that the families with different numbers of persons aged 16 years or over are represented in the sample with varying probability. A family is defined as one or several persons between 16 and 74 years who live in the same accommodation and are related (includes also cohabiting couples) and their children, though there can only be one married or cohabiting couple in the family. The sum of the family weight for all completed interviews, gives the number of families in Denmark that have persons aged between 16 and 74 years. The number of families is thus an estimate for the random test.

3.6 Adjustment

No furtherer adjustments are undertaken, beyond those that have already been described under Data validation and Data compilation.

4 Relevance

The most important user is the European Commission for Economy and Finances (ECFIN), which receives detailed tables for all questions and publishes seasonally adjusted consumer confidence indicators for all EU member states. The figures are also of great interest to the news media.

4.1 User Needs

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Since January 2005 Statistics Denmark has delivered net figures and indicators for EU (ECFIN) with decimals. In the same period Statistics Denmark has published the figures with decimals in the Statbank and in "News" from Statistics Denmark.

4.2 User Satisfaction

Relatively large press coverage.



4.3 Data completeness rate

All needed statistics are available and comply fully with guidelines submitted by Commission.

5 Accuracy and reliability

As the results are based on a sample survey, they are subject to a certain degree of statistical uncertainty. This depends on both the size of the sample and the number of completed interviews, which vary from survey to survey. With a sample of approximately 1,500 persons and a response rate of about 65 pct., which has normally been achieved in the last few years, the statistical uncertainty is in 95 pct. of the cases estimated ranged within +/- 3 percentage points. A change in an indicator should be greater than 5 percentage points to indicate a significant change.

5.1 Overall accuracy

Overall accuracy depends on on the sample size and on the number of conducted interviews., which vary from survey to survey. With a sample of approximately 1,500 persons and a response rate of about 65 pct., which has normally been achieved in the last few years, the statistical uncertainty is in 95 pct. of the cases estimated ranged within +/- 3 percentage points. A change in an indicator should be greater than 5 percentage points to indicate a significant change.

5.2 Sampling error

At present an omnibus survey consists of a sample of about 1,500 persons, drawn from a population of persons aged 16-74 years residing in Denmark.

As it is not possible to interview all 1,500 persons, each completed interview is given a personal weight, which partly corrects the effects of non-sampling and non-response and partly ensures that if you sum up all completed interviews you end up with a number of persons in tables and analyses corresponding to a number of persons of the age between 16 and 74 years. The questions asked to the persons are being enumerated with this weight, as well as weighted figures are being used at calculations of percentages.

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With a sample of approximately 1,500 persons and a response rate of about 65%, which has normally been achieved in the last few years, the statistical uncertainty is in 95% of the cases estimated ranged within +/-3 percentage points.



5.3 Non-sampling error

Not available information.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

As it is not possible to interview all 1,500 persons, each completed interview is given a personal weight, which partly corrects the effects of non-sampling and non-response and partly ensures that if you sum up all completed interviews, you end up with a number of persons in tables and analyses corresponding to a number of persons of the age between 16 and 74 years. The questions asked to the persons are being enumerated with this weight, as well as weighted figures are being used at calculations of percentages.

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5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the <u>Revision Policy for Statistics</u> <u>Denmark</u>. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

Only final figures.



6 Timeliness and punctuality

There is no difference between planned and actual release time.

6.1 Timeliness and time lag - final results

The consumer expectations survey for a given month is published monthly and about 2-3 days after completing the collection of data.

6.2 Punctuality

The reference period is the survey month, where the data collection takes place in the first two weeks of the month. The consumer expectations survey for a given month is published monthly and about 2-3 days after completing the collection of data. Announced the release date and deadlines to Eurostat are respected 100%.

7 Comparability

All questions shown in section 1.1 were included in the omnibus surveys since 1974, and the new figures can immediately be compared with previously published statistics.

As far as net figures and consumer confidence indicator are concerned, they are available in the Statbank as far back as October 1974. But because of changes in the calculation method, direct data comparability is only possible from 2007.

7.1 Comparability - geographical

Statistics is comparable across the countries, since all national institutes use the same harmonized questionnaires in accordance with the principle of harmonization of the Commission's survey program, which aims to produce a set of comparable data for all countries.

7.2 Comparability over time

All questions shown in section 1.1 were included in the omnibus surveys since 1974, and the new figures can immediately be compared with previously published statistics. As far as net figures and consumer confidence indicator are concerned, they are available in the Statbank as far back as October 1974. But because of changes in the calculation method, direct data comparability is only possible from 2007.

7.3 Coherence - cross domain

The questions asked are so specific that there are no other comparable figures available at Statistics Denmark, but the European Commission publishes corresponding figures for the EU countries (incl. Denmark) at its data base. However 'Consumer confidence indicator' published by the European Commissions is compiled as a simple arithmetic average of the questions 2,4,8 and 11 and unlike the figures published by Statistics Denmark, the EU figures are available as seasonally adjusted and not seasonally adjusted. Therefore these two indicators are not directly comparable.



7.4 Coherence - internal

Not relevant for this statistics.

8 Accessibility and clarity

The results are published in *Nyt fra Danmarks Statistik* (News from Statistics Denmark): <u>Danmarks Statistik</u> and are also available on the Internet from Statbank Denmark: <u>Danmarks Statistik</u>.

After each survey, Statistics Denmark submits detailed tables giving a number of background variables as well as the consumer confidence indicator and net figures to the European Commission, which publishes monthly both seasonally adjusted and not seasonally adjusted indicator and the net figures for each members state (incl. Denmark), at European Commission data base: European Commission. The access to the more detailed data and Micro-data can be granted through Statistics Denmark's agreement for researchers.

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.4 News release

Danmarks Statistik

8.5 Publications

Danmarks Statistik

8.6 On-line database

Danmarks Statistik

8.7 Micro-data access

Micro-data is regularly submitted to the European Commission by Statistics Denmark, but is not accessible to third party. The access to the more detailed data and Micro-data can be granted through Statistics Denmark's agreement for researchers. Micro-data is subject to the rule of anonymisation in order to protect personal information.



8.8 Other

After each survey, Statistics Denmark submits detailed tables giving a number of background variables as well as the consumer confidence indicator and net figures to the European Commission, which publishes monthly both seasonally adjusted and not seasonally adjusted indicator and the net figures for each members state (incl. Denmark), at European Commission data base: European Commission.

8.9 Confidentiality - policy

Statistics Denmark Confidentiality policy is described under: Statistics Denmark.

8.10 Confidentiality - data treatment

Statistics Denmark Confidentiality policy is described under: <u>Danmarks Statistik</u>.

8.11 Documentation on methodology

All programs and papers can be found in Statistics Denmark.

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

The administrative placement of this statistic is in the division of Consumption and Prices. The person responsible is Zdravka Bosanac, tel. +45 3917 34 6, e-mail: zbo@dst.dk

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

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