Introduction Business Tendency Surveys Consumer Tendency Surveys Time series Presentation of results

Concept, implementation and use of economic tendency surveys

Klaus Abberger

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 - Consumer Tendency Surveys
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Economic tendency surveys

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Economic Tendency Surveys

Economic Tendency Surveys (ETS) gather qualitative information about assessments and expectations of businesses and consumers.

Often results are used to calculate so called confidence indicators.

Economic Tendency Surveys (ETS) can be separated into Business Tendency Surveys (BTS) and Consumer Tendency Surveys (CTS).

Some typical questions

Our production in the next three months will increase/ remain unchanged/ decrease

We assess our backlog of orders as above normal/normal/below normal

How do you expect the general economic situation in the country to change over the next 12 months? get a lot better/ get a little better/ stay the same/ get a little worse/ get a lot worse

Why Business Surveys?

Businesses are central to a country's economy in terms of both economic growth and maintaining the nation's infrastructure. Because of their importance, data from businesses are needed for national, regional, local, and individual business monitoring, and policymaking and decisionmaking, as well as decisionmaking for individual members of society.

Why Business Tendency Surveys?

A vibrant private sector is crucial for the success of an economy. Businesses employ people and make investments. It is important to understand which factors are hindering businesses in their activity. A rich and appropriate information source are the businesses themselves. With the help of perception surveys the views of the business community are systematically observed and made measurable. The main bottlenecks can be identified and the standardized approach allows to detect improvements in the business climate over time.

- Base for business cycle relevant indicators
- Receive timely signals about general business cycle course
- Change point detection
- Information about assessments of current situation and expectations for the coming months of enterprises, e.g.
 - assessment of stocks
 - expectations about price changes
 - plans about employment
 - capacity utilization

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The information covered by BTS goes beyond topics which are usually captured by conventional quantitative statistics. Examples include

- assessments (e.g. capacities, stocks)
- plans and expectations
- bottlenecks

Consumer Tendency Surveys

CTS consist of questions dealing with the individual financial situation of households as well as their perception on the general economic situation in their country.

Hence, they have two main purposes:

- to cover the demand-side of the business cycle
- to assess consumer confidence



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General consideration

The first measures of consumer confidence were developed by George Katona in the late 1940s as a means to directly incorporate empirical measures of expectations into models of spending and saving behaviour. Katona's now famous dictum was that consumer spending depends on both their 'ability and willingness to buy.' By spending, he meant discretionary purchases; by ability, he meant the current income of consumers; and by willingness, he meant consumers' assessments of their future income prospects. Katona hypothesized that spending would increase when people became optimistic, and precautionary saving would rise when they became pessimistic.

Aims of Economic Tendency Surveys

ETS includes information about the

- recent past
- current situation
- near future



Aims of Economic Tendency Surveys

- Economic Tendency Surveys deliver timely information about the development of economic activity. They also deliver information about assessments and plans of business and people.
- They are a valuable and timely supplement of quantitative statistics not a substitute of these.
- They are not used for structural analysis.



- easier for respondents
- can be completed quickly
- timely results
- smaller sample size possible
- less data editing and consistency checks
- less seasonal distortion
- reduced influence of outliers



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- Politics
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Customers of ETS results

Two broad categories of users according to their needs:

- 'Executives' (e.g. senior business executives, politicians, senior civil servants responsible for government policy, senior personal in banks and financial institutions and the press and other media)
- 'Analysts' (e.g. economists and researchers operating in the academia, research institutions and governmental bodies)

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FINANCIAL TIMES

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Brexit / Following

Consumer confidence plummets after Brexit vote

Scale and speed of fall reinforces case for BoE rate cut next week



© EPA

CONFIDENCE

The pollsters

Consumer and business confidence indicators are usually correlated with the ups and downs of the UK economy. YouGov and the Centre for Economics and Business Research say their surveys suggest a "significant shock".

This began before the EU referendum date and results were reported separately before and after the vote. Consumer confidence in the UK economy fell from 111.9 points early in June to 104.3 after the vote, the lowest level of this indicator since May 2013. But it remains well above the levels seen before the last recession, when it slumped below 70.

Although most companies were still optimistic about their own prospects, the proportion with a gloomy outlook rose from 16 per cent before the referendum to 26 per cent after it.



Signal for growth: Poor



August 14, 2014 5:04 pm

Russian shadow unsettles German business confidence

By Stefan Wagstyl and Chris Bryant in Berlin





August 4, 2014 12:02 am

UK business confidence dips for first time in two years

By Brian Groom, Business and Employment Editor



Any questions? Ask Customer Services

July 30, 2014 11:59 pm

UK consumer confidence falls for first time in six months

By Emily Cadman



Any



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Financial Times

Last updated: July 1, 2014 5:07 am

Japan's Tankan business survey falls after consumption tax rise

By Ben McLannahan in Tokyo



Any questions?



The Economist



The Economist



The Wall Street Journal



ECONOMY

Euro-Zone Consumer Confidence Keeps Climbing

Sentiment at Strongest Level Since Before Financial Crisis



The Wall Street Journal



ECONOMY

South Africa Business Confidence Falls to 15-Year Low

Strikes Have Reen a Drag on Economic Growth

Reuters



UK consumer confidence falls as election nears -YouGov/Cebr

LONDON, APRIL 29

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Reuters

Markets | Fri Apr 24, 2015 3:00am EDT

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Users of ETS

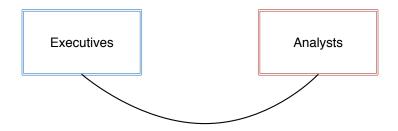
Users of economic tendency surveys

Executives

Analysts

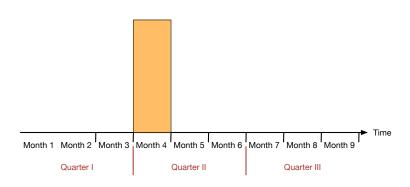
Users of ETS

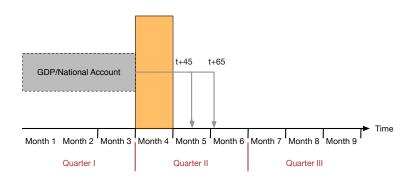
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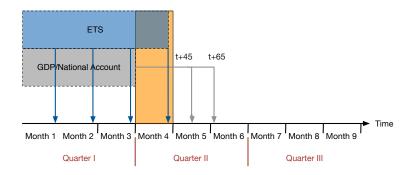


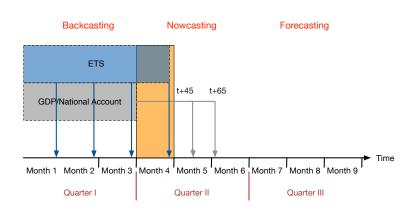
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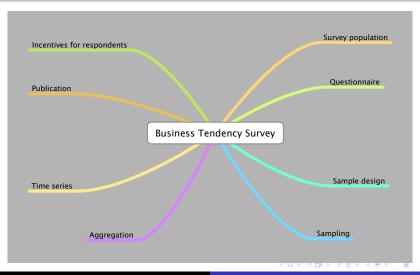


Economic tendency surveys

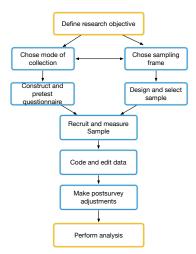
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Aspects of conducting BTS



Lifecycle from a process perspective(Groves et al.)



Aspects regarding the selection of the population

Privat sector or government determined

Selected Population

Cyclicity

Cyclicity

Contribution to overall economy (employment)

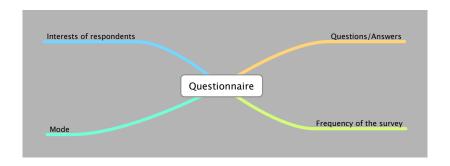
Formal/informal sector

Range of KOF Business Tendency Surveys

Sector	Frequency (today)	Introduction	
Manufacturing	monthly	1955	
Retail Trade	monthly	1973	
Wholesale Trade	quarterly	1977	
Hotel and Restaurants	quarterly	1988	
Construction	monthly	1994	
Architects and Engineers	monthly	1996	
Banks	monthly	2000	
Insurances	monthly	2001	
Other Services	quarterly	2006	
Investment Survey	biannual	1970	



Aspects of the Questionnaire



Questions should consider topics which:

- measure an early stage of production/activity (e.g. new orders, order books, demand);
- respond rapidly to changes in economic activity (e.g. stocks)
- measure expectations or are sensitive ti expectations (e.g. production plans, employment plans, business climate).

The variables should not only be relevant from a theoretical point of view but also in the view of managers and enterprises.



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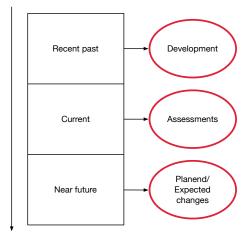
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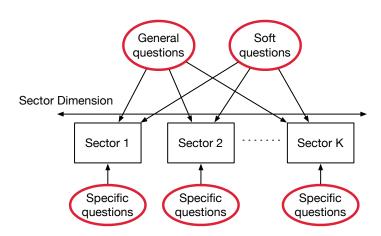
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Time Dimension





		Manufacturing	Examples
Soft questions	Recent past	Business activity/situation	How has your business situation developed over the past three months? It has improved/remaind unchanged/deteriorated
	Current	Business situation	How do you assess your current business situation? It is good/satisfactory/poor
	Near future	Business activity/situation	How do you expect your business situation to develop over the next 3 (6) months? It will imporve/remain unchanged/deteriorate
General questions	Recent past	Firm's employment	How has your firm's total employment changed over the past three months? It has increased/remaind
	Current	Firm's employment	How do you currently assess your firm's total employment? It is to large/adequat/to low
	Near future	Firm's employment	How do you expect your firm's total employment to change over the next three months? It will increase/ remain unchanged/decrease
Specific questions	Recent past	Production, order books, stock of finished products	How has your firm's stock of finished products changed over the past three months? It has increased/remaind unchanged/decreased
	Current	Total order books, export order books, stock of finished products	How do you currently assess your firm's stock of finished products? It is to large/adequat/to low
	Near future	Production, selling prices	How do you expect your production to develop over the next 3 months? It will increase/remain unchanged/ decrease



		Construction	Retail	Financial Services	Other Services	
questions	Recent past	Business activity/situation	Business activity/situation	Business activity/situation	Business activity/situation	
	Current	Business situation	Business situation	Business situation	Business situation	
	Near future	Business activity/situation	Business activity/situation	Business activity/situation	Business activity/situation	
General questions	Recent past	Firm's employment	Firm's employment	Firm's employment	Firm's employment	
	Current	Firm's employment	Firm's employment	Firm's employment	Firm's employment	
	Near future	Firm's employment	Firm's employment	Firm's employment	Firm's employment	
Specific questions	Recent past	Order books, production	Turnover	Demand	Demand	
	Current	Factors limiting production, order books	Stock of goods			
	Near future	Selling prices, production	Orders placed with supliers, selling prices, turnover	Demand	Demand, selling prices	



		Wholesale	Agriculture
Soft questions	Recent past	Business activity/situation	Business activity/situation
	Current	Business situation	Business situation
	Near future	Business activity/situation	Business activity/situation
General questions	Recent past	Firm's employment	Firm's employment
	Current	Firm's employment	Firm's employment
	Near future	Firm's employment	Firm's employment
Specific questions	Recent past	Turnover	
4	Current	Stock of goods	Factors limiting production, stock of finished products
	Near future	Turnover, selling prices	Selling prices, production



		Manufacturing	Construction	Retail	Financial Services	Other Services	Wholesale	Agriculture
		Orders, competitive position			Operating income, operating expenses, profitability, capital			
	Current	production,				Factors limiting activity, capacity utilization		
	Near future	Export orders, orders			Operating income, operating expenses, profitability, capital expenditure, competitive position			

Questions: General remarks

		Manufacturing	Construction	Retail	Financial Services	Other Services	Wholesale	Agriculture
questions	Recent past	Development of fixed investment last year	Development of fixed investment last year				Development of fixed investment last year	Development of fixed investment last year
	Current	Palanned development of fixed investment this year	Palanned development of fixed investment this year				Palanned development of fixed investment this year	Palanned development of fixed investment this year
	Near future	Palanned development of fixed investment next year	Palanned development of fixed investment next year	Palanned development of fixed investment next year			Palanned development of fixed investment next year	Palanned development of fixed investment next year

Bottleneck questions

Questions regarding constraints

Demand constraints:

Insufficient domestic demand; insufficient foreign demand

Supply constraints:

Shortage of equipment; insufficient capacity; shortage of (skilled) labour; shortage of raw materials; shortage of capital

Further topics:

Quality of infrastructure, legal system, political stability, costs of crime and violence, quality of electricity supply, intellectual property protection, access to foreign currencies for intermediate goods/input purchases etc.



Aspects of conducting BT Selection of population Questionnaire Sampling Aggregation Composite Indicators

Further topics:

Further topics:

Quality of locally produced intermediate goods compared to foreign ones: How do assess the quality of locally produced components which could be used in your final product? (very bad, bad, neutral, good, very good)



- 1. THE JOINT HARMONISED EU INDUSTRY SURVEY
- 1.1. Industry survey Questionnaire

Monthly questions

- Q1 How has your production developed over the past 3 months? It has...
 - + increased
 - = remained unchanged
 - decreased
- Q2 Do you consider your current overall order books to be...?
 - + more than sufficient (above normal)
 - = sufficient (normal for the season)
 - not sufficient (below normal)
- Q3 Do you consider your current export order books to be...?
 - + more than sufficient (above normal)
 - = sufficient (normal for the season)



- Q4 Do you consider your current stock of finished products to be...?
 - + too large (above normal)
 - = adequate (normal for the season)
 - too small (below normal)
- Q5 How do you expect your production to develop over the next 3 months? It will...
 - + increase
 - remain unchanged
 - decrease
- Q6 How do you expect your selling prices to change over the next 3 months? They will...
 - + increase
 - remain unchanged
 - decrease



- Q7 How do you expect your firm's total employment to change over the next 3 months? It will...
 - + increase
 - = remain unchanged
 - decrease



Quarterly questions (January, April, July and October)

- Q8 What main factors are currently limiting your production?
 - none
 - · insufficient demand
 - shortage of labour force
 - shortage of material and/or equipment
 - · financial constraints
 - · other factors
- Q9 Considering your current order books and the expected change in demand over the coming months, how do you assess your current production capacity? The current production capacity is....
 - + more than sufficient
 - = sufficient
 - not sufficient
- Q10 How many months of production are assured by your current overall order books? Our production is assured for □□.□ months



- Q11 How have your orders developed over the past 3 months? They have...
 - + increased
 - = remained unchanged
 - decreased
- Q12 How do you expect your export orders to develop over the next 3 months? They will...
 - + increase
 - = remain unchanged
 - - decrease
- Q13 At what capacity is your company currently operating (as a percentage of full capacity)?

The company is currently operating at $\square \square . \square$ % of full capacity.



- Q14 How has your competitive position on the domestic market developed over the past 3 months? It has...
 - + improved
 - = remained unchanged
 - deteriorated
- Q15 How has your competitive position on foreign markets inside the EU developed over the past 3 months? It has...
 - + improved
 - = remained unchanged
 - deteriorated
- Q16 How has your competitive position on foreign markets outside the EU developed over the past 3 months? It has...
 - + improved
 - = remained unchanged
 - deteriorated



Aspects of conducting B' Selection of population Questionnaire Sampling Aggregation Composite Indicators

Harmonized Questionnaire of the European Union

- 5. THE JOINT HARMONISED EU CONSTRUCTION SURVEY
- 5.1. Construction survey Questionnaire

Monthly questions

- Q1 How has your building activity developed over the past 3 months? It has...
 - + increased
 - remain unchanged
 - decreased
- Q2 What main factors are currently limiting your building activity?
 - none
 - insufficient demand
 - weather conditions
 - · shortage of labour force
 - shortage of material and/or equipment
 - · financial constraints
 - other factors



- Q3 Do you consider your current overall order books to be...?
 - + more than sufficient (above normal)
 - = sufficient (normal for the season)
 - not sufficient (below normal)
- Q4 How do you expect your firm's total employment to change over the next 3 months? It will...
 - + increase
 - remain unchanged
 - decrease
- Q5 How do you expect the prices you charge to change over the next 3 months? They will...
 - + increase
 - = remain unchanged
 - decrease



Quarterly question (January, April, July and October)

Q6 Assuming normal working hours, about how many months' work is accounted for by the work in hand and the work already contracted for?

Number of months: $\Box\Box.\Box$



- 4. THE JOINT HARMONISED EU RETAIL TRADE SURVEY
- 4.1. Retail trade survey Questionnaire

Monthly questions

- Q1 How has (have) your business activity (sales) developed over the past 3 months? It has... (They have...)
 - + improved (increased)
 - = remained unchanged
 - deteriorated (decreased)
- Q2 Do you consider the volume of stock you currently hold to be...?
 - + too large (above normal)
 - = adequate (normal for the season)
 - too small (below normal)
- Q3 How do you expect your orders placed with suppliers to change over the next 3 months? They will...
 - + increase
 - remain unchanged



- Q4 How do you expect your business activity (sales) to change over the next 3 months? It (They) will...
 - + improve (increase)
 - remain unchanged
 - deteriorate (decrease)
- Q5 How do you expect your firm's total employment to change over the next 3 months? It will...
 - + increase
 - remain unchanged
 - decrease
- Q6 How do you expect the prices you charge to change over the next 3 months? They will...
 - + increase
 - remain unchanged
 - decrease



- 2. THE JOINT HARMONISED EU SERVICES SURVEY
- 2.1. Services survey Questionnaire

Monthly questions

- Q1 How has your business situation developed over the past 3 months? It has...
 - + improved
 - remained unchanged
 - deteriorated
- Q2 How has demand (turnover) for your company's services changed over the past 3 months? It has...
 - + increased
 - remained unchanged
 - decreased
- Q3 How do you expect the demand (turnover) for your company's services to change over the next 3 months? It will...
 - + increase
 - remain unchanged



- Q4 How has your firm's total employment changed over the past 3 months? It has...
 - + increased
 - = remained unchanged
 - decreased
- Q5 How do you expect your firm's total employment to change over the next 3 months? It will...
 - + increase
 - remain unchanged
 - decrease
- Q6 How do you expect the prices you charge to change over the next 3 months? They will...
 - + increase
 - remain unchanged
 - decrease



Quarterly question (January, April, July and October)

- Q7 What main factors are currently limiting your business?
 - none
 - insufficient demand
 - shortage of labour force
 - shortage of space and/or equipment
 - financial constraints
 - other factors



- 7. THE EU FINANCIAL SERVICES SURVEY
- 7.1. Financial services sector survey Questionnaire

Monthly questions

- Q1 How has your business situation developed over the past 3 months? It has...
 - + improved
 - = remained unchanged
 - deteriorated
- Q2 How has demand (turnover) for your company's services changed over the past 3 months? It has...
 - + increased
 - remained unchanged
 - decreased
- Q3 How do you expect the demand (turnover) for your company's services to change over the next 3 months? It will...
 - + increase
 - remain unchanged
 - decrease



- Q4 How has your firm's total employment changed over the past 3 months? It has...
 - + increased
 - = remained unchanged
 - decreased
- Q5 How do you expect your firm's total employment to change over the next 3 months? It will...
 - + increase
 - remain unchanged
 - decrease



Quarterly questions (January, April, July and October)

- Q10 How has your operating income developed over the last 3 months? It has...
 - + increased
 - remained unchanged
 - decreased



- Q20 How do you expect your operating income to develop over the next 3 months? It will...
 - + increase
 - remain unchanged
 - decrease
- Q30 How have your operating expenses developed over the last 3 months? They have...
 - + increased
 - remained unchanged
 - decreased
- Q40 How do you expect your operating expenses to develop over the next 3 months? They will...
 - + increase
 - remain unchanged
 - decrease



- Q50 How has the profitability of your company developed over the last 3 months? It has...
 - + increased
 - remained unchanged
 - decreased
- Q60 How do you expect the profitability of your company to develop over the next 3 months? It will...
 - + improve
 - = remain unchanged
 - deteriorate
- Q70 How has your capital expenditure developed over the last 3 months? It has...
 - + increased
 - remained unchanged
 - decreased



- **Q80** How do you expect your capital expenditure to develop over the next 3 months? It will...
 - + increase
 - = remain unchanged
 - decrease

How has the competitive position of your company developed over the past 3 months? It has...

```
      Q90
      Total
      + improved / = remained unchanged / - deteriorated

      Q91
      In your country
      + improved / = remained unchanged / - deteriorated

      Q92
      Within the euro area
      + improved / = remained unchanged / - deteriorated

      Q93
      Within the EU
      + improved / = remained unchanged / - deteriorated

      Q94
      Outside the EU
      + improved / = remained unchanged / - deteriorated
```

How do you expect the competitive position of your company to develop over the next 3 months? It will...

```
    Q100
    Total
    + improve
    / = remain unchanged
    / - deteriorate

    Q101
    In your country
    + improve
    / = remain unchanged
    / - deteriorate

    Q102
    Within the euro area
    + improve
    / = remain unchanged
    / - deteriorate

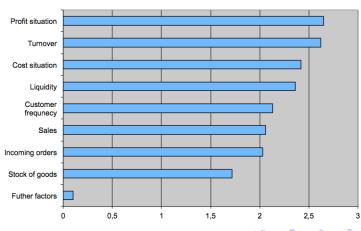
    Q103
    Within the EU
    + improve
    / = remain unchanged
    / - deteriorate

    Q104
    Outside the EU
    + improve
    / = remain unchanged
    / - deteriorate
```

Ifo Business Climate



Business Climate: Factors for assessment of current situation (trade)



History of the EU harmonised program

The Joint Harmonised EU Programme of Business and Consumer Surveys was launched by the Commission decision of 15 November 1961. The first survey was the harmonised business survey in the manufacturing industry conducted in 1962. Since then, the sector coverage of the programme has widened considerably. The BCS programme was extended to the construction sector and to investment plans in the manufacturing sector in 1966, to consumers in 1972, to the retail trade in 1984, and to the services sector in 1996. Since 2007, the Commission conducts a survey in the financial services sector at EU and euro-area level.

History of the EU harmonised program

Meanwhile, the geographical coverage of the programme has been regularly extended to include all Member States as well as the candidate countries. As of May 2016, the programme encompasses the 28 Member States of the European Union and candidate countries.



EU harmonised program

The harmonised surveys are carried out at national level by partner institutes such as ministries, statistical offices, central banks, research institutes, business associations or private companies. The surveys are conducted according to a common methodology, which consists essentially of harmonised questionnaires and a common timetable.



EU harmonised program

The principle of harmonisation underlying the Commission's survey programme aims to produce a set of comparable data for all countries. Harmonisation is essential to allow the comparison of business cycles in the different Member States as well as the calculation of meaningful business cycle indices for the euro area and the EU as a whole

- use by all national institutes of the same harmonised questionnaires;
 and
- conduct of the national surveys, and transmission of the results, according to a common timetable.



EU harmonised program

Harmonisation does not mean uniformity. The national questionnaires may include additional questions, beyond the harmonised ones. Similarly, the sectoral breakdown in the questionnaires may be more detailed than the one set in the programme. Also, the national partner institutes are free to organise the fieldwork the way that best suits the purpose. While the sample design, the sample size, the survey mode, and other methodological considerations are in principle left to their discretion, these important parameters shall be chosen so as to ensure a high degree of representativeness and a low degree of irregular short-term fluctuations (noise) in the data. A broad and frequently updated sampling frame and a high number of completed questionnaires are considered as key in this respect.

Questionnaire: Mode

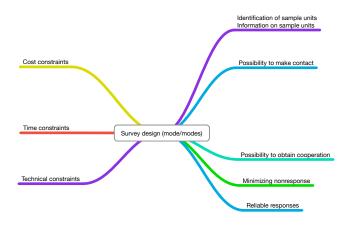
Modes

- personel interviews
- telephone
- letter
- FAX
- e-mail
- internet

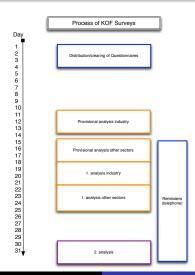
Often multi mode surveys lead to better response rates than single mode surveys.



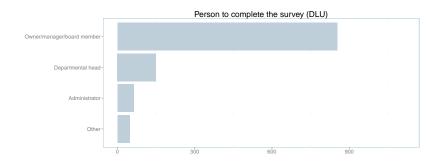
Questionnaire: Mode



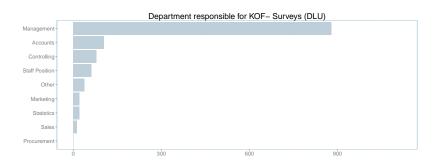
KOF Survey process



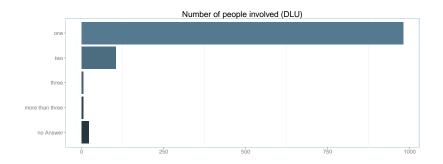
Experiences regarding respondents and response behaviour (services)



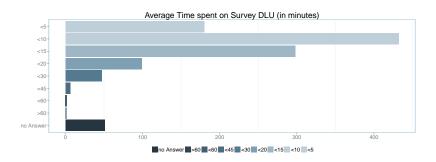
Experiences regarding respondents and response behaviour (services)



Experiences regarding respondents and response behaviour (services)



Experiences regarding respondents and response behaviour (services)



Questionnaire: Frequency of the survey

The frequency is important for the assessment of the results

- at least quarterly to ensure reliable and timely turning point analysis
- at best monthly



Implementation strategy

Implementation strategy mplementation of secto Implementation of a specific survey for one simplified survey for various sectors Full implementation of sector specific surveys Implementation of sector for various sectors specific survey for one sector Implementation of sector specific surveys Implementation of sector specific survey for one Adding missing sectors Overall results and some Overall results and in sector results available. depth results for sectors No in depth sector In depth results for available results available at the sectors available. Overall Are sufficient resources beginning, Questionnaire results at the beginning available (survey at the beginning not available. conduction, data probably not analysis, reporting: IT comparable to other resources, e.g data countries. base)

- Survey frame: Business register including information about contact details, kind if economic activity, size, etc.
- Reporting unit: Part of an enterprise for which data are collected
- Sampling unit: Used to select participant (use survey frame)
- Response unit: Units to whom questionnaires are sent

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- Sampling unit: Used to select participant (use survey frame)
- Response unit: Units to whom questionnaires are sent

Enterprises might be split regarding location and products:

Enterprise	Location 1	Location 2	Location 3
Product 1	Establishment	Establishment	Establishment
Product 2	Establishment	Establishment	Establishment
Product 3	Establishment	Establishment	Establishment

Establishments are the building blocks of BTS.



- The establishments in one location sum up to the local unit
- The establishments in one industry sum up to the kind-of-activity unit
- The establishments sum up to the enterprise
- The local units sum up to the enterprise
- The kind-of-activity units sum up to the enterprise

- The establishments in one location sum up to the local unit
- The establishments in one industry sum up to the kind-of-activity unit
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- The establishments in one industry sum up to the kind-of-activity unit
- The establishments sum up to the enterprise
- The local units sum up to the enterprise
- The kind-of-activity units sum up to the enterprise



Some companies are located at one place and produce one kind of product.

Some companies are more differentiated and cannot give information for their establishments.

Local units provide correct regional information, but might give a misleading picture of the industry structure.

Kind-of-activity units give a correct industrial structure but a wrong regional distribution.



Some topices regarding sampling frames in business surveys

- Businesses that perform different kinds of activity can be classified by more than one industry code. Normally, however, only the primary code, referring to the main activity, is used for classification purposes.
- The industry code is normally decided by the kind of activity that generates the most value. But sometimes, the activity that leads to the highes turnover or the activity that a majority of the employees are performing is used as an alternative way to select the industry code. However, the most labour-intensive activity does not always generate the most value, nor does the activity that generates most value always generate the highest turnover.

Sample design

- Judgmental sampling: 'representative' or 'important' units are selected
- Random sample: pure random sample, stratified random sample (branch, size)

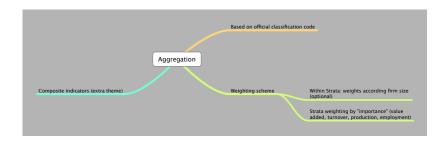
BTS are usually panel samples. Often some kind of post-stratification is also used.



Sample design

Business samples are often random samples, stratified by industry and the number of employees or the size of business' turnover (to classify for business' size). The number of employees is often used when the main focus of the survey is on production, while turnover is preferred when the main focus is on financial output.

Aggregation: Overview



Quantification: Balances

- 1. Calculate percentages of the three response categories.
- 2. Net-balances: percentage (+) answers minus percentage (-) answers.

$$B = P - N$$
,

with B=Balances, P= percentage (+) answers, N= percentage (-) answers.

With more than three categories weights like 1, 0.5, 0, -0.5, -1 can be used.

Quantification: Balances

Answer	Firm 1	Firm 2	Firm 3	Firm 4	Industry I
Increase	Х		Х		2
Remain unchanged				X	1
Decrease		x			1
Increase					0.5
Remain unchanged					0.25
Decrease					0.25
Balance					0.25



Quantification: Diffusion index

Diffusion indices (D) are calculated as:

$$D = P + E/2$$
,

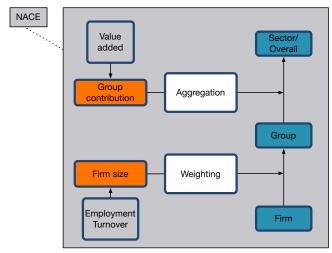
with E the percentage of (=) answers.

Balances range from -100 to 100 and diffusion indices from 0 to 100. Since E=100-P-M it follows

$$B=2(D-50).$$



Aggregation: Overview



Weighting

Weighting in Business Tendency Surveys

Seize weights are often used in BTS, because the importance of answers is assumed to depend on the size of reporting units. The answers from a large firm carry more weight than answers from small firms.

For most quantitative variables in other surveys it is not necessary to use size weights. The reason for this is that these quantitative variables are in themselves a measure of the size of the company. For example variables like turnover, number of employees and volume of production will be higher for large businesses.

Size weights

Size weights are used in processing qualitative answers because the importance of the answers is assumed to depend on the size of the reporting units. The answers from a large firm carry more weight than answers from a small one.

In practice often number of employees (in trade also sales) is used as size weight. Either the number is contained in the frame or the reporting units have to be asked from time to time.

Aggregation weights

To aggregate results branches have to be weighted. Weights should depend on the survey variable concerned. For example, questions about production in a given reporting unit ought to be weighted by the relative value of production by that unit in the branch as a whole, questions about employment with the number of persons employed, etc. It would be costly, or even impossible, for most countries to obtain such a set of weights for. Furthermore, practical experience has shown that the balances are not very sensitive to the choice of weighting variables. In practice it is sufficient to use a single variable reflecting the general economic importance of the industries. The variable of choice would normally be value added.

Aggregation

	Industry 1	Industry 2	Industry 3	Overal
Value added	1500	800	700	3000
or employment				
Share	0.5	0.267	0.233	1

Aggregtaion

Firm 1	Firm 2	Firm 3	Firm 4	balance	weight	weighted
1	0	0	1	0.5	0.5	0.25
0	1	-1	0	0	0.267	0
1	0	-1	-1	-0.25	0.233	-0.0583
						0.19



Economic Tendency Survey data are typically considered in a growth cycle or growth rate cycle framework because of their trend free nature. The advantage of composite indicators over the individual component series is that they achieve a better trade-off between responsiveness and stability. Composite indicators can be constructed to have fewer false alarms and fewer missed turning points than its individual components; moreover they tend to have more stable lead-times. Finally, the composites have the capacity to react to various sources of economic fluctuations and at the same time can be resilient to perturbations affecting only one of the components.

- Soft questions vs. hard questions
- Selection of indicators
- Aggregation of indicators



- Soft questions vs. hard questions
- Selection of indicators
- Aggregation of indicators



- Soft questions vs. hard questions
- Selection of indicators
- Aggregation of indicators



Soft questions: Ifo Business Climate



Hard questions: European Union

Industrial Confidence

- Assessment of order books
- Assessment of current stock of finished goods
- Production expectations



Hard questions: European Union

Service Confidence

- Development of business situation
- Development of demand
- Expected demand



Hard questions: European Union

Retail Trade Confidence

- Development of business activity
- Assessment of stock of goods
- Expected business activity



Hard questions: European Union

Construction Confidence

- Assessment of order books
- Employment plans



Hard questions: European Union

Questions included in Cls



Source: DG ECFIN



Hard questions: European Union

Calculation of the ESI

components: 15 balance series of the 5 sectoral CIs

- seasonally adjusted
- standardised

allocating weights per sector:

Industry: 40% ; Services: 30% ; Consumers: 20% ; Construction: 5% ; Retail Trade: 5%

individual INDU question has weight of 13.3% (= 40% / 3 questions)

calculation of arithmetic mean of weighted balances

standardisation of the FSI and:

- addition of 100
- values >100 indicate above-average economic sentiment
- multiplication by 10 _
- 2/3 of observations will be in the interval [90; 110] (assuming normality)

Source: DG ECFIN

KOF: Employment Indicator

KOF Employment Indicator and Employment



— KOF Employment Indicator, left scale (min/max: -100/+100)

 Fulltime equivalent employment comp. to previous year in %, right scale

Source: DG ECFIN



Economic tendency surveys

- Introduction
- 2 Business Tendency Surveys
- 3 Consumer Tendency Surveys
 - Aspects of conducting CTS
 - Selection of population
 - Questionnaire
 - Sampling
 - Aggregation
 - Composite Indicator
- Time series
- Presentation of results



Aspects of conducting CTS



Units

- Consumer: The consumer is often intended as a full aged person contributing also in non-monetary terms to the household management
- Households: Household is defined as a person living alone or a group
 of people who live together in the same private dwelling and share
 expenditures, including the joint provision of the essentials of living.

Units

- Consumer: The consumer is often intended as a full aged person contributing also in non-monetary terms to the household management
- Households: Household is defined as a person living alone or a group
 of people who live together in the same private dwelling and share
 expenditures, including the joint provision of the essentials of living.

Categories of Variables

Micro-questions

Focus on households' financial situation, past, current and future. Consumers are also asked if they are likely to make durable consumption expenditures in the present or in the future.

Macro-questions

Devoted to the perception of the economic situation in the country, such as the evolution of consumer prices and unemployment.

Charactersitics of respondents

Used for weighting or classification purposes. Variables like type of household, income, gender, etc.



Response scales

In CTS, questions are generally formulated around a five option scale. Typical possible answers are

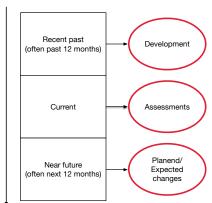
- A lot better / much more / increase sharply
- A little better / a little more / increase slightly
- The same / about the same / remain the same
- A little worse / a little less / fall slightly
- A lot worse / much less / fall sharply

Questions may also be formulated around a four option scale. In this case, the neutral answer is generally removed from the available options.



Reference periode

Time Dimension





Questionnaire: Frequency of the survey

The frequency is important for the assessment of the results

- at least quarterly to ensure reliable and timely turning point analysis
- at best monthly



- Name of respondent
- Name of household head
- Address
- Respondent's characteristics
 - Relationship to the household head
 - Age
 - 16-29
 - 30-49
 - 50-64
 - 65+



- Respondent's characteristics
 - Sex
 - Male
 - Female
 - Civil status
 - Highest educational attainment
 - Primary
 - Secondary
 - Further education
 - Working status
 - Full time
 - Part time



- Respondent's characteristics
 - Primary occupation
 - Self-employed professional
 - Self-employed farmer
 - Skilled manual worker
 - Other worker
 - Other occupation
 - Unemployed
 - Inactive
- Household characteristics
 - Household size
 - Number of employed persons



- Household characteristics
 - Household income
 - 1st quartile
 - 2nd quartile
 - 3rd quartile
 - 4th quartile

Questionnaire: Harmonized EU program

Monthly CTS

Subject	Past	Current	Future
	(last x months)		(next x months)
Evolution of household financial situation	x		х
Evolution of the general economic situation in the country		х	
Evolution of consumer prices	х		x
Evolution of the number of unemployed people			х
Right moment to make major purchases		x	
Evolution of money spent on major purchases			х
Opportunity to save		x	х
Statement best describing the household financial situation		x	

Questionnaire: Harmonized EU program

Quarterly CTS

Subject	Past (last x months)	Current	Future (next x months)
Likelihood to buy a car			х
Plans to buy or to build a home			x
Likelihood to spend large sums of money on home improvements or renovations			x

Evolution of household financial situation - last 12 months
How has the financial situation of your household changed over the last
12 months? (It has... (1) got a lot better, (2) got a little better, (3)
stayed the same, (4) got a little worse, (5) got a lot worse, (6) don't
know)

Evolution of household financial situation - next 12 months How do you expect the financial situation of your household to change over the next 12 months? (It will...(1) get a lot better, (2) get a little better, (3) stay the same, (4) get a little worse, (5) get a lot worse, (6) don't know)

Evolution of the general economic situation in the country - last 12 months

How do you think the general economic situation in the country has changed over the past 12 months? (It has...(1) got a lot better, (2) got a little better, (3) stayed the same, (4) got a little worse, (5) got a lot worse, (6) don't know)

Evolution of the general economic situation in the country - next 12 months

How do you expect the general economic situation in the country to change over the next 12 months? (It will...(1) get a lot better, (2) get a little better, (3) stay the same, (4) get a little worse, (5) get a lot worse, (6) don't know)

Evolution of consumer prices - last 12 months

How do you think that consumer prices have changed over the last 12 months? (They have... (1) risen a lot, (2) risen moderately, (3) risen slightly, (4) stayed the same, (5) fallen, (6) don't know)

Evolution of consumer prices - next 12 months

How do you expect the consumer prices to change over the next 12 months? (They will... (1)increase more rapidly, (2) increase at the same rate, (3) increase at a slower rate, (4) stay about the same, (5) fall, (6) don't know)

Evolution of the number of unemployed people - next 12 months How do you expect the number of unemployed in this country to change over the next 12 months? (They will...(1) increase more sharply, (2) increase slightly, (3) remain the same, (4) fall slightly, (5) fall sharply, (6) don't know)

Right moment to make major purchases - current

Considering 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? ((1) yes it is, (2) it's neither the right nor the wrong moment, (3) no it is not, (4) don't know)

Evolution of money spent on major purchases - next 12 months 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? (I will spend... (1) much more, (2) a little more, (3) about the same, (4) a little less, (5) much less, (6) don't know) Opportunity to save - current

Considering the general economic situation, do you think that now it is..? ((1) a very good moment to save, (2) a fairly good moment to save, (3) not a good moment to save, (4) a very bad moment to save, (5) don't know)

Opportunity to save - **next 12 months** Over the next 12 months, how likely it is that you save any money? ((1) very likely, (2) fairly likely, (3) not likely, (4) not at all likely, (5) don't know)

Statement best describing the household financial situation - current

Which of these statements best describes the current financial situation of your household? (We are...(1) saving a lot, (2) saving a little, (3) just managing to make ends meet on our income, (4) having to draw on our savings, (5) running into debt, (6) don't know)

Questionnaire: Harmonized EU program, quarterly

Likelihood to buy a car - next 12 months

How likely would you buy a car in the next 12 months? ((1) very likely, (2) fairly likely, (3) not likely, (4) not at all likely, (5) don't know)

Plans to buy or to build a home - next 12 months

Are you planning to buy or build a home in the next 12 months (to live in yourself, a member of your family, as a holiday home, to let, etc.)? ((1) yes definitely, (2) possibly, (3) probably not, (4) no), (5) don't know)

Questionnaire: Harmonized EU program, quarterly

Likelihood to spend large sums of money on home improvements or renovations - next 12 months

How likely would you spend any large sums on home improvements or renovations over the next 12 months? ((1) very likely, (2) fairly likely, (3) not likely, (4) not at all likely, (5) don't know)

Michigan Consumer Sentiment

The Michigan Index of Consumer Sentiment (ICS) is derived from the following five questions:

- (1) We are interested in how people are getting along financially these days. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?
- (2) Now looking ahead—do you think that a year from now you (and your family living there) will be better off financially, or worse off, or just about the same as now?

Michigan Consumer Sentiment

- (3) Now turning to business conditions in the country as a whole—do you think that during the next twelve months we'll have good times financially, or bad times, or what?
- (4) Looking ahead, which would you say is more likely—that in the country as a whole we'll have continuous good times during the next five years or so, or that we will have periods of widespread unemployment or depression, or what?
- (5) About the big things people buy for their homes—such as furniture, a refrigerator, stove, television, and things like that. Generally speaking, do you think now is a good or bad time for people to buy major household items?



Definition of target population



Sampling techniques

A first distinction is between deterministic sampling and random sampling.

A deterministic technique is for example quota sampling. Quotas are built by subdividing the population in homogeneous classes according to some variables (gender, age,...). The total sample size is thus spread within the classes so as to mirror the corresponding population weights.Quotas are the defined as the number of interviews to be carried out in each class.

Sampling techniques

Popular random sampling techniques are for example Simple Random Sampling or Stratified Random Sampling.

In Simple Random Sampling all possible samples of equal size have from the survey frame have exactly the same chance of selection. In consumer surveys Simple Random Sampling might be combined with Post-stratification. See next chapter about Post-stratification.



Sampling techniques

In Stratified Random Sampling one first divides the frame into several non-overlapping sub-frames called strata, and uses Simple Random Sampling in each stratum.

The question is how to distribute the total sample size over the strata? This is known as the allocation problem. There are various methods available. One which is straight forward to implement in consumer surveys is proportional allocation. In this case the sample in each stratum is taken in proportion to the size of the stratum. All elements in the frame, irrespective of the stratum, have then the same probability of being selected in the sample. As a consequence of this, all units have the same weight in the estimation on no specific weighting scheme is needed for aggregation. We refer in this case to a self-weighting sample.

Common sample sizes

A majority of countries in the OECD carrying out consumer surveys select a sample size ranging from 1000 to 2000 units. The Michigan Survey selects a sample size of about 500.



Quantification: Balances

In the case of questions with six options, i.e. the three options above plus 'very positive' ('got/get a lot better', 'very much higher', 'increase sharply', etc.), 'very negative' ('got/get a lot worse', 'very unfavourable', 'fall sharply', etc.) and 'don't know', the balances are calculated on the basis of weighted averages. If P, E and M have the meaning 'positive', 'neutral/equal', 'negative', while PP denotes the percentage of respondents having chosen the option 'very positive', MM the percentage of respondents having chosen the option 'very negative' and N is the percentage of respondents without any opinion (so that PP+P+E+M+MM+N=100), balances are calculated as B=(PP+1/2P)-(1/2M+MM)

Quantification: Balances

	Α	В	С	D	Е	share
++	Х			Х		0.4
+			X			0.2
0		X				0.2
_						0
_					X	0.2
balance						0.3
coding	1	0	0.5	1	-1	average = 0.3

Post-stratification

Post-stratification is a technique, mainly used in CTS, to apply a correction to the estimated value when the sample is not an accurate reflection of the population. One cause for such inaccuracies is when values of stratification variables such as age, gender or education level of sample units are not known until after data have been collected. In such cases one may find that some categories are over- or under-represented, simply because of the random nature of the samples used.

Quantification: Balances

	Α	В	С	D	Е	share
++	Х			Х		0.4
+			X			0.2
0		X				0.2
-						0
_					X	0.2
balance						0.3
coding	1	0	0.5	1	-1	average = 0.3

Now let A and B be in the low income, C and D in the middle income and E in the high income group.



Quantification: Weighting

Assume that we have three income groups (low, middle, high) with shares low=0.3, middle=0.5, high=0.2. With weighting we get:

	/			0 -	
income			mean	weight	weighted
low	1	0	0.5	0.3	0.15
middle	0.5	1	0.75	0.5	0.375
high	-1		-1	0.2	-0.2
balance					0.325



The consumer confidence indicator is the arithmetic average of the balances (in percentage points) of the answers to the questions on the financial situation of households, the general economic situation, unemployment expectations (with inverted sign) and savings, all over the next 12 months. Balances are seasonally adjusted.



How do you expect the financial position of your household to change over the next 12 months? It will...

- ++ get a lot better
- get a little better
- stay the same
- get a little worse
- get a lot worse
- N don't know.



How do you expect the general economic situation in this country to develop over the next 12 months? It will...

- ++ get a lot better
- + get a little better
 - stay the same
- get a little worse
- get a lot worse
- N don't know.



How do you expect the number of people unemployed in this country to change over the next 12 months? The number will...

- ++ increase sharply
- increase slightly
- = remain the same
- fall slightly
- -- fall sharply
- N don't know.



Aspects of conducting C Selection of population Questionnaire Sampling Aggregation Composite Indicator

Composite Indicator: E.U. Consumer Confidence

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

- ++ very likely
- + fairly likely
- not likely
 - not at all likely
- N don't know.



Michigan Consumer Sentiment - Questions

The Michigan Index of Consumer Sentiment (ICS) is derived from the following five questions:

- (1) We are interested in how people are getting along financially these days. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?
- (2) Now looking ahead—do you think that a year from now you (and your family living there) will be better off financially, or worse off, or just about the same as now?



Michigan Consumer Sentiment - Questions

- (3) Now turning to business conditions in the country as a whole—do you think that during the next twelve months we'll have good times financially, or bad times, or what?
- (4) Looking ahead, which would you say is more likely—that in the country as a whole we'll have continuous good times during the next five years or so, or that we will have periods of widespread unemployment or depression, or what?
- (5) About the big things people buy for their homes—such as furniture, a refrigerator, stove, television, and things like that. Generally speaking, do you think now is a good or bad time for people to buy major household items?



Michigan Consumer Sentiment - Indicator

A indicator of current conditions is calculated by the average of the results of question (1) and question(5).

An indicator of consumer expectations if calculated by averaging questions (2), (3) and (4).

An overall consumer sentiment is calculated by a weighted average of the indicator of current conditions and the indicator of consumer expectations. The conditions have a weight 0.4 and expectations of 0.6.

Economic tendency surveys

- Introduction
- Business Tendency Surveys
- Consumer Tendency Surveys
- 4 Time series
- Presentation of results

Seasonal Adjustment

Model

- Additive model $y_t = g_t + s_t + \epsilon_t, \quad t = 1, ..., n$
- Multiplicative model $y_t = g_t \cdot s_t \cdot \epsilon_t, \quad t = 1, ..., n$

Adjustment

Additive model

$$y_t - s_t = g_t + \epsilon_t, \quad t = 1, ..., n$$

Multiplicative model

$$\frac{y_t}{s_t} = g_t \cdot \epsilon_t, \quad t = 1, ..., r$$



Seasonal Adjustment

Model

- Additive model $y_t = g_t + s_t + \epsilon_t, \quad t = 1, ..., n$
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Adjustment

Additive model

$$y_t - s_t = g_t + \epsilon_t, \quad t = 1, ..., n$$

Multiplicative model

$$\frac{y_t}{s_t} = g_t \cdot \epsilon_t, \quad t = 1, ..., n$$



- Estimate the smooth component
- Adjust series for the smooth component
- Estimate seasonal factors
- Adjust original series for seasonal factors



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Economic tendency surveys

- 1 Introduction
- 2 Business Tendency Surveys
- Consumer Tendency Surveys
- 4 Time series
- Presentation of results
 - Special Graphical Representations
 - Publication Strategy

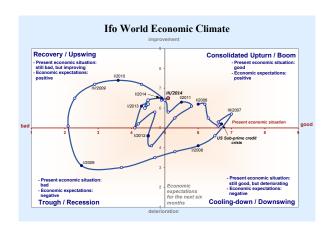
Presentation of results

Report/users	Focus of information	Content
Press release	Main features/results	Text, main figures
		main graphs
Analysts	Overview, main features by sector	Text, tables, graphs
Respondents	main results, branch results	Text, tables, graphs

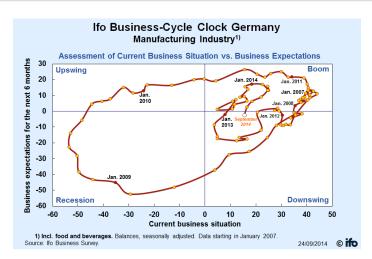
Time Series



Ifo Business Cycle Clock



Ifo Business Cycle Clock



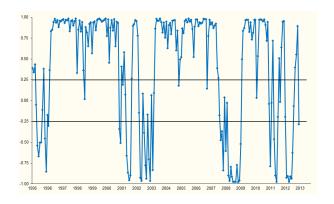
Example of a Business Monitor (Clock)

German Federal Statistical Office: Business Cycle Monitor

Statistics Netherlands: Business Cylcel Tracer



DG EFCIN Turning point indicator for the euro area

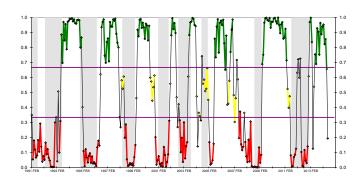


Probability for upswing minus probability for downswing

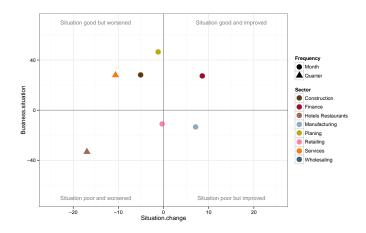
Source: OECD



Ifo Business Cycle Traffic Lights



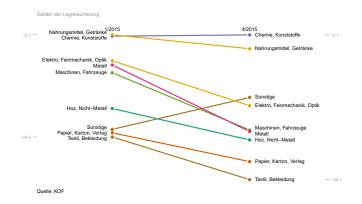
KOF Business Situation Matrix



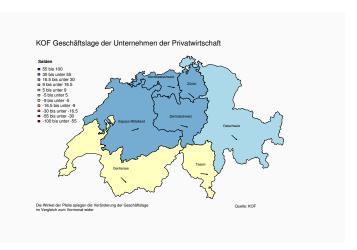
KOF Business Situation Radar



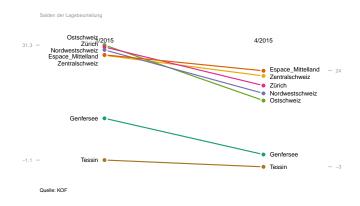
KOF Business Situation Altimeter for Industries



KOF Business Situation Map



KOF Business Situation Altimeter for Regions



Targeted audience

Usually various user groups are targeted. One has to decide for each user group how to address them in the best way. Typical audiences targeted are

- The general public. The public can be reached directly (e.g. via the internet) or with the help of the media by using journalists as a kind of conduit.
- The media
- Expert users (analysts, scientists, well informed public)
- The survey respondents

Elements of a publication strategy

Nowadays statistical information is mainly distributed via two channels: The internet and the media.

- Transparent publication calendar (and systematic)
- Published information must be accurate and neutral. The given information may not reveal information on individual companies or persons.
- Try to write an interesting story.
- Give the date of the release and a contact.

Often the "inverted pyramid" style is used . Simply, you write about your conclusions at the top of the story, and follow with secondary points in order of decreasing importance throughout the text.

Elements of a publication strategy

The availability of statistics also depends on the extent to which survey respondents understand that data serve an important purpose by providing a mirror on the world in which we live. The more a statistical agency can show the relevance of its data, the more respondents will be encouraged to provide the data.

DG ECFIN Publication schedule



BUSINESS AND CONSUMER SURVEYS

Publication dates 2015

Flash Consumer Confidence Indicator

Month	Publication							
Month	Day	Date	Time					
January	Thursday	22 January 2015	16h00					
February	Thursday	19 February 2015	16h00					
March	Monday	23 March 2015	16h00					
April	Wednesday	22 April 2015	16h00					
May	Thursday	21 May 2015	16h00					
June	Monday	22 June 2015	16h00					
July	Thursday	23 July 2015	16h00					
August	Friday	21 August 2015	16h00					
September	Tuesday	22 September 2015	16h00					
October	Thursday	22 October 2015	16h00					
November	Friday	20 November 2015	16h00					
Docombor	Monday	21 December 2015	16500					

Economic Sentiment Indicator & Business Climate Indicator

		Publication							
Month	Day	Date	Time						
January 1)	Thursday	29 January 2015	11h00						
February	Thursday	26 February 2015	11h00						
March	Monday	30 March 2015	11h00						
April 1) 2)	Wednesday	29 April 2015	11h00						
May	Thursday	28 May 2015	11h00						
June	Monday	29 June 2015	11h00						
July 1)	Thursday	30 July 2015	11h00						
August	Friday	28 August 2015	11h00						
September	Tuesday	29 September 2015	11h00						
October 1)	Thursday	29 October 2015	11h00						
November 2)	Friday	27 November 2015	11h00						
December	Thursday	07 January 2016	11h00						

¹⁾ includes quarterly surveys of manufacturing industry, services and consumers

²⁾ includes investment survey

Ifo Press release



Ifo Business Climate Germany Results of the Ito Business Survey for March 2015

Ifo Business Climate Index Rises

The Ifo Business Climate Index for German trade and industry rose to 107.9 points in March from 166.8 points last month. The index reached its highest level since July 2014. Companies were more satisfied with their current business situation. They also expressed far greater optimism about future business developments. The German economy continues to expand.

In manufacturing the climate indicator rose once again. Manufacturers were more satisfied with their cument business situation. They were also clearly more optimistic about future business developments. Production plans reached their highest level since May 2014.

In wholeasing the business climate also improved. Assessments of the current business situation were far more flowcrable, while wholeasiers scaled back their sightly optimistic business expectations; in retailing the business climate also continued to brighten. After falling in Fabruary, the business situation indicator rose again. Retailars expressed greater confisience in flux the business developments.

In construction, by contrast, the business climate indicator continued to fall, but remains at a high level. Contractors assessed both their current business situation and their business outlook less flavourably than last month. There is still a boom in construction, but it is weakening.

Hans-Werner Sinn President of the Ifo Institute



Germany (In													
Month/year	03/14	04/14	05/14	06/14	07/14	08/14	09/14	10/14	11/14	12/14	01/15	02/15	03/15
	110.7												
	115.3												
Expectations	105.4	105.5	55	5	10.0	102.7	100.4	95.9	100.1	101.3	102.0	12.5	103.9

For long time-series in Excel format consult year cestlo-group de langewhen



KOF Press release

ETH

Eidgenössische Technische Hochschule Zürich Swiss Federal Institute af Technology Zurich KOF Koejunkturforschungsswille KOF Swilss Koosenic institute ETH Zurich LEE G 116 Leoch afferrasse 21 0902 Zurich

kofcc@kof.ethz.ch

Press Release

Zurich, 3 March 2015, 9 a.m.

Results of the KOF Business Tendency Surveys of February 2015

Consequences of the Decision by the SNB Become Apparent

According to the most recent KOF Business Tendercy Surveys, the economic outlood flusts business coded significantly in February. The current results provide the first comprehensive indications regarding the new currency altustion, since in January to the first comprehensive indications regarding the new currency altustion, since in January to the first comprehensive indications regarding the current form the first way to the control of the control of the survey. I minufacturing, result in rate, finance, construction and the architectural and engineering sector—the seconest conductor destroinset. The publicies norranged particularly for manufacturing, result trade, finance, construction and the publicies norranged particularly for manufacturing conductors of the control conductor destroinset. The publicies norranged particularly for manufacturing control of the control conductor destroinsets. The publicies norranged particularly for manufacturing control of the contr

Breakdown according to sector

All accommic sectors quasiconed by the XOC considered their economic outfoot to be less shourable in February than in January. The fall was significant for the construction industry and the architectural and engineering sector, although did not occur on an embandaring scale. The economic condois industrie bald improved application by in embandaring scale. The expension condois industries and improved application by in partially reverses that rise. The direct consequences of the increase in the value of the finanshould be limited in the occuracion includy.

Press Release - KOF Susiness Tendency Surveys - 3 March 2015





Press release

well as willingness to buy.

The next GfK Consumer Climate report will be published on Thursday, April 23, 2015, 8.00 a.m. press embargo: March 26, 2015, 8,00 a.m.

March 26, 2019 RuffBani T +48 911 289 2096

Unsula Fleischmann Corporate Communic T +48 811 286 2745

Bright prospects for German consumer climate Findings of the GfK Consumer Climate study for Germany for

Nuremberg, March 26, 2015 - German consumers are becoming ever more optimistic. Following a value of 9.7 points in March 2015, the overall indicator is forecasting 10.0 points for April. Increases were once again recorded in both economic and income expectations as

The tug of war in Europe over the future of Greece is currently having no impact whatsoever on the consumer mood of Germans. Consumers consider the German economy to be on clear unwant transf based on a weak euro, which is boosting exports, and lower energy costs. In the wake of an improving economic outlook, income expectations and willingness to buy also rose further to again surpass the record value of the previous month. Economic expectations: upswing is stabilizing

In March, the upward movement in economic expectations continued unabated. The indicator rose by 9.6 points to 36.8 points. This is the fourth conservitive increase for the indicator. A higher value of 45.9 points was last recorded in July 2014. The indicator's upward trend has therefore clearly

The low interest rate policy of the European Central Bank (ECB) has placed the euro under great pressure of devaluation. This has therefore significantly improved the competitiveness of German exports outside the eurozone. In addition, the effect of exceedingly low energy costs for households and companies is similar to a mini economic stimulus program

Consequently, economic experts now regard the original growth forecast of 1.5 percent for gross domestic product (GDP) this year as too conservative. They are now forecasting an increase of almost 2 percent.

T +49 911 289-0 Companies also clearly consider the German economy to be on an upward trend, as is reflected in the fifth successive increase in the Ifo Business Cli-

mate Index in March







Income expectations: upward trend continues

Given the significant improvement in the economic outlook, income expectations have also risen. After rising by 2.5 points, the indicator is now at \$3.1 points. This is the third consecutive increase on an already extremely high level.

The combination of rising employment, good collection was prevenents and very low in Italian to we caused community for inome optimism to time further. And not introd in success the first collective wags applicament in in the Andrew Collective wags application of the collective wags application in the collective wags application in the collective wags application in the collective way of the collective way of the collective was of the collective way of the collective way of the collective for inclination and vegage, pressioner can also be topolised of con-devolutioned for alliends and vegage, pressioner can also be to fortified of con-devolution of the collective way of the

Willingness to buy: sixth consecutive rise

After a sixth consecutive rice, willingness to buy has once again surpassed to eight-year high. Following an increase of 3.9 points, the indicator is now at 63 points. The propensity to consume is therefore 1.4 points below its highest ever value of 64.4 points in October 2006, shortly before the VAT increases.

The reasons for the excellent development of willingness to buy are obvious: rising employment and income prospects coupled with low energy prices are giving consumers planning security and the financial means for making major purchases with renewed vicor.

In addition, the ECB's monetary policy which aims to push interest rates to rock bottom is also boosting the spanding mood, because the alternative of saving is currently not very appealing. The propensity to save remains extremely low. although a slight increase was recorded in March.

Consumer climate: highest value in 13 years

Following a value of 9.7 points in March 2015, the overall indicator is forecasting 10.0 points for April. This is its highest value since October 2001, when the indicator was at 11.0 points. The consumer climate in Germany is therefore continuing its upward trend.

GRK confirms its forecast issued at the start of the year that private spending in Germany will increase by around 1.5 percent in real terms in 2015. It will therefore be a key pillar of the German economy.

Despite the positive outlook, there are still some risks. Although Germans are currently not affected, the current battle on the future of Greece could





cause uncertainty in Germany in the coming months as well as the risks are difficult to assess. If a Great, where Greece renounces the euro and subsequently leaves the eurozone, were in fact to materialize, the German economy could suffer a servere setback as a result.

PLEASE NOTE: publication date for April has changed: Thursday, April 23, 2015, 8 a.m.

Provisional publication dates for 2015

Provisional publication dates for 2015

Unudally, March 22, 2015, 8 a.m.

Visitally, Appendix A. (2015, 8 a.m.

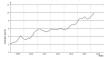
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The following table shows the development of the individual indicators in March in comparison with the previous month and prior year:

	March 2015	February 2015	March 2014
Economic expectations	36.0	27.2	33.2
Income expec- tations	53.1	50.6	45.6
Willingness to buy	63.0	59.1	55.5
Consumer climate	9.7	9.3	8.3

The following graph shows the development of the consumer climate indicator over the past few years:

GfK Consumer Climate indicator (as at: March 2015)





About the etude

These findings are extracts from the "ORK Consumer Climate MAXX survey," which is based on around 2,000 consumer interviews conducted each month on behalf of the European Commission. The report contains charts, forecasts and a detailed commission preparing the indicators. In addition, the report includes information on proposed consumer spending in 20 different areas of the consumer goods and services markets. The GRK Consumer Climate survey has been consulted since 1980.

The consumer climate explicitly refers to all private consumer spending. However, depending on the definition, only 30 percent of private consumer spending is accounted for retail. The remainder is attributable to services, travel, rent. health services and the entire personal care segment.

GRK is predicting a rise in private consumption of 1.5 percent for 2015. Again, his does not relate to just retail sales, but to all consumer spending. Last year, CRR side forecast that private spending would increase by 1.5 percent. According to figures from the Federal Statistical Office, private spending gree by 1.2 percent in 2014.

Willingness to buy is a most indicator, as are all the other indicators. It examines whether consumers think it is advisable to make major purchases at present. Even if they asseur "yes", two further requirements need to be fulfied for a purchase to be made: consumers must have the money that is required for such major purchase and also regard this acquisition to be necessary. In addition, it only relates to consumer durables, which require a greater budget.

The findings of the consume climate survey based on around 2,000 interview constructed each most on a representative sample of the Cerman population. This survey tool is subject to continuous quality controls, especuly in relation to the expresentativescent. The fast that the resists are used and recognised in the field of empirical legal research (or example, the lisablected of contains to believe processing in a sessioner to the exceptionally high quality of this servey. This means that the recurs are quality accrosed to excent and must stated us to court.

Further information: Rolf Borld, Tel. +49 911 395-3056,





The table below provides an overview of the following indicators:

Economic expecta- tions	This index is based on the following question to consumers: "How do you think the general economic situation will develop in the next 12 months?" (improve – stagnate – deteriorate)				
income expectations	This index is based on the following question to consumers: "How di you think the financial situation of your household will develop in the next 12 months?" (improve – stagnate – deteriorate)				
Consumption and buying willingness	This index is based on the following question to consumers: "Do you think it is advisable to make major purchases at the moment?" (good time – neither good nor bad time – bad time)				
Consumer climate	This index is used to describe private consumption. Key factors are income expectations, buying willingness and savings trends. The ectorist outlook has a more indirect effect on the consumer climate, generally as a result of income expectations.				

About GfK

Olf is the fusable source of relevant market and consumer information that enables its disclaim. Nater than 11-000 minute research experts combine that passion with Olf is large-standing data science experts combine that passion with Olf is large-standing data science experience. This abouts Olf to deliver valid gobal insights matched with bods market intelligence from more than 100 countries. By using intro-waits technologies and data science, Olf time big data in lors and data science, Olf time big data in lors and data science, Olf time big data in lors and data science, Olf time big data in lors and data science, Olf time big data in lors and data science, Olf time big data in end of some data, enabling its clients to improve their competitive edge and enrich consumers? scorpinges and thissis.

For more information, please visit www.gfk.com. or follow GfK on Twitter: www.twitter.com/gfk.en

Responsible under press legislation: GM SE, Corporate Communications.

Jan Saeger Nordwestring 101 90419 Nuremberg Germany



OECD Press release



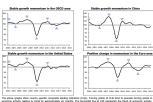
Paris, 9 March 2015 OECD Composite Leading Indicators News Release

Composite leading indicators point to positive change in growth momentum in the euro area

Composite leading indicators (CLIs), designed to anticipate turning points in economic activity relative to trend, point to positive change in grewth momentum in the **euro area**, and stable growth momentum in most other major economies and the **OECD area** as a whole the most other major economies and the **OECD area** as a whole the continuation of the continuation

In Germany, the CLI contents the positive charge in momentum that was tentatively flagged in last moetrics assessment. The outdook for **Tably** and **France** has also improved, with the CLIs now showing tentative signs of a positive change in momentum.

Stable growth momentum is anticipated amongst most other major economies, including the **United States**, the **United Kingdom**, **Canada**, **Japan**, **China and Brazil**. In **India**, the CLI continues to indicate firming growth, while in **Russia** the CLI still points to a loss in overeith momentum.



economic activity relative to trend by approximately six months. The horizontal line at 100 represents the trend of economic activities of the QLI. Blank transples mark provisional turning-points that may be reversed.

Methodological Notes:

The CLI reshoolingical notes are available at: www.next.org/stdfeading-indicators/44728410.pdf
Watch our video explaining the CLIst : ITEM ANNUAL DEVIATE CONTRACTORS ANNUAL SERVICES CONTRACTORS AND ANNU

Contacts:

For further information journalists are invited to contact the OECD's Media Relations Division on (33) 1 45 24 97 00 or e-mail page contact@local.com.

For technical questions contact stat contact@coord.org Next release: 9 April 2015

