



Third International Seminar on Early Warning and Business Cycle Indicators

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Global Assessment on Tendency Surveys

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12 November 2010

Overview

A total of 67 organizations responded to the Global Assessment on Tendency Surveys. The Assessment was disseminated to a global list of national statistical offices and other organizations known to conduct tendency surveys. Detailed information was collected for five different economic activity sectors:

- Industry
- Construction
- Consumer
- Services
- Retail

The respondents to the survey spanned all geographical areas. However, Europe was a predominate responder to the Assessment, comprising over half of all respondents.

The tendency survey most commonly conducted is for the industrial sector followed closely by construction, services, retail and consumer sector surveys. Agricultural surveys, on the other hand, are conducted by a small number of organizations. Some organizations reported other tendency surveys such as investment and financial sector surveys. Cross-sector surveys are conducted less often but draw from all five economic activities.

Detailed questions were asked on the surveys conducted in the five most commonly used sectors listed above.

Respondent organizations by region (respondents who answered at least 25 question)

	<i>Africa</i>	<i>Asia</i>	<i>Europe</i>	<i>North America</i>	<i>Oceania</i>	<i>South America</i>
Respondents	4	11	41	4	4	3

0.1.1. For which sectors do you administer tendency surveys on a recurrent basis?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>	<i>Agriculture</i>
Number of surveys	54	43	32	43	41	9

0.1.1. Do you administer tendency surveys on any other sectors?

	<i>Investment</i>	<i>Financial/ Banking</i>	<i>Wholesale</i>	<i>Transport</i>	<i>Others</i>
Number of surveys	6	5	3	3	4

0.1. Please check all sectors from which information is drawn for the cross-sector indicators

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Number of sectors	25	19	16	21	19

0.2.1. Which year did you start administering this tendency survey?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>	<i>Agriculture</i>
Average	1990	1992	1992	2000	1995	1987
Oldest	1949 (Germany)	1956 (Germany)	1958 (France)	1981 (Bolivia)	1950 (Germany)	1950 (Belgium, Bolivia)
Most recent	2010 (Puerto Rico, Kiribati, Hungary)	2010 (Brazil)	2009 (Luxem- Bourg)	2010 (Ukraine)	2009 (Brazil)	2004 (Malaysia)

I. Institutional Environment and Management

Data quality and intuitional rules and laws are fundamentally important to providing reliable statistics.

Tendency surveys are compulsory in about half of the organizations that carry out surveys excepting industry and consumer surveys which are mostly non-compulsory.

A quality management review exists for nearly all organizations in every sector. The most important factor for the design of a quality assurance framework is the sample size in the survey followed by the total response rate. On the other hand, reference series and item non-response were not important factors in the quality assurance framework. Periodic reviews are undertaken by most organizations to maintain quality requirements, and organizations explore respondent and non-respondent differences at a medium frequency. About two-thirds of organizations have a benchmark series used for comparisons.

The majority of organizations collect their own survey data and most do not subcontract data collections.

1.1.1. Is the survey compulsory?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	20	15	10	15	19
No	31	16	22	15	14

1.2.1. A quality management review exists.

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	40	26	30	25	27
No	6	5	2	4	6

1.2.2. What are the determining factors of the design quality assurance framework (rank in order of importance)? 1-Most important to 8-Least important

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Sample size	1.8	1.8	2.1	1.5	1.7
Sample updates	3.0	3.2	3.1	3.2	2.9
Unit response rate in total	2.7	2.7	3.2	2.8	2.6
Weighting updates	4.0	4.1	4.0	4.0	3.8
Unit response rate on disaggregated levels	4.2	4.3	4.7	4.6	4.6
Reference series	5.1	5.2	4.7	5.1	5.2
Item non-response	5.4	5.3	5.4	5.4	5.3
Other	7.0	7.0	7.9	6.8	6.8

1.2.3. Periodic reviews are undertaken to identify steps necessary to maintain quality requirements.

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	40	28	30	25	27
No	5	3	2	4	3

1.2.4. How often do you explore differences between respondents and non-respondents?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Frequently	9	8	8	5	7
2	6	3	1	2	4
3	15	11	10	9	10
4	7	5	5	6	5
Never	8	4	9	5	6

1.2.5. Do you compare selected values to a benchmark series?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	33	23	22	22	23
No	18	13	14	11	13

1.2.6. Does your institution collect data for this survey or do you use data provided by others?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Collect data ourselves	45	32	28	30	32
Use data provided by others	10	7	7	6	5

1.2.6. Do you subcontract data collections?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	8	1	12	4	4
No	33	21	15	16	17

II. Registers and Frames

This section focuses on the tendency survey frame – frame sources, unit inclusion, update schedule and the characteristics that are considered when designing the frame list.

Most organizations use the statistical office for the source of their registers and frames. Some organizations use other governmental offices, and for industry and consumer surveys private sources are often used. More than half of the organizations include all units in their frame lists. The frame list size varies widely by organization and by sector, though, predictably, consumer surveys have the largest average frame and construction has the smallest average frame.

The vast majority of organizations update their frames within five years, and most organizations update their frames every two years or less. A large number of characteristics are considered for the frame list.

2.1. Sources for survey frame (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Statistical office	36	24	18	24	26
Government (NOT statistical office)	14	8	3	8	9
Private	11	5	9	5	4
Other	1	0	4	0	0

2.2.2. Are all units included in the frame?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	26	17	17	17	20
No	17	14	8	12	12

2.2.2. If No, what units are missing? (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Specific branches	8	3	n/a	7	4
Specific regions/areas	1	2	n/a	1	1
Specific size categories	13	10	n/a	9	10
Other	5	2	n/a	1	2

2.3. What is your frame list update schedule?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
< 2 years	28	19	13	18	22
2 to 5 years	15	10	10	10	10
> 5 years	4	2	3	2	1

2.4. What are your frame list characteristics considerations? (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Identification	42	30	19	29	31
Address	41	31	19	29	32
Contact	35	27	13	24	27
No. of employees	46	29	17	29	31
Turnover	25	18	10	22	22
Links between units	11	8	15	9	8
Links to other registers	4	4	7	3	2
NACE/ISIC code	40	26	11	25	27
Other	8	3	4	4	4

III. Surveys

Two sampling methods are most often used to make unit selections from the frame – stratified sampling and sampling by ISIC/NACE categories, with the exception of the consumer sector which does not have industry classification codes and therefore primarily use stratified sampling. The stratification criteria used vary between size, geography, ISIC/NACE sector and turnover. The sample size is chosen by primarily considering estimate precision, though budget constraints are also often taken into account.

All the sectors, bar consumer, usually use weighting in the aggregation process, using a mixture of firm size and ISIC/NACE category to conduct the weighting (usually at the 2-digit level of ISIC/NACE). Weights are usually updated every five years or less.

Frame sizes vary broadly among organizations. Construction, services and retail sectors can have less than 100 units in the frame. The consumer sector naturally has a much larger frame often in the millions (often the consumer frame size is the national population). Survey sample sizes, on the other hand, occur in a relatively small range, from a low of about 40 to a high of 8,000. The sample size does not correlate with the frame size.

Survey responses are collected using a variety of means. Interviews are less favored on average in each sector except for consumer. The consumer sector collects responses primarily through interviews or phone calls.

Organizations aim for an average response rate of about 80% across all sectors. Most organizations have developed follow up activities, conducted mostly by phone or email (i.e. a more personal form of survey collection). Follow ups are prioritized primarily by the size of units (for the consumer sector strata completeness). Follow ups make a large impact on the average response rate, improving the response rate by about 15% in each sector, although consumer sector follow ups were the least effective, improving response rates by about 6%.

About two-thirds of organizations deal with non-response by a single unit in a single collection round. Of the organizations that do deal with unit non-response, they do so using sampling weight or imputation techniques. Regular unit non-response is addressed only half of the time by replacement with another frame unit in future collection rounds. Item non-response is addressed by about half of the organizations (except for the consumer sector where it is not often dealt with) usually by imputation or, less often, by sampling weight adjustment. A variety of imputation techniques are used across all sectors. Of organizations that use imputation, the three most common techniques used are subjective treatment, mean/modal imputation and substitution. Three techniques are used by a smaller number of organizations – near neighbour, sequential hot deck and regression. Rarely used are post stratification, cold or hot deck.

Most organizations do perform data validation checks before tabulating the collected data. A variety of data validation checks are conducted by organizations.

Most organizations have three multiple choice questions in their survey, except for consumer surveys which more often have five multiple choice questions. Balance statistics are most often used to convert the multiple choice questions into a single time series.

Source Questions

Source questions used by each organization follow closely the OECD Harmonized System of questions.

More source questions are asked on a monthly basis than on a quarterly basis. For those questions where a quarterly basis is more common, they are less used in composite tendency (confidence) indicators. This indicates source questions that are used for composite indicators are most often asked on a monthly basis, whereas source questions not used in composite indicators are seen as less of a priority and are therefore collected on a quarterly basis.

OECD countries tend to collect more source questions on a monthly basis than their non-OECD counterparts. This may be an indication that countries with more resources (i.e. OECD countries) have the expertise and budget to conduct the more costly monthly source question surveys.

However, non-OECD countries ask a slightly wider range of questions, less closely following the OECD Harmonized System. In other words, for questions that are not recommended by OECD, OECD countries display a sharp drop-off in their use whereas non-OECD countries display a slower drop. For example, in construction source questions, very few OECD countries ask questions on “profit” and “delay in payment by client” which are not recommended questions. Non-OECD constructions do ask these construction sector questions, though.

Composite indicators are generally compiled using a small number of source questions. For industry, three to five main source questions are used; construction uses two main source questions; services uses three main source questions; and retail uses three main source questions. The exception to this is the consumer sector that uses about six to nine main source questions.

Source question format

The format of the source questions (i.e. month of reference) follows OECD Harmonized Format very closely. This is true for both OECD and non-OECD countries, whose formats are barely distinguishable. Most questions fall into three format categories: T3 for past questions (3 months prior), F3 for future questions (3 months in the future) or present month. An exception to this is the consumer survey where question formats are T12 (a year prior), F12 (a year in the future) or present.

OECD recommendations, however, are not followed when the format is recommended to be six months prior or in the future. Organizations continue to use the more common three month format.

3.1.1. Method of unit selection from the frame list (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Simple Random	6	3	5	6	4
Stratified	31	21	17	21	23
Probability proportional	9	4	3	6	6
Purposive/quotas	7	5	7	4	4
ISIC/NACE	16	11	0	14	13
Other	8	6	4	5	6

3.1.1. If stratification is used, what are the stratification criteria (Select all that apply)?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Size (household size for consumer)	21	11	1	10	10
Geography	6	5	12	4	3
ISIC/NACE (or gender for consumer)	16	7	3	8	8
Turnover (or age for consumer)	4	4	4	5	7
Other	2	3	5	1	2

3.1.2. Key factors for decisions on sample size (rank in order of importance): 1-Very important to 5-Not important

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Estimate precision	1.6	1.6	1.8	1.5	1.6
Population variability	2.9	2.6	2.7	2.9	3.0
Budget constraints	2.4	2.6	2.5	2.7	2.8
Sampling fraction	3.2	2.9	3.4	3.1	3.0
Non Response	3.5	4.0	3.6	3.9	3.7
Other	3.3	4.2	4.4	4.1	3.9

3.2.1. Do you use weighting during the aggregation process?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	38	27	n/a	24	26
No	7	2	n/a	5	2

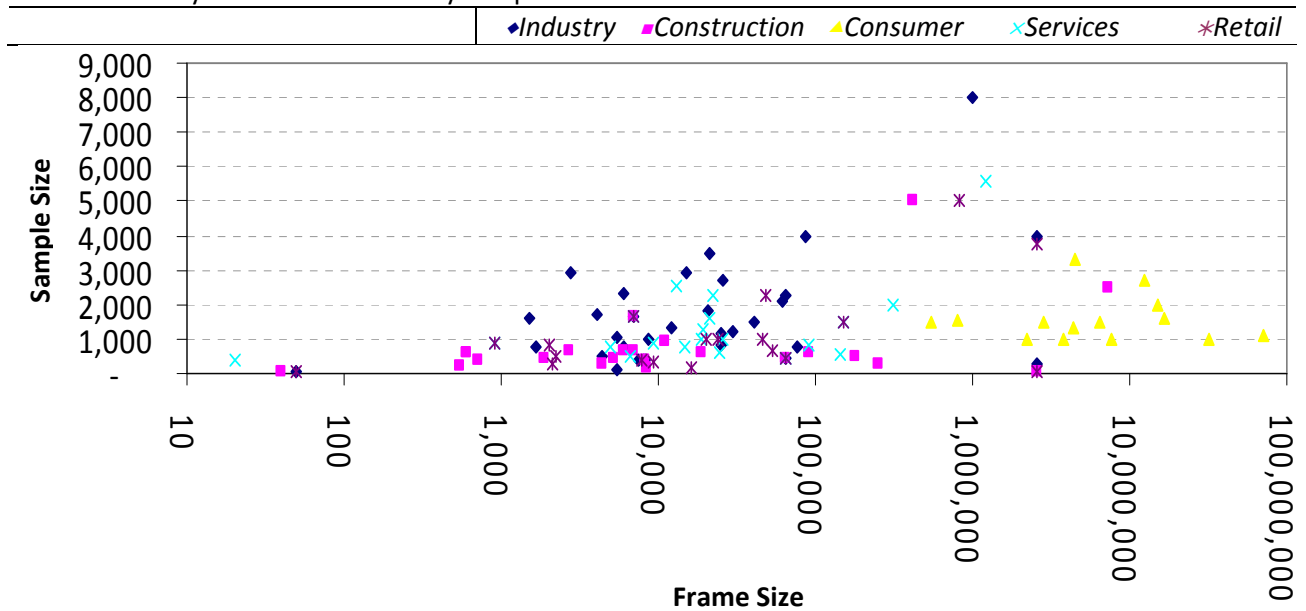
3.2.1. If yes, what information do you use (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Firm size	27	21	n/a	19	22
Size of ISIC/NACE category	19	15	n/a	14	15
Other	12	8	n/a	6	8

3.2.2. How often are the weights updated?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
< 2 years	24	16	n/a	16	19
2 to 5 years	12	10	n/a	8	8
> 5 years	3	3	n/a	1	1

3.3.1. What is your frame and survey sample size?



3.3.2. What method do you use to collect survey responses? (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Interview	10	6	16	4	4
Postal Mail	30	24	3	21	23
E-mail	18	12	1	12	11
Internet	23	12	1	13	14
Phone	18	11	17	12	11
Fax	6	1	0	3	3
Other	2	1	0	2	2

3.3.3. What unit response rate are you aiming for?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
<70%	6	9	8	4	4
70-80%	6	4	7	3	4
80-90%	14	6	1	11	11
90-100%	15	10	11	10	9
Average Percent	80%	76%	75%	80%	79%

3.3.4. Have you developed follow-up activities?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	38	28	18	21	27
No	2	2	9	3	1

3.3.4. If yes, Please specify (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Phone	42	25	17	26	27
Postal mail	14	8	2	7	10
E-mail	28	18	2	17	17
Interview	7	4	6	3	4
Other	2	2	2	3	2

3.3.5. Are follow-ups prioritized? (Please indicate the priority starting with 1 as the highest priority)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Size of units	1.4	1.4	n/a	1.4	1.2
Strata completeness	2.0	2.2	1.4	2.4	2.2
Potential non- response bias	2.7	2.8	2.2	2.6	2.6
Number of survey rounds without response (by this unit)	2.8	2.6	2.4	3.2	3.2
No priority	2.4	2.7	2.2	2.7	2.9
Other	5.7	6.0	5.0	6.0	6.0

3.3.6. How much did responses increase (Δ) after follow up in 2009 (or latest available year)?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Δ when initial response rate <50%	31%	27%	11%	33%	29%
Δ when initial response rate \geq 50%	13%	9%	4%	9%	13%
Average Δ	18%	17%	6%	17%	18%

3.3.7. Do you deal with the problem of single unit non-response by a respondent in a single collection round?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	26	17	12	18	19
No	17	13	14	12	9

3.3.7. If yes please indicate (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Sampling weight adjustment	9	9	12	9	13
Imputation	15	9	2	9	10
Other	5	2	1	2	4

3.3.8. Do you deal with the problem of regular unit non-response by replacement with another frame unit for future collection rounds (apart from regular updates)?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	23	17	15	17	15
No	23	14	13	13	15

3.3.9. Do you deal with the problem of item non-response?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	24	17	11	18	19
No	19	12	17	10	9

3.3.9. If yes please indicate (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Sampling weight adjustment	7	8	6	7	9
Imputation	17	12	6	13	14
Other	5	2	1	3	5

3.3.10. What are your procedures for imputation? (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Subjective treatment	11	5	2	6	7
Mean/modal imputation	9	6	9	8	6
Post stratification	3	0	2	0	0
Substitution	7	5	4	6	5
Cold deck	2	1	0	1	1
Hot deck	1	1	0	1	1
Near-neighbour	4	3	3	6	7
Sequential hot deck	3	2	0	2	2
Regression	3	2	2	1	0
No imputation done	5	4	3	4	4
Other	6	2	1	2	4

3.3.11. Are data validation checks performed before tabulating the data collected?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	38	27	24	23	28
No	4	1	0	1	0

3.3.11 If yes, Please indicate what checks are used (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Routine check	35	24	21	23	26
Valid value check	29	19	19	18	21
Rational check	23	17	15	19	21
Other	2	2	2	1	2

3.3.12. How many items do you have in your multiple choice questions? (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
3 (e.g. positive, equal, negative)	37	25	10	24	26
5 (e.g. very positive, positive, equal, negative, very negative)	5	3	19	2	2
Other	6	4	2	2	3

3.3.12 How do you convert three multiple choice questions into a single time series?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Balance (P-N)	33	22	9	24	22
Diffusion indices (P+E/2)	3	2	2	1	1
Other	3	1	0	0	1

3.3.12 How do you convert five multiple choice questions into a single time series?

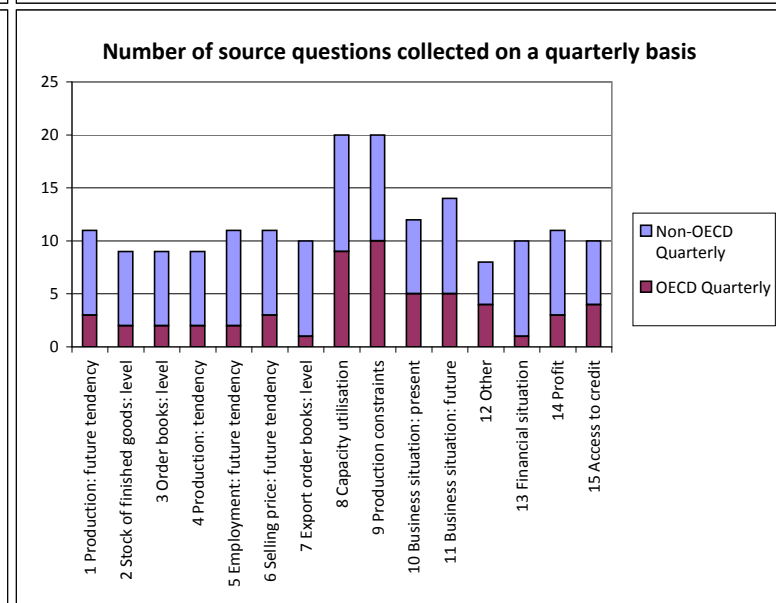
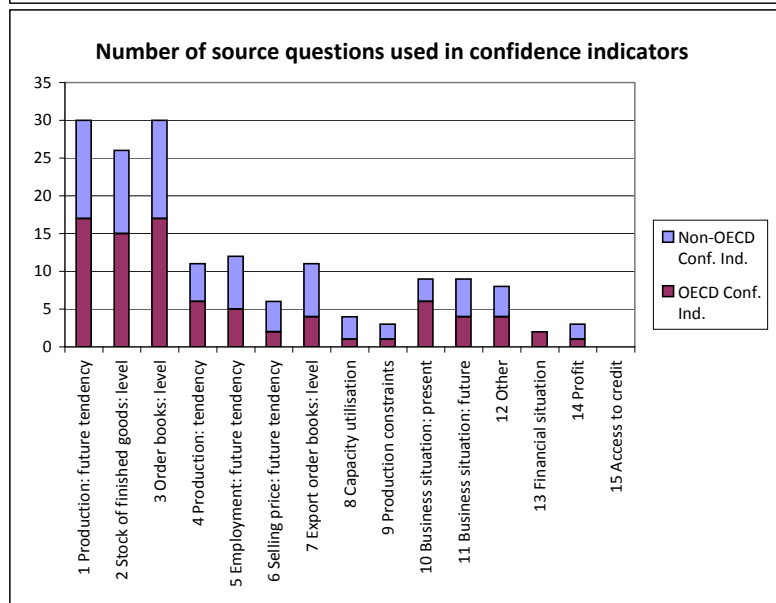
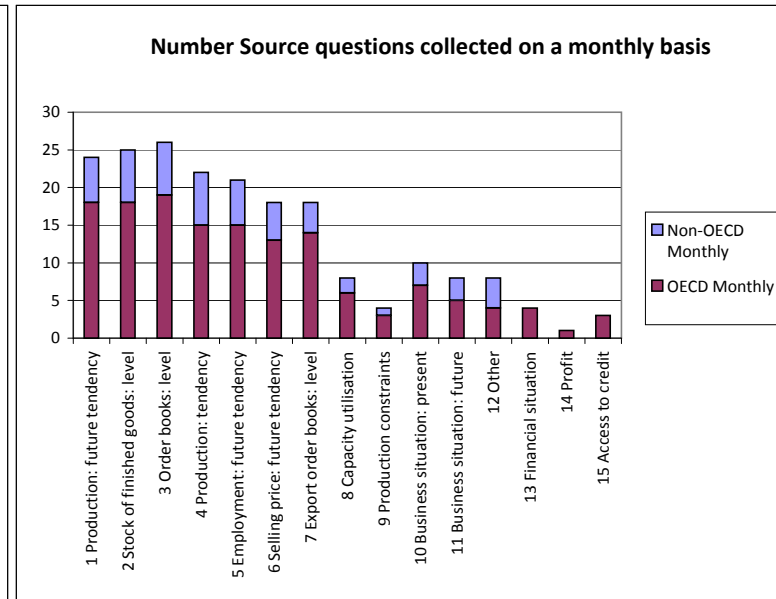
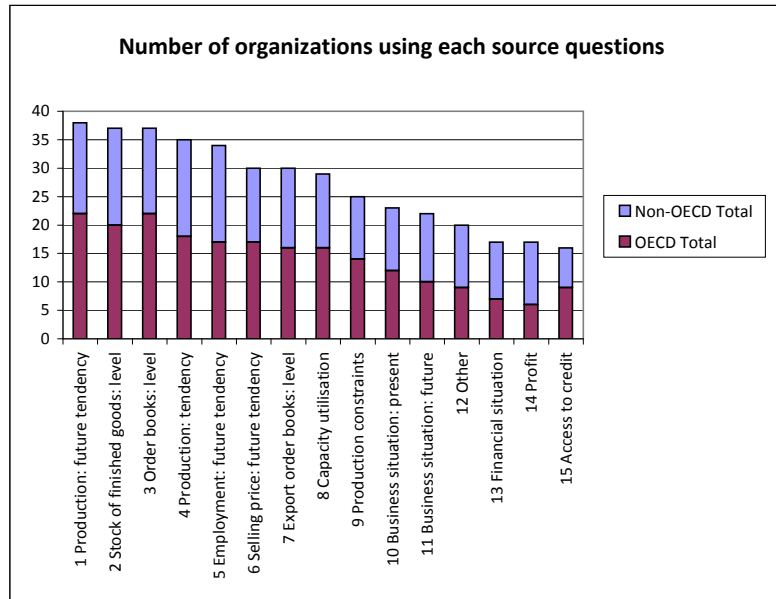
	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Balance 1 (PP+P-NN-N)	2	1	7	1	1
Balance 2 (PP+P/2)-(NN+N/2)	2	1	13	1	1
Other	5	4	3	3	1

3.4.1. Industrial Source Questions

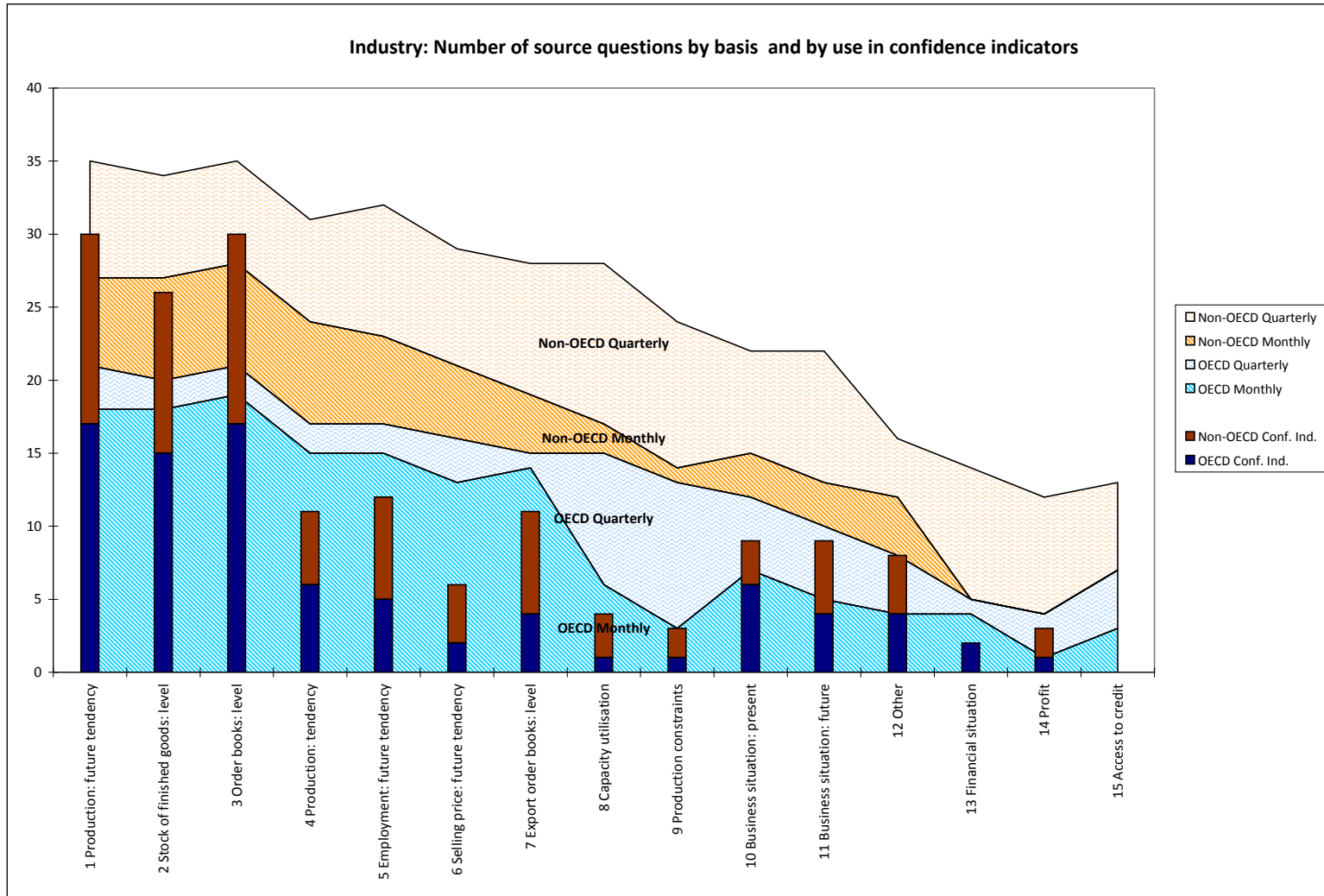
Organizations with source questions responses 46

	OECD Harmonised System	Total Count of Source Questions				OECD Count of Source Questions				Non-OECD Count of Source Questions			
		Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator
1 Production: future tendency	x	38	24	11	30	22	18	3	17	16	6	8	13
2 Stock of finished goods: level	x	37	25	9	26	20	18	2	15	17	7	7	11
3 Order books: level	x	37	26	9	30	22	19	2	17	15	7	7	13
4 Production: tendency	x	35	22	9	11	18	15	2	6	17	7	7	5
5 Employment: future tendency	x	34	21	11	12	17	15	2	5	17	6	9	7
6 Selling price: future tendency	x	30	18	11	6	17	13	3	2	13	5	8	4
7 Export order books: level	x	30	18	10	11	16	14	1	4	14	4	9	7
8 Capacity utilisation	x	29	8	20	4	16	6	9	1	13	2	11	3
9 Production constraints	x	25	4	20	3	14	3	10	1	11	1	10	2
10 Business situation: present	x	23	10	12	9	12	7	5	6	11	3	7	3
11 Business situation: future	x	22	8	14	9	10	5	5	4	12	3	9	5
12 Other		20	8	8	8	9	4	4	4	11	4	4	4
13 Financial situation	x	17	4	10	2	7	4	1	2	10	0	9	0
14 Profit		17	1	11	3	6	1	3	1	11	0	8	2
15 Access to credit	x	16	3	10	0	9	3	4	0	7	0	6	0
Total		410	200	175	164	215	145	56	85	195	55	119	79

3.4.1. Industrial Source Questions - Count of Answers



3.4.1. Industrial Source Questions - Combined graph: Source questions are displayed in stacked area graphs by basis (monthly or quarterly) and the number of times a source question is used in a confidence indicator are shown in the stacked bar graphs. Note: A source question is counted only once per organization, even if the organization uses a source question in more than one confidence indicator. This maintains balance between the number of source questions in total and the number used in confidence indicators.

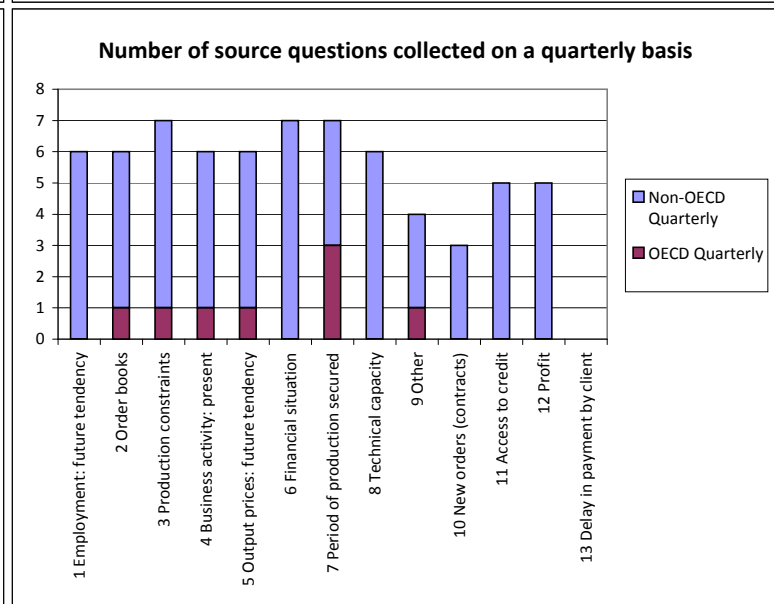
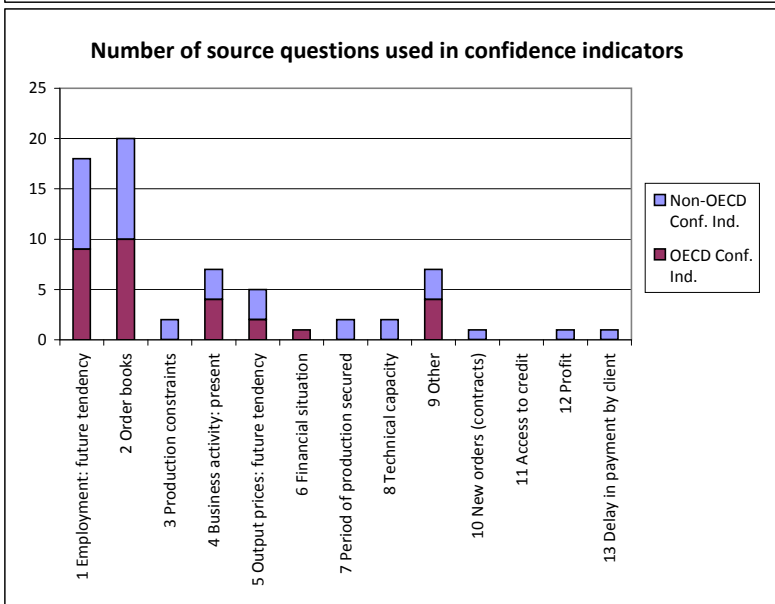
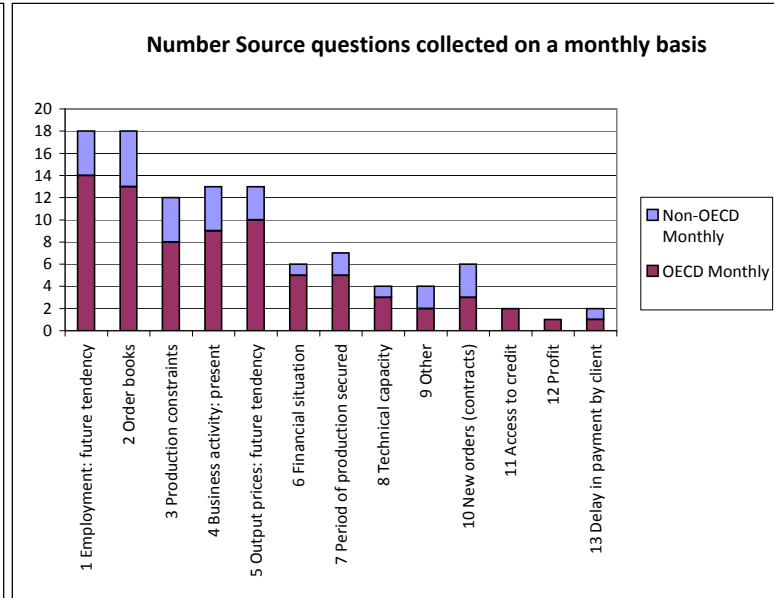
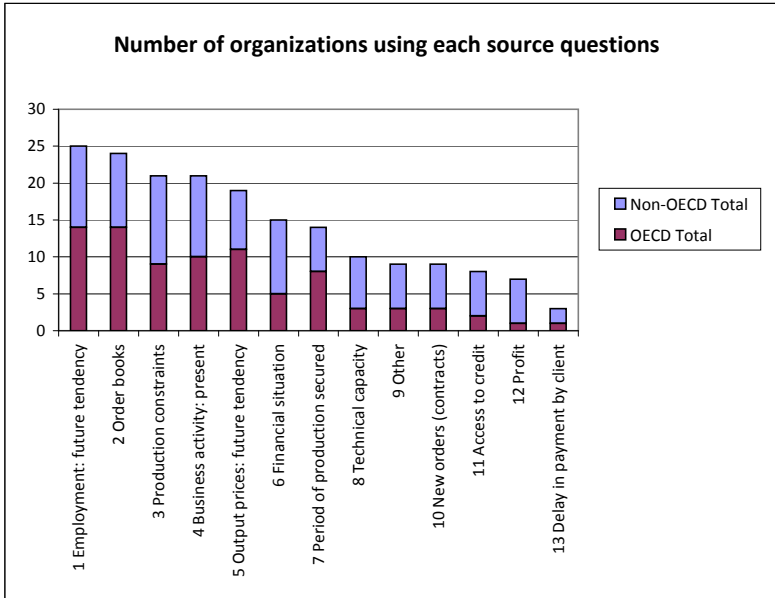


3.4.1. Construction Source Questions

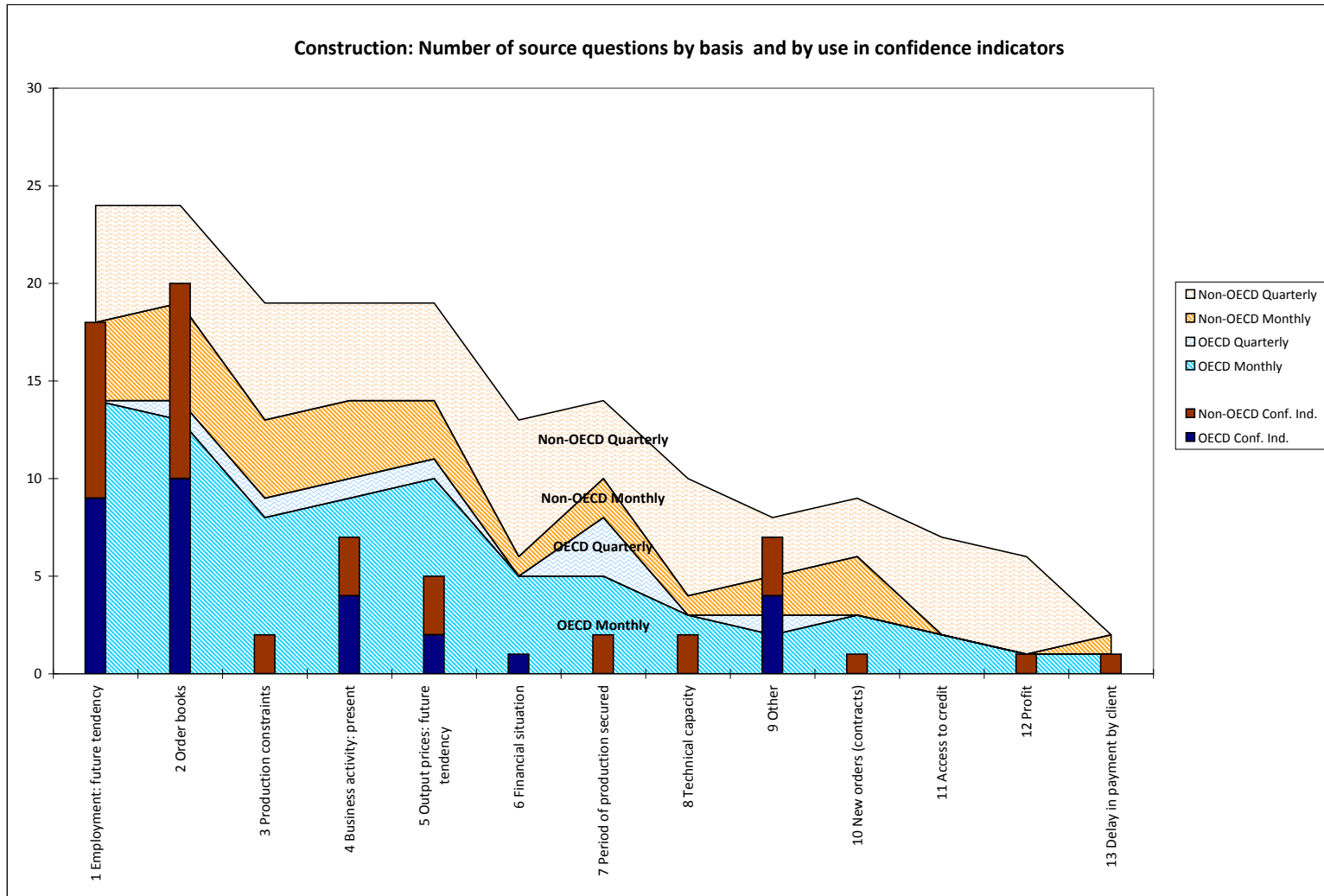
Organizations with source questions responses 28

	OECD Harmonised System	Total Count of Source Questions				OECD Count of Source Questions				Non-OECD Count of Source Questions			
		Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator
1 Employment: future tendency	x	25	18	6	18	14	14	0	9	11	4	6	9
2 Order books	x	24	18	6	20	14	13	1	10	10	5	5	10
3 Production constraints	x	21	12	7	2	9	8	1	0	12	4	6	2
4 Business activity: present	x	21	13	6	7	10	9	1	4	11	4	5	3
5 Output prices: future tendency	x	19	13	6	5	11	10	1	2	8	3	5	3
6 Financial situation	x	15	6	7	1	5	5	0	1	10	1	7	0
7 Period of production secured	x	14	7	7	2	8	5	3	0	6	2	4	2
8 Technical capacity		10	4	6	2	3	3	0	0	7	1	6	2
9 Other		9	4	4	7	3	2	1	4	6	2	3	3
10 New orders (contracts)	x	9	6	3	1	3	3	0	0	6	3	3	1
11 Access to credit	x	8	2	5	0	2	2	0	0	6	0	5	0
12 Profit		7	1	5	1	1	1	0	0	6	0	5	1
13 Delay in payment by client		3	2	0	1	1	1	0	0	2	1	0	1
Total		185	106	68	67	84	76	8	30	101	30	60	37

3.4.1. Construction Source Questions - Count of Answers



3.4.1. Construction Source Questions - Combined graph: Source questions are displayed in stacked area graphs by basis (monthly or quarterly) and the number of times a source question is used in a confidence indicator are shown in the stacked bar graphs. Note: A source question is counted only once per organization, even if the organization uses a source question in more than one confidence indicator. This maintains balance between the number of source questions in total and the number used in confidence indicators.

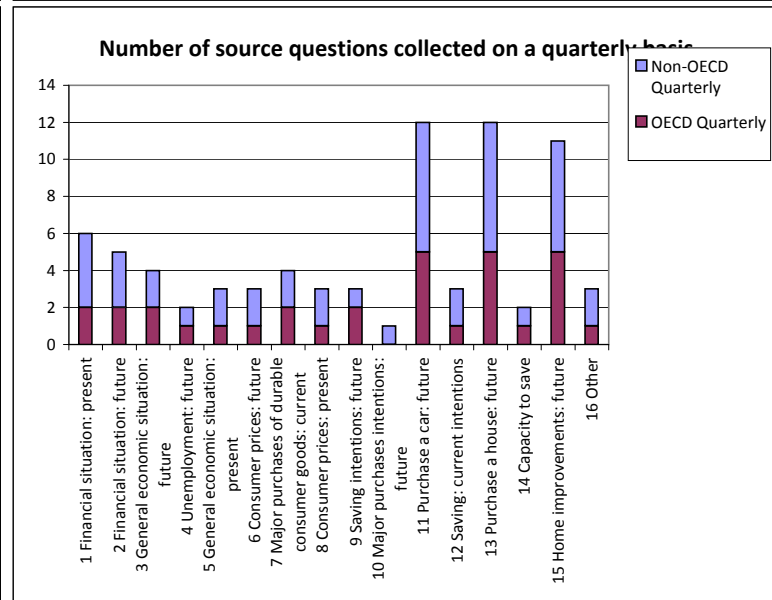
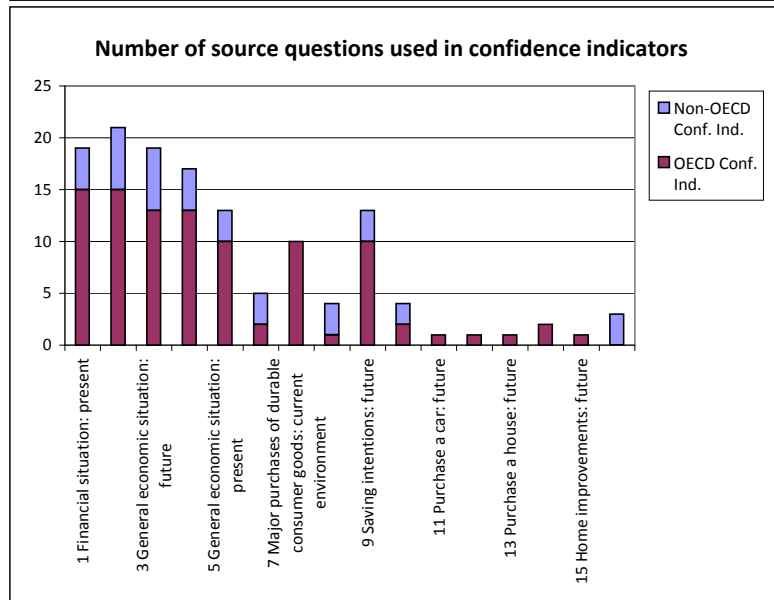
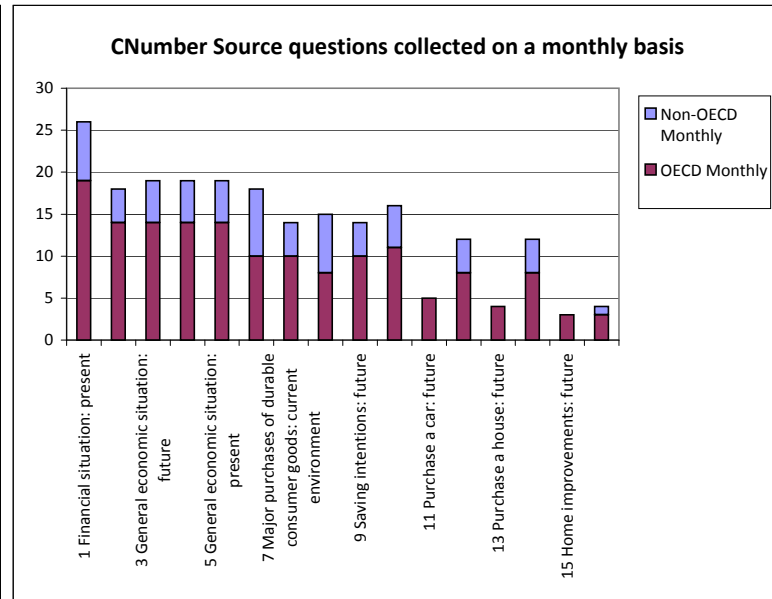
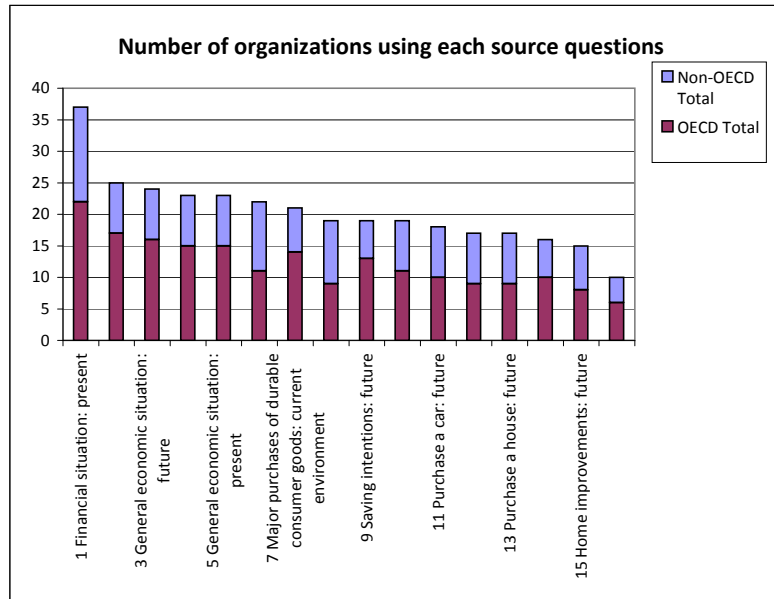


3.4.1. Consumer Source Questions
Organizations with source questions responses

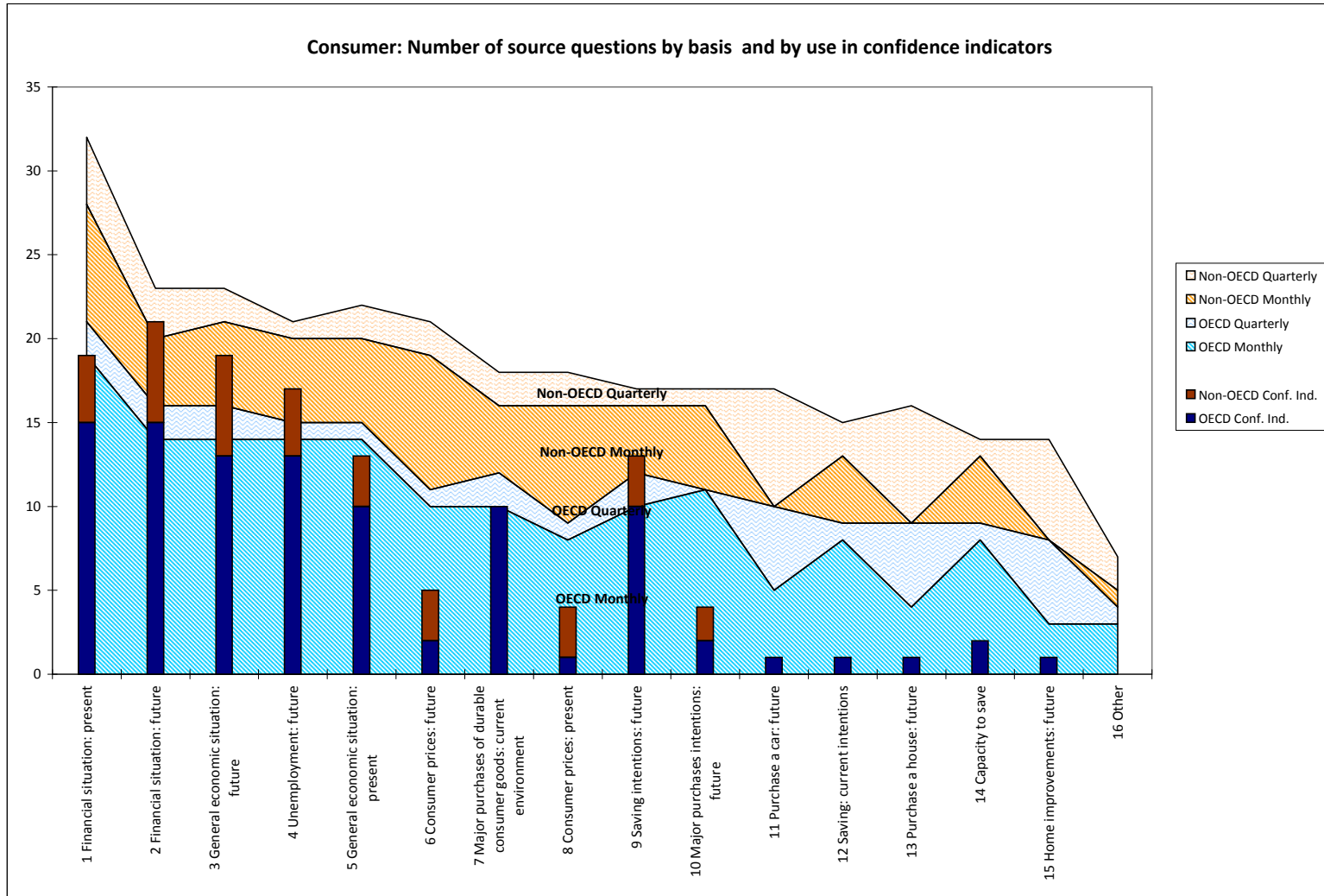
26

OECD Harmonised System (n/a)	Total Count of Source Questions				OECD Count of Source Questions				Non-OECD Count of Source Questions			
	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator
1 Financial situation: present	37	26	6	19	22	19	2	15	15	7	4	4
2 Financial situation: future	25	18	5	21	17	14	2	15	8	4	3	6
3 General economic situation: future	24	19	4	19	16	14	2	13	8	5	2	6
4 Unemployment: future	23	19	2	17	15	14	1	13	8	5	1	4
5 General economic situation: present	23	19	3	13	15	14	1	10	8	5	2	3
6 Consumer prices: future	22	18	3	5	11	10	1	2	11	8	2	3
7 Major purchases of durable consumer goods: current environment	21	14	4	10	14	10	2	10	7	4	2	0
8 Consumer prices: present	19	15	3	4	9	8	1	1	10	7	2	3
9 Saving intentions: future	19	14	3	13	13	10	2	10	6	4	1	3
10 Major purchases intentions: future	19	16	1	4	11	11	0	2	8	5	1	2
11 Purchase a car: future	18	5	12	1	10	5	5	1	8	0	7	0
12 Saving: current intentions	17	12	3	1	9	8	1	1	8	4	2	0
13 Purchase a house: future	17	4	12	1	9	4	5	1	8	0	7	0
14 Capacity to save	16	12	2	2	10	8	1	2	6	4	1	0
15 Home improvements: future	15	3	11	1	8	3	5	1	7	0	6	0
16 Other	10	4	3	3	6	3	1	0	4	1	2	3
Total	315	214	74	131	189	152	31	97	126	62	43	34

3.4.1. Consumer Source Questions - Count of Answers



3.4.1. Consumer Source Questions - Combined graph: Source questions are displayed in stacked area graphs by basis (monthly or quarterly) and the number of times a source question is used in a confidence indicator are shown in the stacked bar graphs. Note: A source question is counted only once per organization, even if the organization uses a source question in more than one confidence indicator. This maintains balance between the number of source questions in total and the number used in confidence indicators.



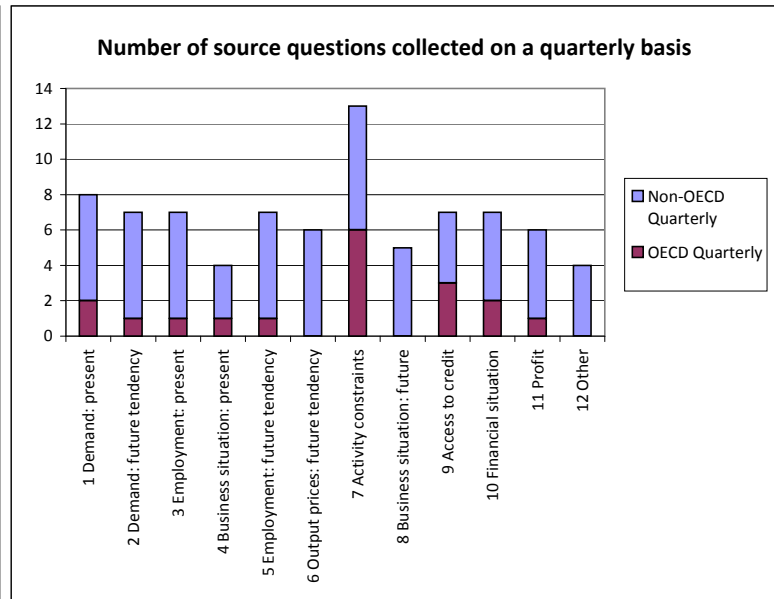
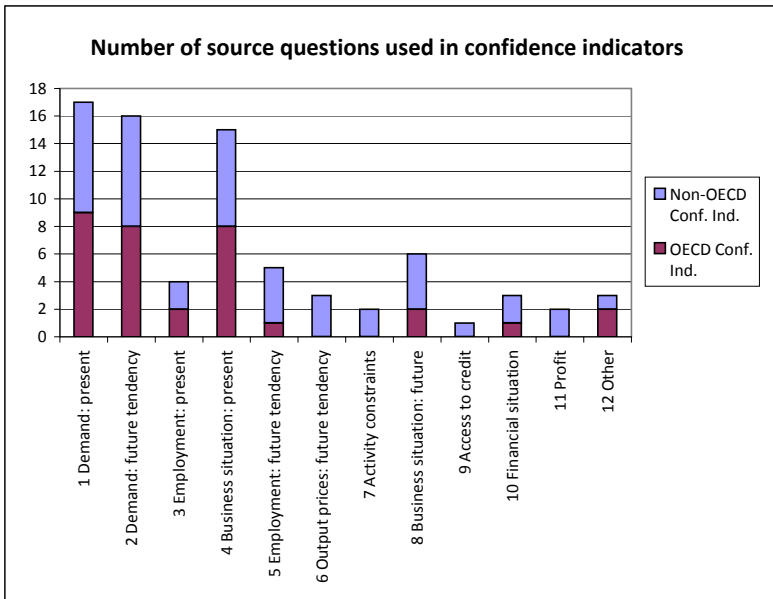
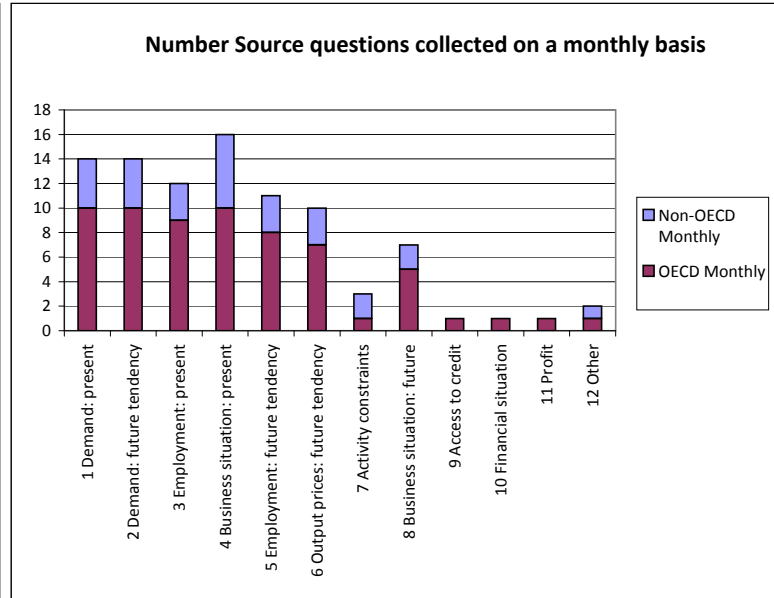
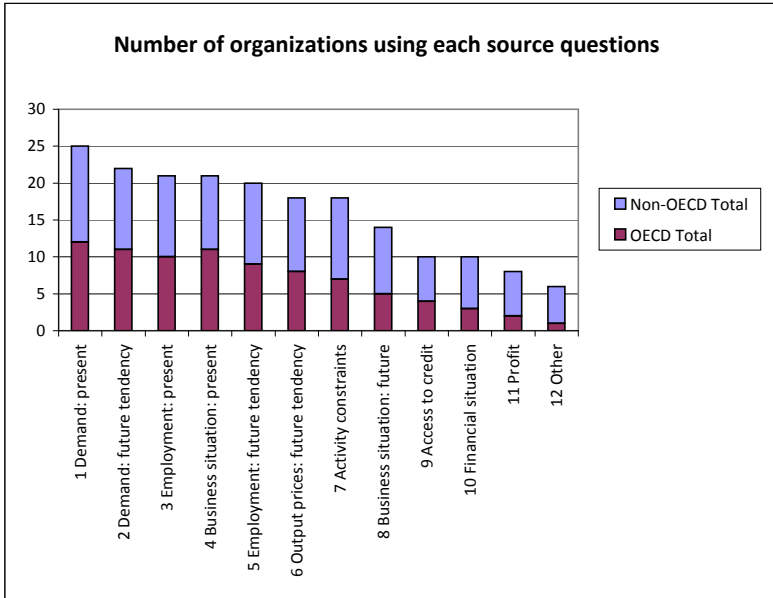
3.4.1. Services Source Questions

Organizations with source questions responses

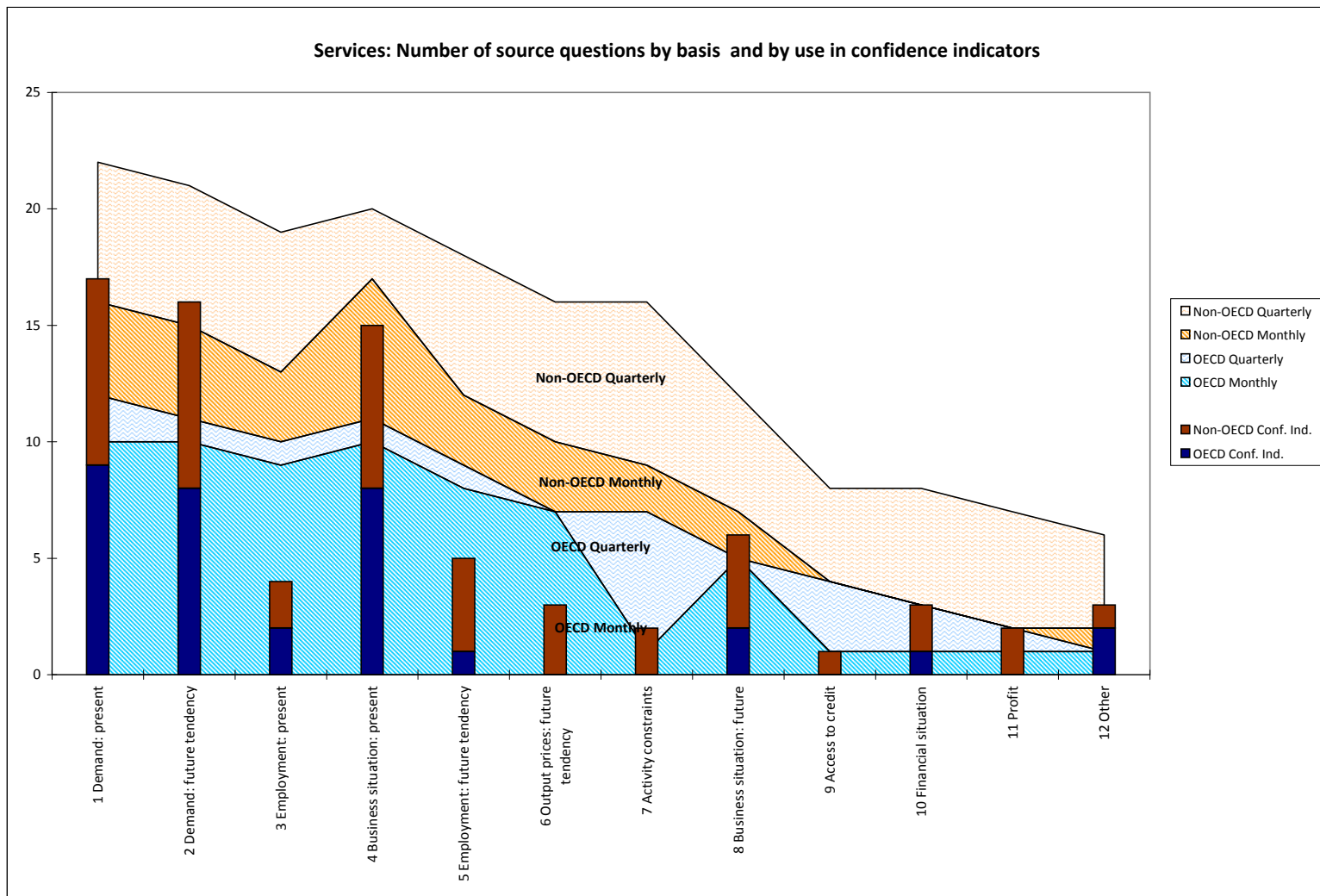
26

	OECD Harmonised System	Total Count of Source Questions				OECD Count of Source Questions				Non-OECD Count of Source Questions			
		Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator
1 Demand: present	x	25	14	8	17	12	10	2	9	13	4	6	8
2 Demand: future tendency	x	22	14	7	16	11	10	1	8	11	4	6	8
3 Employment: present	x	21	12	7	4	10	9	1	2	11	3	6	2
4 Business situation: present	x	21	16	4	15	11	10	1	8	10	6	3	7
5 Employment: future tendency	x	20	11	7	5	9	8	1	1	11	3	6	4
6 Output prices: future tendency		18	10	6	3	8	7	0	0	10	3	6	3
7 Activity constraints	x	18	3	13	2	7	1	6	0	11	2	7	2
8 Business situation: future	x	14	7	5	6	5	5	0	2	9	2	5	4
9 Access to credit	x	10	1	7	1	4	1	3	0	6	0	4	1
10 Financial situation	x	10	1	7	3	3	1	2	1	7	0	5	2
11 Profit		8	1	6	2	2	1	1	0	6	0	5	2
12 Other		6	2	4	3	1	1	0	2	5	1	4	1
Total		193	92	81	77	83	64	18	33	110	28	63	44

3.4.1. Services Source Questions - Count of Answers



3.4.1. Services Source Questions - Combined graph: Source questions are displayed in stacked area graphs by basis (monthly or quarterly) and the number of times a source question is used in a confidence indicator are shown in the stacked bar graphs. Note: A source question is counted only once per organization, even if the organization uses a source question in more than one confidence indicator. This maintains balance between the number of source questions in total and the number used in confidence indicators.



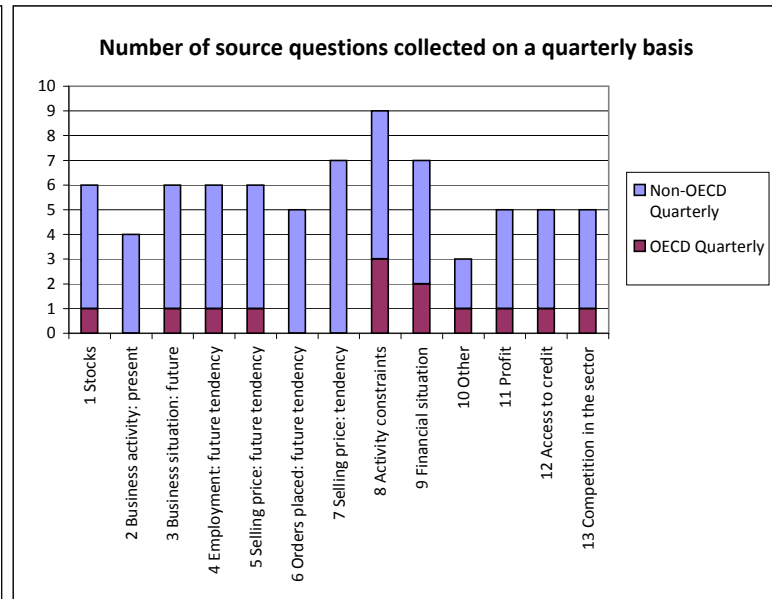
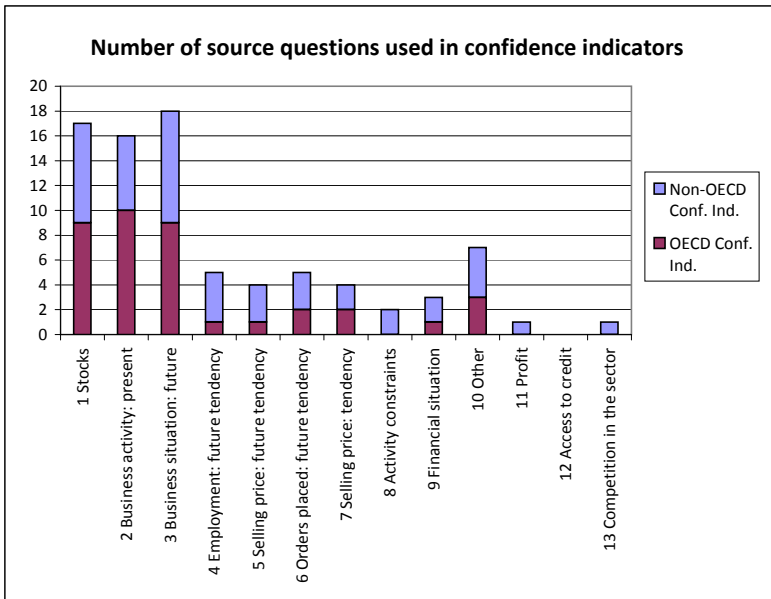
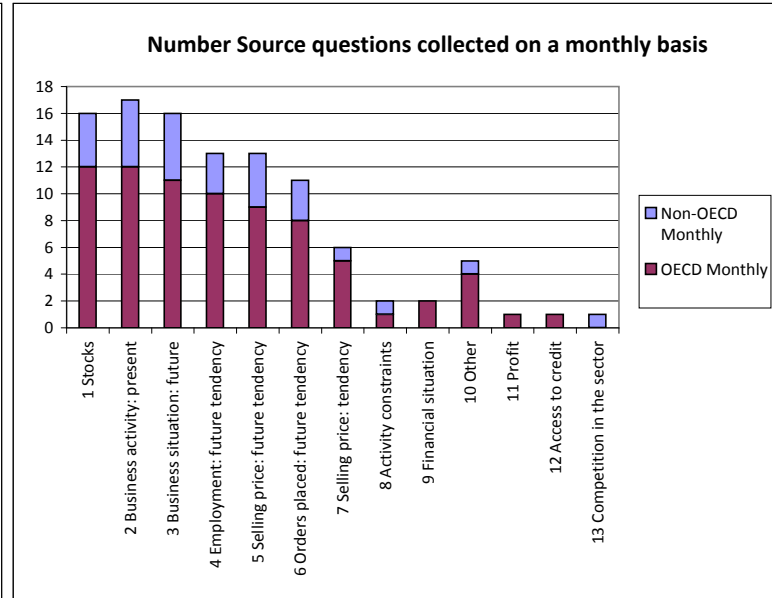
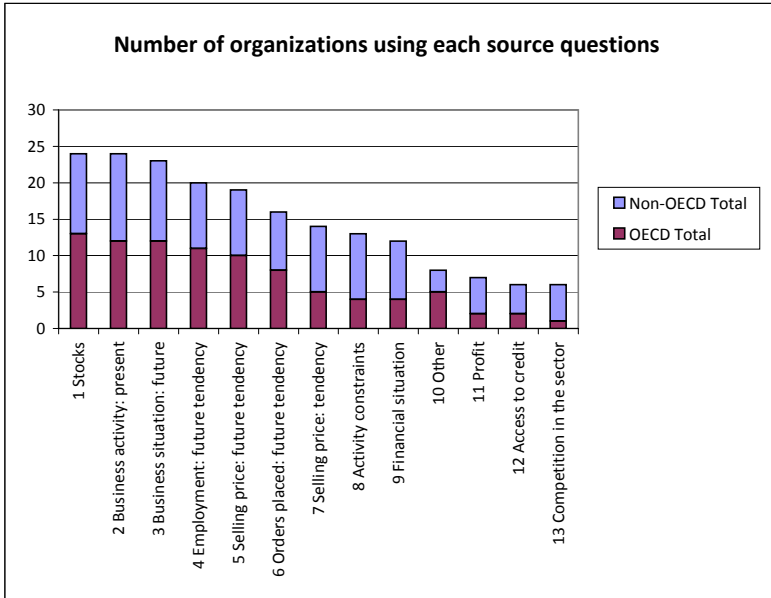
3.4.1. Retail Source Questions

Organizations with source questions responses

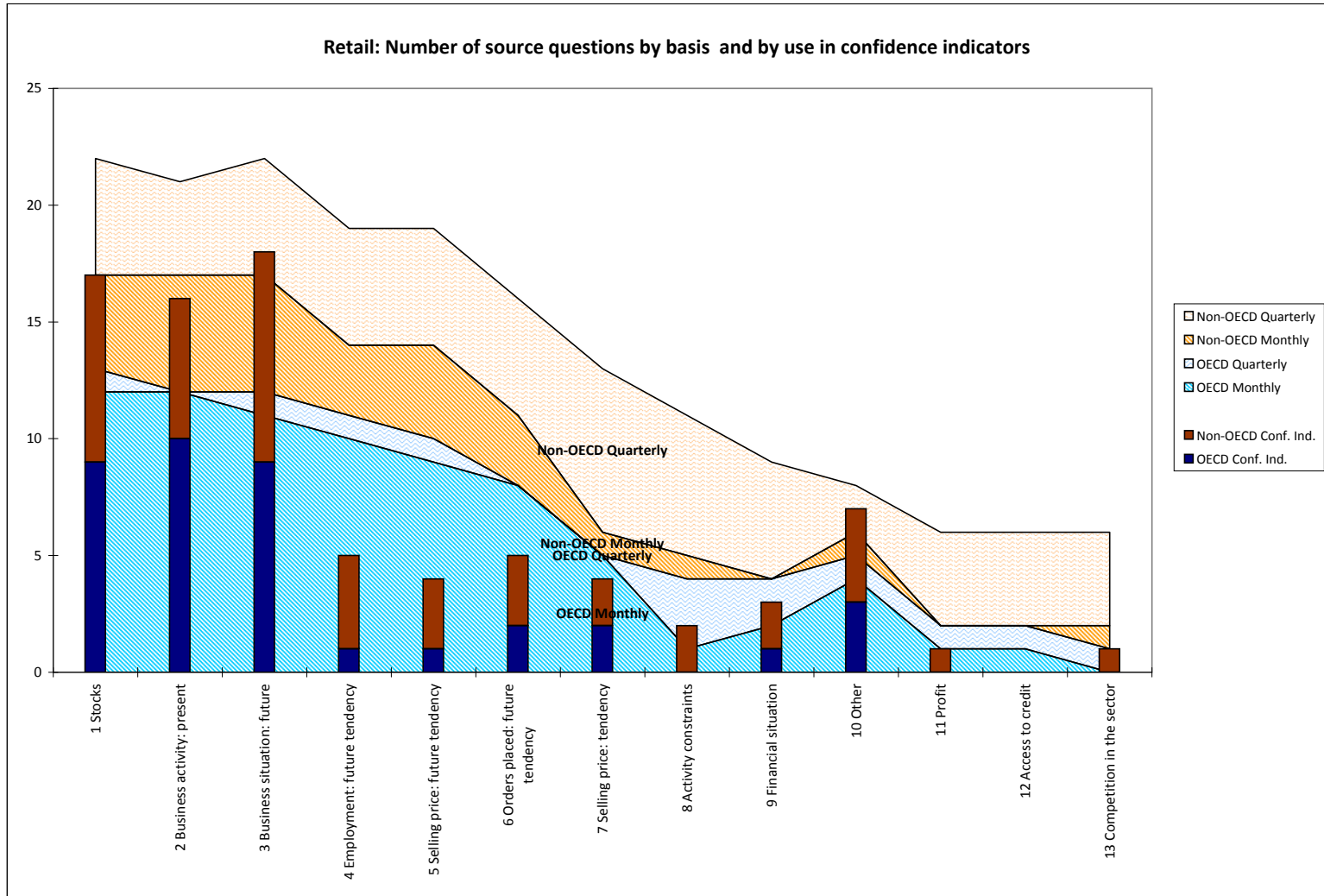
27

	OECD Harmonised System	Total Count of Source Questions				OECD Count of Source Questions				Non-OECD Count of Source Questions			
		Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator	Total (incl. annual)	Monthly	Quarterly	Conf. Indicator
1 Stocks	x	24	16	6	17	13	12	1	9	11	4	5	8
2 Business activity: present	x	24	17	4	16	12	12	0	10	12	5	4	6
3 Business situation: future	x	23	16	6	18	12	11	1	9	11	5	5	9
4 Employment: future tendency	x	20	13	6	5	11	10	1	1	9	3	5	4
5 Selling price: future tendency	x	19	13	6	4	10	9	1	1	9	4	5	3
6 Orders placed: future tendency	x	16	11	5	5	8	8	0	2	8	3	5	3
7 Selling price: tendency	x	14	6	7	4	5	5	0	2	9	1	7	2
8 Activity constraints	x	13	2	9	2	4	1	3	0	9	1	6	2
9 Financial situation	x	12	2	7	3	4	2	2	1	8	0	5	2
10 Other		8	5	3	7	5	4	1	3	3	1	2	4
11 Profit		7	1	5	1	2	1	1	0	5	0	4	1
12 Access to credit	x	6	1	5	0	2	1	1	0	4	0	4	0
13 Competition in the sector	x	6	1	5	1	1	0	1	0	5	1	4	1
Total		192	104	74	83	89	76	13	38	103	28	61	45

3.4.1. Retail Source Questions - Count of Answers



3.4.1. Retail Source Questions - Combined graph: Source questions are displayed in stacked area graphs by basis (monthly or quarterly) and the number of times a source question is used in a confidence indicator are shown in the stacked bar graphs. Note: A source question is counted only once per organization, even if the organization uses a source question in more than one confidence indicator. This maintains balance between the number of source questions in total and the number used in confidence indicators.



3.5.1 Industry Source Question Format

Total	OECD Harm. Format	Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12
		1 Order books: level	Pres	44	2	9	0	1	26	1	5
2 Stock of finished goods: level	Pres	41	3	8	0	1	22	2	5	0	0
3 Production: future tendency	F3	39	2	2	0	1	2	4	28	0	0
4 Capacity utilisation	Pres	38	5	6	0	2	18	3	3	0	1
5 Export order books: level	Pres	38	1	8	0	2	18	2	7	0	0
6 Production: tendency	T1/T3	38	6	17	0	2	7	2	4	0	0
7 Employment: future tendency	F3	34	1	2	0	0	3	3	24	1	0
8 Selling price: future tendency	F3	33	3	2	0	0	2	4	21	0	1
9 Business situation: present	T1/T3	29	4	4	2	1	14	2	2	0	0
10 Production constraints		28	3	1	0	1	18	1	3	0	1
11 Business situation: future	F6	27	2	1	0	0	3	4	9	7	1
12 Access to credit		21	2	4	0	1	9	1	1	0	3
13 Profit		21	3	6	0	2	5	1	4	0	0
14 Financial situation		19	3	4	0	1	7	1	1	0	2
15 Other		20	3	5	0	0	3	1	4	2	2

OECD Organizations		Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12
1 Order books: level	Pres	23	0	5	0	0	16	0	2	0	0
2 Stock of finished goods: level	Pres	19	0	4	0	0	13	0	2	0	0
3 Production: future tendency	F3	20	0	1	0	1	0	1	17	0	0
4 Capacity utilisation	Pres	18	1	3	0	2	9	1	1	0	1
5 Export order books: level	Pres	18	0	5	0	1	9	0	3	0	0
6 Production: tendency	T1/T3	16	2	8	0	1	2	0	3	0	0
7 Employment: future tendency	F3	17	0	1	0	0	1	1	14	0	0
8 Selling price: future tendency	F3	15	1	1	0	0	0	1	11	0	1
9 Business situation: present	T1/T3	11	1	1	1	1	7	0	0	0	0
10 Production constraints		14	0	0	0	1	10	0	2	0	1
11 Business situation: future	F6	11	0	0	0	0	1	1	4	4	1
12 Access to credit		11	0	1	0	1	5	0	1	0	3
13 Profit		5	1	0	0	1	2	0	1	0	0
14 Financial situation		8	1	0	0	1	3	0	1	0	2
15 Other		8	0	1	0	0	0	0	4	1	2

Non-OECD Organizations		Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12
1 Order books: level	Pres	21	2	4	0	1	10	1	3	0	0
2 Stock of finished goods: level	Pres	22	3	4	0	1	9	2	3	0	0
3 Production: future tendency	F3	19	2	1	0	0	2	3	11	0	0
4 Capacity utilisation	Pres	20	4	3	0	0	9	2	2	0	0
5 Export order books: level	Pres	20	1	3	0	1	9	2	4	0	0
6 Production: tendency	T1/T3	22	4	9	0	1	5	2	1	0	0
7 Employment: future tendency	F3	17	1	1	0	0	2	2	10	1	0
8 Selling price: future tendency	F3	18	2	1	0	0	2	3	10	0	0
9 Business situation: present	T1/T3	18	3	3	1	0	7	2	2	0	0
10 Production constraints		14	3	1	0	0	8	1	1	0	0
11 Business situation: future	F6	16	2	1	0	0	2	3	5	3	0
12 Access to credit		10	2	3	0	0	4	1	0	0	0
13 Profit		16	2	6	0	1	3	1	3	0	0
14 Financial situation		11	2	4	0	0	4	1	0	0	0
15 Other		12	3	4	0	0	3	1	0	1	0

T1: One month ago; T3: Three months ago; T6: Six months ago; T12: Twelve months ago; Pres: Present;
 F1: One month in the future; F3: Three months in the future; F6: Six months in the future; F12: Twelve months in the future

3.5.1 Construction Source Question Format

Total	OECD Harm. Format	Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12	
1 Employment: future tendency	F3	25	0	1	0	0	2	1	20	1	0	
2 Production constraints		20	2	1	0	0	14	0	3	0	0	
3 Access to credit		9	1	3	0	0	5	0	0	0	0	
4 Profit		9	2	4	0	0	2	0	1	0	0	
5 Financial situation	T1/T3	14	2	5	0	0	6	0	1	0	0	
6 Other		15	1	3	0	0	4	0	3	4	0	
7 Business activity: present	T1/T3	23	3	10	0	0	7	1	2	0	0	
8 Delay in payment by client	T1/T3	5	1	3	0	0	0	0	1	0	0	
9 New orders (contracts)	F3	14	1	5	0	0	2	1	4	1	0	
10 Order books	Pres	29	1	7	0	0	16	1	4	0	0	
11 Output prices: future tendency	F3	20	0	1	0	0	2	1	16	0	0	
12 Period of production secured		16	1	2	0	0	10	1	1	0	1	
13 Technical capacity	Pres	12	1	3	0	0	6	0	2	0	0	
OECD Organizations												
1 Employment: future tendency	F3	13	0	0	0	0	1	0	12	0	0	
2 Production constraints		8	0	0	0	0	7	0	1	0	0	
3 Access to credit		2	0	0	0	0	2	0	0	0	0	
4 Profit		1	1	0	0	0	0	0	0	0	0	
5 Financial situation	T1/T3	5	1	0	0	0	3	0	1	0	0	
6 Other		6	0	0	0	0	1	0	3	2	0	
7 Business activity: present	T1/T3	10	1	5	0	0	3	0	1	0	0	
8 Delay in payment by client	T1/T3	1	0	1	0	0	0	0	0	0	0	
9 New orders (contracts)	F3	4	0	2	0	0	1	0	1	0	0	
10 Order books	Pres	14	0	3	0	0	9	0	2	0	0	
11 Output prices: future tendency	F3	10	0	0	0	0	1	0	9	0	0	
12 Period of production secured		8	0	1	0	0	6	0	0	0	1	
13 Technical capacity	Pres	2	0	0	0	0	2	0	0	0	0	
Non-OECD Organizations												
1 Employment: future tendency	F3	12	0	1	0	0	1	1	8	1	0	
2 Production constraints		12	2	1	0	0	7	0	2	0	0	
3 Access to credit		7	1	3	0	0	3	0	0	0	0	
4 Profit		8	1	4	0	0	2	0	1	0	0	
5 Financial situation	T1/T3	9	1	5	0	0	3	0	0	0	0	
6 Other		9	1	3	0	0	3	0	0	2	0	
7 Business activity: present	T1/T3	13	2	5	0	0	4	1	1	0	0	
8 Delay in payment by client	T1/T3	4	1	2	0	0	0	0	1	0	0	
9 New orders (contracts)	F3	10	1	3	0	0	1	1	3	1	0	
10 Order books	Pres	15	1	4	0	0	7	1	2	0	0	
11 Output prices: future tendency	F3	10	0	1	0	0	1	1	7	0	0	
12 Period of production secured		8	1	1	0	0	4	1	1	0	0	
13 Technical capacity	Pres	10	1	3	0	0	4	0	2	0	0	

T1: One month ago; T3: Three months ago; T6: Six months ago; T12: Twelve months ago; Pres: Present;
 F1: One month in the future; F3: Three months in the future; F6: Six months in the future; F12: Twelve months in the future

3.5.1 Consumer Source Question Format

Total	OECD Harm. Format										
		Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12
1 Other		10	0	2	0	0	4	0	1	1	2
2 Capacity to save		13	0	0	0	0	10	0	0	0	3
3 Consumer prices: future		18	0	0	0	0	0	1	0	2	15
4 Consumer prices: present		17	0	1	0	13	2	0	0	0	1
5 Financial situation: future		26	0	1	0	0	2	0	2	1	20
6 Financial situation: present		34	0	2	1	18	11	0	0	0	2
7 General economic situation: future		22	0	0	0	0	1	1	1	1	18
8 General economic situation: present		22	0	0	0	15	5	0	0	0	2
9 Home improvements: future		14	0	0	0	0	1	0	1	0	12
10 Major purchases intentions: future		19	0	0	0	0	2	0	1	2	14
11 Major purchases of durable consumer goods: current		20	0	0	0	0	18	0	0	0	2
12 Purchase a car: future		18	0	0	0	0	2	0	1	1	14
13 Purchase a house: future		17	0	0	0	0	2	0	1	0	14
14 Saving intentions: future		15	0	0	0	0	0	0	0	0	15
15 Saving: current intentions		15	0	1	0	1	12	0	0	0	1
16 Unemployment: future		21	0	1	0	0	0	0	0	2	18
OECD Organizations											
1 Other		3	0	0	0	0	2	0	0	0	1
2 Capacity to save		10	0	0	0	0	7	0	0	0	3
3 Consumer prices: future		11	0	0	0	0	0	0	0	1	10
4 Consumer prices: present		10	0	0	0	9	0	0	0	0	1
5 Financial situation: future		17	0	0	0	0	1	0	0	1	15
6 Financial situation: present		23	0	0	1	12	8	0	0	0	2
7 General economic situation: future		15	0	0	0	0	1	0	0	1	13
8 General economic situation: present		16	0	0	0	11	3	0	0	0	2
9 Home improvements: future		8	0	0	0	0	0	0	0	0	8
10 Major purchases intentions: future		10	0	0	0	0	0	0	0	1	9
11 Major purchases of durable consumer goods: current		14	0	0	0	0	13	0	0	0	1
12 Purchase a car: future		10	0	0	0	0	0	0	0	1	9
13 Purchase a house: future		9	0	0	0	0	0	0	0	0	9
14 Saving intentions: future		11	0	0	0	0	0	0	0	0	11
15 Saving: current intentions		9	0	0	0	1	8	0	0	0	0
16 Unemployment: future		14	0	0	0	0	0	0	0	1	13
Non-OECD Organizations											
1 Other		7	0	2	0	0	2	0	1	1	1
2 Capacity to save		3	0	0	0	0	3	0	0	0	0
3 Consumer prices: future		7	0	0	0	0	0	1	0	1	5
4 Consumer prices: present		7	0	1	0	4	2	0	0	0	0
5 Financial situation: future		9	0	1	0	0	1	0	2	0	5
6 Financial situation: present		11	0	2	0	6	3	0	0	0	0
7 General economic situation: future		7	0	0	0	0	0	1	1	0	5
8 General economic situation: present		6	0	0	0	4	2	0	0	0	0
9 Home improvements: future		6	0	0	0	0	1	0	1	0	4
10 Major purchases intentions: future		9	0	0	0	0	2	0	1	1	5
11 Major purchases of durable consumer goods: current		6	0	0	0	0	5	0	0	0	1
12 Purchase a car: future		8	0	0	0	0	2	0	1	0	5
13 Purchase a house: future		8	0	0	0	0	2	0	1	0	5
14 Saving intentions: future		4	0	0	0	0	0	0	0	0	4
15 Saving: current intentions		6	0	1	0	0	4	0	0	0	1
16 Unemployment: future		7	0	1	0	0	0	0	0	1	5

T1: One month ago; T3: Three months ago; T6: Six months ago; T12: Twelve months ago; Pres: Present;
 F1: One month in the future; F3: Three months in the future; F6: Six months in the future; F12: Twelve months in the future

3.5.1 Services Source Question Format

Total	OECD Harm. Format	Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12	
1	Employment: future tendency	F3	19	0	0	0	0	1	2	16	0	0
2	Business situation: present	T1/T3	23	1	12	0	1	8	0	0	1	0
3	Business situation: future	F6	13	0	0	0	0	0	2	7	4	0
4	Access to credit	T1/T3	10	0	4	0	0	5	0	0	0	1
5	Profit		13	1	4	0	1	4	0	3	0	0
6	Financial situation	T1/T3	12	1	4	0	1	4	0	1	0	1
7	Other		8	0	5	0	0	2	0	1	0	0
8	Activity constraints		18	1	5	0	0	9	0	2	0	1
9	Demand: future tendency	F3	22	0	0	0	0	1	1	20	0	0
10	Demand: present	T1/T3	25	1	17	0	1	6	0	0	0	0
11	Employment: present	T1/T3	21	1	13	0	1	6	0	0	0	0
12	Output prices: future tendency		18	0	1	0	0	1	1	15	0	0

OECD Organizations		Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12	
1	Employment: future tendency	F3	9	0	0	0	0	0	1	8	0	0
2	Business situation: present	T1/T3	12	0	7	0	0	5	0	0	0	0
3	Business situation: future	F6	7	0	0	0	0	0	1	4	2	0
4	Access to credit	T1/T3	4	0	1	0	0	2	0	0	0	1
5	Profit		3	1	0	0	0	1	0	1	0	0
6	Financial situation	T1/T3	3	1	1	0	0	0	0	0	0	1
7	Other		1	0	0	0	0	0	0	1	0	0
8	Activity constraints		7	0	2	0	0	4	0	0	0	1
9	Demand: future tendency	F3	11	0	0	0	0	0	0	11	0	0
10	Demand: present	T1/T3	12	0	9	0	0	3	0	0	0	0
11	Employment: present	T1/T3	10	0	7	0	0	3	0	0	0	0
12	Output prices: future tendency		8	0	1	0	0	0	0	7	0	0

Non-OECD Organizations		Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12	
1	Employment: future tendency	F3	10	0	0	0	0	1	1	8	0	0
2	Business situation: present	T1/T3	11	1	5	0	1	3	0	0	1	0
3	Business situation: future	F6	6	0	0	0	0	0	1	3	2	0
4	Access to credit	T1/T3	6	0	3	0	0	3	0	0	0	0
5	Profit		10	0	4	0	1	3	0	2	0	0
6	Financial situation	T1/T3	9	0	3	0	1	4	0	1	0	0
7	Other		7	0	5	0	0	2	0	0	0	0
8	Activity constraints		11	1	3	0	0	5	0	2	0	0
9	Demand: future tendency	F3	11	0	0	0	0	1	1	9	0	0
10	Demand: present	T1/T3	13	1	8	0	1	3	0	0	0	0
11	Employment: present	T1/T3	11	1	6	0	1	3	0	0	0	0
12	Output prices: future tendency		10	0	0	0	0	1	1	8	0	0

T1: One month ago; T3: Three months ago; T6: Six months ago; T12: Twelve months ago; Pres: Present;
 F1: One month in the future; F3: Three months in the future; F6: Six months in the future; F12: Twelve months in the future

3.5.1 Retail Source Question Format

Total	OECD Harm. Format	Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12
		17	0	0	0	0	0	1	1	15	0
2	F3	16	0	0	0	0	0	1	15	0	0
3	F6	22	0	0	0	0	1	2	14	5	0
4		7	0	4	0	0	3	0	0	0	0
5		10	1	3	0	1	3	0	2	0	0
6	T1/T3	11	1	4	0	1	3	0	2	0	0
7		12	0	6	0	0	1	0	5	0	0
8		14	1	4	0	0	6	0	3	0	0
9		20	1	10	0	1	8	0	0	0	0
10	T1/T3	7	0	4	0	0	1	0	2	0	0
11	F3	16	0	0	0	0	1	1	14	0	0
12	T1/T3	12	3	5	0	1	3	0	0	0	0
13	Pres	23	1	4	0	1	15	0	2	0	0

OECD Organizations		Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12
1	F3	9	0	0	0	0	1	0	8	0	0
2	F3	8	0	0	0	0	0	0	8	0	0
3	F6	12	0	0	0	0	1	1	8	2	0
4		2	0	1	0	0	1	0	0	0	0
5		2	1	0	0	0	1	0	0	0	0
6	T1/T3	3	1	1	0	0	0	0	1	0	0
7		8	0	3	0	0	0	0	5	0	0
8		4	0	1	0	0	2	0	1	0	0
9		9	0	5	0	0	4	0	0	0	0
10	T1/T3	1	0	0	0	0	1	0	0	0	0
11	F3	8	0	0	0	0	1	0	7	0	0
12	T1/T3	3	2	0	0	0	1	0	0	0	0
13	Pres	10	0	1	0	0	9	0	0	0	0

Non-OECD Organizations		Total	T1	T3	T6	T12	Pres	F1	F3	F6	F12
1	F3	8	0	0	0	0	0	1	7	0	0
2	F3	8	0	0	0	0	0	1	7	0	0
3	F6	10	0	0	0	0	0	1	6	3	0
4		5	0	3	0	0	2	0	0	0	0
5		8	0	3	0	1	2	0	2	0	0
6	T1/T3	8	0	3	0	1	3	0	1	0	0
7		4	0	3	0	0	1	0	0	0	0
8		10	1	3	0	0	4	0	2	0	0
9		11	1	5	0	1	4	0	0	0	0
10	T1/T3	6	0	4	0	0	0	0	2	0	0
11	F3	8	0	0	0	0	0	1	7	0	0
12	T1/T3	9	1	5	0	1	2	0	0	0	0
13	Pres	13	1	3	0	1	6	0	2	0	0

T1: One month ago; T3: Three months ago; T6: Six months ago; T12: Twelve months ago; Pres: Present;
 F1: One month in the future; F3: Three months in the future; F6: Six months in the future; F12: Twelve months in the future

IV. Data Integration

Most organizations make no data adjustments either before or after they calculate their composite indices. They simply take an arithmetic or weighted arithmetic average of the survey time series to create their composite index.

The organizations that do make prior data adjustments usually make seasonal adjustments and standardization calculations. De-trending and smoothing of the data is not often done. Of the organizations that do make adjustments after the confidence index has been calculated, they most often make a seasonal adjustment.

Breaks in series are not routinely reported by all organizations. However, back casting after a break in series is usually done by most organizations, although less so for the consumer sector.

4.4.1. Data adjustment before calculation (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Seasonal	10	5	5	4	5
Standardize	6	3	6	0	0
De-trending	1	1	1	1	1
Smoothing	1	0	0	0	0
No data adjustment	20	10	12	13	7

4.5.1. Calculation (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Averages Arithmetic	24	11	30	13	11
Averages Geometric	1	2	1	1	1
Averages Other avg	1	0	0	0	0
Weighted Averages Arithmetic	23	15	15	13	11
Weighted Averages Geometric	0	0	0	0	0
Principal component	5	2	1	1	1
Markov switching	1	0	0	0	1
Factor Analysis Static	3	1	0	1	1
Factor Analysis Dynamic	1	1	0	0	0

4.6.1. Data adjustment after calculation (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Seasonal	12	6	10	3	4
Rescaling	1	1	6	1	1
Smoothing	3	2	1	1	1
Normalizing	1	1	1	0	0
No data adjustment	23	12	11	14	10

4.7. Are breaks in series indicated?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	19	10	8	10	12
No	18	14	15	10	9

4.8. Are series back-cast after change in methodology?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	27	16	10	14	15
No	11	7	14	5	6

V. Dissemination

Data is disseminated using a variety of means, including paper publication, electronic format and over the internet. Most organizations use all three of these means to disseminate data. Most organizations also have an advance release calendar for their dissemination schedule and releases are usually punctual. Most organizations make the data available to all users simultaneously. Response rates are reported about half the time.

Almost all organizations have a law or formal provision protected individual data confidentiality. Data providers are almost always informed that their information will be used for statistical purposes only and confidentiality is assured usually by aggregation or suppression.

5.1.1. How are statistics disseminated? (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Paper publication	34	24	18	23	23
Electronic format	37	27	24	24	24
Internet	45	28	28	29	29
Other	3	1	1	1	1

5.1.2. Does an advance release calendar exist for dissemination of statistics?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	43	31	28	29	31
No	7	3	3	4	2

5.1.3. Are the releases punctual?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	41	29	30	26	28
No	7	3	0	5	5

5.1.4. Do you make the statistics available to all users simultaneously?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	42	30	25	28	29
No	6	3	4	4	3

5.1.5. Do you report response rates?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	30	20	13	18	19
No	18	12	16	14	13

5.2.1. Does a law or other formal provision exists stating that individual data are to be treated confidentially?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	47	32	28	31	33
No	2	1	1	0	0

5.2.2. For statistical inquires, do you inform respondents that information provided by them will be used for statistical purposes only?

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Yes	45	28	25	27	28
No	1	1	1	1	1

5.2.3. What methods are used to ensure confidentiality of individual data? (Select all that apply)

	<i>Industry</i>	<i>Construction</i>	<i>Consumer</i>	<i>Services</i>	<i>Retail</i>
Aggregation	45	30	26	30	31
Suppression	15	7	8	6	7
Perturbation	0	0	0	0	0
Other	4	3	2	2	1