

METHODOLOGICAL DOCUMENT ON THE MAJOR REVISION MADE IN SECTORAL CONFIDENCE INDICES

Introduction

Within the concept of business tendency statistics implemented monthly business tendency surveys in services, retail trade and construction sectors aim to find out current business situation assessments and near future expectations of business senior managers.

Survey results provide a source for calculating services, retail trade and construction sector confidence indices.

Within the context of Sectoral Confidence Indices (SCI), services, retail trade and construction confidence indices have been calculated to summarize the assessments and expectations of senior managers on various topics related to economic activity as leading indicators indicating the confidence of sector.

Business Tendency Surveys applied to services, retail trade and construction sectors have been carried out in the “Joint Harmonized European Union Programme of Business and Consumer Surveys” since the beginning of the applications.

Reasons For Major Revision

Changes in the method used in the business tendency surveys for determining the enterprises to apply the surveys and for weighting process of enterprises’ responses are the reasons for major revision.

Within the change of the scope of the survey units, enterprises have been started to be selected by performing 70% cut-off each sector’s total turnover for implementing total count survey. Surveys have been applied to enterprises simultaneously to be selected both by stratified random sampling method and to enterprises to be selected by the new scope starting from October 2020 to January 2021.

Survey responses are weighted by proportional turnover of the enterprise in each sector using two-digit activity codes for services and construction sectors and three-digit activity codes for retail trade sector of NACE rev.2 Economic Activity Classification.

In the respect of the weighting process, since October 2020 weighting have been applied according to the previous and new processes. In the previous weighting process, weighting to survey responses has been performed by using expansion coefficients according to activity codes giving aggregated sectors. On the other hand, in the new process survey responses have been weighted by using enterprises’ turnover and Gross Domestic Product (GDP) value added of enterprises’ activity sectors.

Survey responses are weighted by value added-Gross Domestic Product (GDP) of enterprises’ activity sectors and aggregated at two-digits and total levels of services and construction sectors, at three digit, two digit and total levels of retail trade of NACE rev.2 Economic Activity Classification at two and three stages respectively.

Calculation of Back-Casted Sectoral Confidence Indices

Application changes accordingly new sectoral confidence indices, sub-indices, indices based on individual questions, possible rates on the enterprises' status of activities to increase in the case of increased demand without any change in their current resource and rates main factors limiting activities series have been produced. Back-casting by the difference of averages of the overlapping periods method has been applied to sub-indices and indices based on individual questions. Back-casting by the proportional difference of overlapping periods method has been applied to possible rates on the enterprises' status of activities to increase in the case of increased demand without any change in their current resource and rates main factors limiting activities series in order to produce the back-casted new series between January 2011-September 2020.

Length of Major Revision

Revision is made for the period January 2011 - December 2020.

Depth of Major Revision

Revizyon process is applied to sectoral confidence indices, sub-indices, question based indices, possible rates on the enterprises' status of activities to increase in the case of increased demand without any change in their current resource and main factors limiting activities series

Effects Of The Major Revision

The tables and graphics showing the effects of the revisions made for the sectoral confidence indices series is presented below.

When Table 1,2 and 3 is evaluated, it is seen that there is an absolute revision of averagely 17.28%,15.57% and 12.19% in the new series values of the services, retail trade and construction confidence indices repectively compared to the previous series values.

Looking at Graphics 1, 2 and 3 it is seen that there are differences in index series.

Table 1. Services Confidence Index Major Revision Effects

Year	Month	Old serial	New serial	Absolute revision (%)	Year	Month	Old serial	New serial	Absolute revision (%)
2011	January	112.4	131.2	14.31	2016	January	92.5	116.3	20.45
2011	February	111.0	129.6	14.29	2016	February	89.2	113.3	21.21
2011	March	111.2	129.8	14.30	2016	March	93.5	115.1	18.80
2011	April	110.3	129.7	15.00	2016	April	89.9	111.5	19.38
2011	May	110.5	130.6	15.42	2016	May	94.5	114.0	17.09
2011	June	110.3	130.8	15.72	2016	June	95.8	114.1	16.10
2011	July	109.1	129.3	15.62	2016	July	100.9	115.6	12.74
2011	August	106.0	125.7	15.69	2016	August	91.1	111.8	18.56
2011	September	107.8	128.2	15.87	2016	September	96.2	114.9	16.26
2011	October	106.4	126.8	16.11	2016	October	94.5	114.1	17.16
2011	November	107.2	126.9	15.52	2016	November	96.8	114.5	15.45
2011	December	107.0	126.9	15.73	2016	December	93.3	114.0	18.13
2012	January	105.3	125.1	15.77	2017	January	87.5	110.4	20.71
2012	February	104.4	124.3	15.99	2017	February	92.9	113.3	18.06

2012	March	104.6	124.9	16.26	2017	March	96.9	116.3	16.64
2012	April	104.6	125.0	16.27	2017	April	99.9	118.4	15.63
2012	May	105.0	125.4	16.23	2017	May	102.0	121.6	16.14
2012	June	105.9	126.1	15.97	2017	June	98.8	119.0	17.00
2012	July	107.8	127.0	15.07	2017	July	103.7	121.5	14.61
2012	August	105.5	124.9	15.55	2017	August	105.4	122.9	14.26
2012	September	104.1	124.1	16.14	2017	September	103.3	122.4	15.58
2012	October	104.3	124.6	16.30	2017	October	101.1	121.8	17.01
2012	November	102.1	122.0	16.35	2017	November	99.7	119.9	16.91
2012	December	102.4	122.5	16.41	2017	December	96.2	117.7	18.25
2013	January	102.6	122.8	16.46	2018	January	102.0	120.2	15.12
2013	February	104.1	124.1	16.11	2018	February	100.7	118.4	14.96
2013	March	103.7	123.6	16.07	2018	March	99.1	116.9	15.25
2013	April	105.3	125.3	15.96	2018	April	97.1	114.5	15.18
2013	May	104.6	124.3	15.82	2018	May	92.0	111.7	17.65
2013	June	102.5	122.4	16.25	2018	June	91.2	110.1	17.16
2013	July	101.7	121.3	16.15	2018	July	91.9	110.6	16.97
2013	August	103.7	124.3	16.58	2018	August	88.0	105.9	16.93
2013	September	102.9	122.9	16.26	2018	September	79.4	97.9	18.86
2013	October	104.2	124.3	16.18	2018	October	75.7	95.5	20.78
2013	November	105.3	124.4	15.38	2018	November	79.8	99.3	19.61
2013	December	103.9	123.0	15.53	2018	December	81.5	101.4	19.55
2014	January	102.1	122.7	16.76	2019	January	78.3	98.7	20.61
2014	February	100.9	121.5	16.95	2019	February	79.5	99.2	19.86
2014	March	100.2	119.8	16.36	2019	March	81.6	102.4	20.34
2014	April	99.0	119.5	17.17	2019	April	83.1	103.9	19.99
2014	May	98.0	118.4	17.19	2019	May	79.4	101.7	21.88
2014	June	99.6	119.5	16.62	2019	June	85.4	107.2	20.36
2014	July	97.4	116.5	16.39	2019	July	83.5	105.3	20.70
2014	August	99.3	119.4	16.84	2019	August	89.1	109.5	18.56
2014	September	101.0	120.1	15.91	2019	September	89.3	109.4	18.37
2014	October	99.8	119.7	16.61	2019	October	90.7	111.2	18.45
2014	November	97.3	117.3	17.05	2019	November	91.3	110.5	17.32
2014	December	98.8	118.9	16.92	2019	December	93.2	113.4	17.81
2015	January	100.7	122.2	17.63	2020	January	95.2	113.7	16.26
2015	February	101.5	122.6	17.25	2020	February	98.5	115.6	14.85
2015	March	100.8	120.3	16.16	2020	March	92.5	111.1	16.69
2015	April	100.3	120.7	16.93	2020	April	46.1	53.8	14.24
2015	May	100.4	120.4	16.57	2020	May	51.1	62.1	17.66
2015	June	99.3	118.5	16.23	2020	June	55.5	73.5	24.50
2015	July	100.4	118.6	15.34	2020	July	66.7	89.4	25.41
2015	August	100.2	120.0	16.48	2020	August	70.5	93.8	24.86
2015	September	98.1	116.6	15.85	2020	September	74.9	98.2	23.65
2015	October	98.2	117.4	16.33	2020	October	79.7	100.7	20.82
2015	November	100.0	119.2	16.07	2020	November	77.5	102.8	24.58
2015	December	99.0	118.6	16.50	2020	December	70.4	99.0	28.89
					Average absolute revision (%)			17.28	

Graphic 1. Services Confidence Index Major Revision Effects

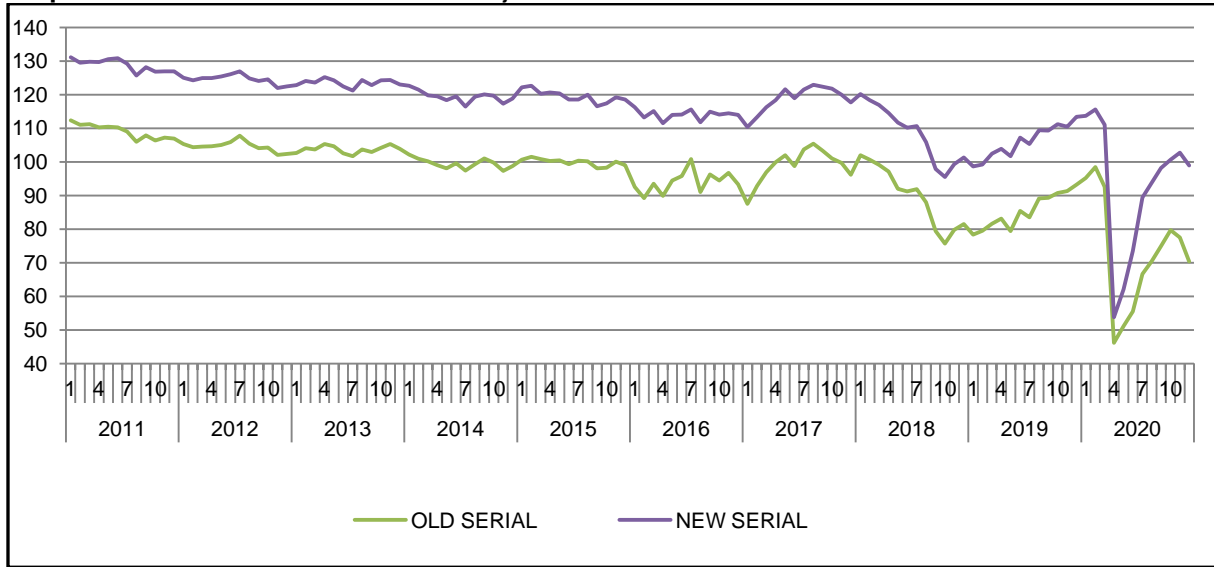


Table 2. Retail Trade Confidence Index Major Revision Effects

Year	Month	Old serial	New serial	Absolute revision (%)	Year	Month	Old serial	New serial	Absolute revision (%)
2011	January	113.5	131.5	13.67	2016	January	108.8	126.6	14.12
2011	February	112.4	131.2	14.36	2016	February	106.2	124.5	14.69
2011	March	109.2	127.9	14.59	2016	March	110.5	126.4	12.56
2011	April	107.9	127.4	15.32	2016	April	103.9	120.4	13.67
2011	May	106.5	125.8	15.32	2016	May	103.8	121.3	14.41
2011	June	109.4	128.4	14.82	2016	June	99.6	119.0	16.30
2011	July	108.1	125.7	14.03	2016	July	103.6	121.3	14.65
2011	August	106.9	125.0	14.49	2016	August	101.2	116.3	13.03
2011	September	105.7	126.3	16.30	2016	September	98.0	118.7	17.46
2011	October	105.8	125.8	15.86	2016	October	96.2	118.8	19.04
2011	November	106.5	124.3	14.36	2016	November	96.0	118.6	19.04
2011	December	106.6	124.7	14.53	2016	December	96.1	119.7	19.72
2012	January	105.2	123.0	14.52	2017	January	95.9	114.6	16.30
2012	February	104.1	123.1	15.37	2017	February	97.9	117.1	16.34
2012	March	104.8	124.0	15.47	2017	March	97.7	117.4	16.80
2012	April	103.7	123.4	15.99	2017	April	101.6	120.4	15.60
2012	May	104.4	123.9	15.74	2017	May	102.8	122.4	16.02
2012	June	101.8	120.9	15.81	2017	June	100.7	120.7	16.59
2012	July	102.7	120.2	14.52	2017	July	107.3	125.6	14.56
2012	August	104.6	122.8	14.87	2017	August	108.5	124.6	12.94
2012	September	106.9	127.0	15.81	2017	September	105.9	124.1	14.63
2012	October	102.5	121.8	15.87	2017	October	104.0	123.1	15.52
2012	November	102.1	120.0	14.90	2017	November	99.9	119.1	16.08
2012	December	103.1	121.3	15.00	2017	December	100.6	119.9	16.06
2013	January	106.5	124.5	14.47	2018	January	106.2	124.1	14.41
2013	February	108.3	127.3	14.90	2018	February	104.7	122.8	14.74
2013	March	109.3	128.8	15.10	2018	March	102.6	121.1	15.24
2013	April	105.7	125.5	15.77	2018	April	100.3	118.8	15.54

2013	May	103.8	123.3	15.80	2018	May	97.1	116.3	16.45
2013	June	103.9	123.2	15.70	2018	June	94.4	113.0	16.50
2013	July	102.6	119.5	14.13	2018	July	97.3	115.3	15.61
2013	August	104.9	123.3	14.91	2018	August	93.4	108.9	14.24
2013	September	107.7	127.6	15.58	2018	September	88.5	103.8	14.67
2013	October	106.4	125.6	15.27	2018	October	87.0	102.2	14.93
2013	November	105.5	123.9	14.84	2018	November	90.7	107.2	15.36
2013	December	105.0	123.7	15.16	2018	December	96.4	115.2	16.30
2014	January	107.2	125.5	14.59	2019	January	92.5	110.9	16.55
2014	February	103.4	122.3	15.46	2019	February	90.8	108.7	16.46
2014	March	101.8	120.6	15.59	2019	March	90.7	109.0	16.79
2014	April	103.2	122.8	15.91	2019	April	90.6	109.4	17.22
2014	May	103.9	123.2	15.68	2019	May	89.9	109.4	17.76
2014	June	101.9	121.7	16.28	2019	June	93.2	113.5	17.82
2014	July	103.8	120.5	13.85	2019	July	90.4	110.0	17.79
2014	August	105.1	123.3	14.77	2019	August	95.0	112.7	15.67
2014	September	106.9	125.6	14.94	2019	September	97.6	116.9	16.52
2014	October	105.8	124.4	14.98	2019	October	102.3	121.6	15.91
2014	November	103.6	123.0	15.79	2019	November	101.2	120.1	15.71
2014	December	105.4	125.2	15.86	2019	December	102.6	123.4	16.84
2015	January	103.6	121.9	15.04	2020	January	105.0	124.8	15.89
2015	February	103.2	122.3	15.62	2020	February	102.9	122.0	15.66
2015	March	103.1	121.5	15.16	2020	March	101.7	120.7	15.77
2015	April	101.8	121.3	16.11	2020	April	75.2	78.2	3.73
2015	May	103.1	122.6	15.88	2020	May	79.0	87.6	9.81
2015	June	103.5	123.9	16.51	2020	June	86.4	104.1	17.00
2015	July	103.7	120.4	13.83	2020	July	94.6	115.5	18.07
2015	August	102.0	119.8	14.87	2020	August	94.9	114.7	17.32
2015	September	98.4	115.6	14.87	2020	September	93.5	115.1	18.81
2015	October	100.8	118.6	15.06	2020	October	95.0	120.7	21.26
2015	November	105.4	125.8	16.22	2020	November	95.0	122.0	22.15
2015	December	104.9	125.7	16.54	2020	December	87.6	108.7	19.40
Average absolute revision (%)									15.57

Graphic 2. Retail Trade Confidence Index Major Revision Effects

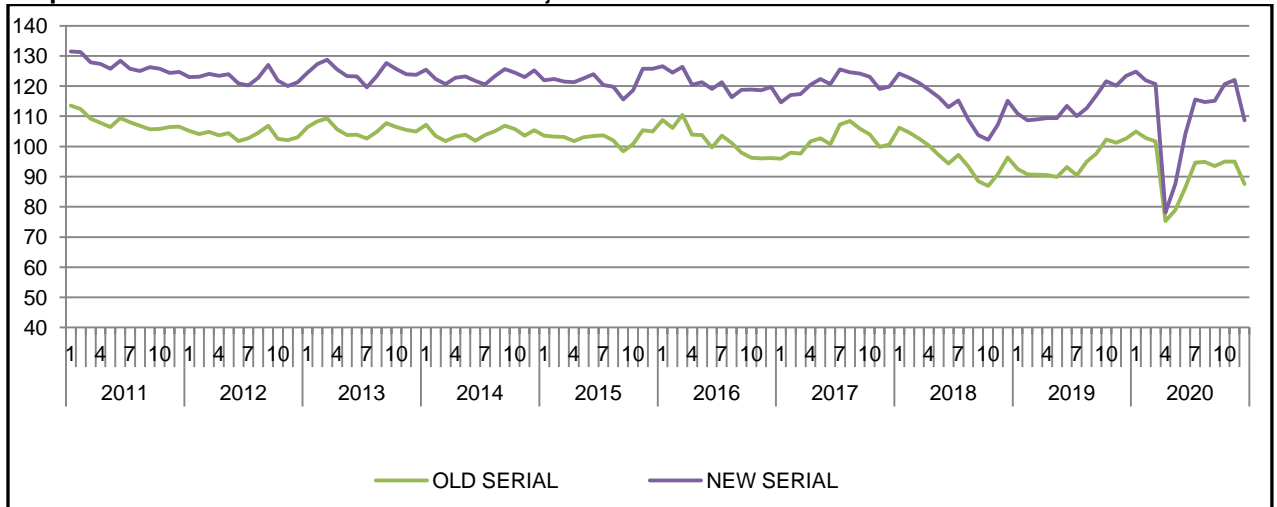


Table 3. Construction Confidence Index Major Revision Effects

Year	Month	Old serial	New serial	Absolute revision (%)	Year	Month	Old serial	New serial	Absolute revision (%)
2011	January	94.4	105.7	10.69	2016	January	83.9	95.3	11.92
2011	February	93.6	103.9	9.99	2016	February	82.8	93.9	11.85
2011	March	85.7	95.6	10.43	2016	March	81.4	92.0	11.53
2011	April	92.3	103.6	10.86	2016	April	81.5	92.0	11.34
2011	May	92.6	105.0	11.73	2016	May	79.2	90.9	12.93
2011	June	93.6	105.3	11.05	2016	June	80.9	92.1	12.10
2011	July	96.1	107.5	10.61	2016	July	83.0	93.3	11.04
2011	August	90.6	101.1	10.39	2016	August	79.4	90.7	12.43
2011	September	92.0	103.0	10.73	2016	September	82.0	92.4	11.30
2011	October	92.8	102.9	9.82	2016	October	81.3	91.0	10.65
2011	November	90.8	101.2	10.27	2016	November	75.7	87.2	13.13
2011	December	91.7	101.1	9.29	2016	December	76.1	86.4	11.83
2012	January	89.8	100.9	11.03	2017	January	74.8	85.7	12.69
2012	February	87.0	97.7	10.93	2017	February	76.4	87.1	12.27
2012	March	89.6	100.1	10.42	2017	March	85.8	96.1	10.69
2012	April	91.5	102.6	10.80	2017	April	85.7	96.5	11.22
2012	May	91.2	103.4	11.79	2017	May	86.3	98.0	11.91
2012	June	89.3	100.8	11.46	2017	June	86.7	98.1	11.60
2012	July	88.1	99.1	11.12	2017	July	85.5	96.4	11.32
2012	August	87.5	98.2	10.94	2017	August	88.3	99.3	11.07
2012	September	88.5	99.2	10.82	2017	September	83.5	94.6	11.76
2012	October	86.2	96.2	10.34	2017	October	84.2	94.6	10.96
2012	November	83.3	94.0	11.37	2017	November	82.4	93.2	11.56
2012	December	81.5	91.2	10.60	2017	December	81.6	91.5	10.83
2013	January	82.0	93.1	11.91	2018	January	87.0	97.1	10.34
2013	February	82.9	93.6	11.46	2018	February	83.8	94.2	11.02
2013	March	88.4	99.0	10.77	2018	March	78.9	89.0	11.42
2013	April	84.8	95.7	11.40	2018	April	78.8	89.6	12.01
2013	May	85.0	97.0	12.32	2018	May	77.2	89.0	13.27
2013	June	84.0	95.4	11.93	2018	June	75.3	86.9	13.31
2013	July	83.8	94.5	11.34	2018	July	77.1	88.2	12.57
2013	August	83.8	94.9	11.69	2018	August	68.8	80.0	13.92
2013	September	82.6	93.3	11.50	2018	September	57.3	67.4	14.97
2013	October	85.4	95.4	10.48	2018	October	58.7	68.7	14.58
2013	November	83.8	94.8	11.57	2018	November	56.6	66.8	15.26
2013	December	82.7	92.6	10.64	2018	December	55.4	65.2	15.06
2014	January	88.1	99.4	11.30	2019	January	56.7	66.4	14.54
2014	February	81.0	91.9	11.82	2019	February	51.8	62.6	17.26
2014	March	78.0	88.6	11.97	2019	March	54.1	63.3	14.59
2014	April	79.2	89.8	11.82	2019	April	53.9	64.3	16.12
2014	May	80.1	91.8	12.77	2019	May	49.8	60.7	18.03
2014	June	80.6	91.8	12.17	2019	June	50.4	62.1	18.76
2014	July	79.7	90.1	11.63	2019	July	52.4	64.4	18.69
2014	August	82.4	93.7	12.04	2019	August	55.5	67.7	18.01
2014	September	84.4	95.1	11.25	2019	September	60.1	72.6	17.21
2014	October	82.0	92.0	10.81	2019	October	65.1	77.4	15.87
2014	November	82.4	93.7	12.01	2019	November	63.9	75.4	15.25
2014	December	82.7	92.7	10.86	2019	December	68.9	80.5	14.43

2015	January	82.3	93.6	12.09	2020	January	78.9	89.5	11.79
2015	February	84.5	95.6	11.55	2020	February	74.5	85.0	12.40
2015	March	83.4	94.0	11.27	2020	March	77.2	87.5	11.78
2015	April	81.4	91.9	11.38	2020	April	44.7	50.9	12.19
2015	May	83.9	95.5	12.24	2020	May	58.5	68.3	14.27
2015	June	85.2	96.3	11.54	2020	June	78.0	90.8	14.12
2015	July	83.0	93.3	11.08	2020	July	87.0	99.3	12.45
2015	August	82.3	93.5	12.05	2020	August	85.0	96.4	11.90
2015	September	80.9	91.4	11.51	2020	September	83.3	95.1	12.41
2015	October	80.5	90.3	10.83	2020	October	83.8	93.2	10.04
2015	November	84.5	95.9	11.88	2020	November	79.0	90.1	12.28
2015	December	85.1	95.3	10.72	2020	December	73.3	88.8	17.44
Average absolute revision (%)									12.19

Graphic 3. Construction Confidence Index Major Revision Effects

