



## Consumer Confidence Survey® Technical Note – February 2011

### Technical Note

#### Introduction and Background

The Conference Board *Consumer Confidence Index*® (CCI) is a barometer of the health of the U.S. economy from the perspective of the consumer. The index is based on consumers' perceptions of current business and employment conditions, as well as their expectations for six months hence regarding business conditions, employment, and income. The Consumer Confidence Index and its related series are among the earliest sets of economic indicators available each month and are closely watched as leading indicators for the U.S. economy.

#### Changeover to New Provider of the *Consumer Confidence Survey*®

In 1967, The Conference Board began the Consumer Confidence Survey (CCS) as a mail survey conducted every two months; in June 1977, the CCS began monthly collection and publication. The CCS has maintained consistent concepts, definitions, questions, and mail survey operations since its inception.

As of February 2011, The Conference Board has changed survey providers from TNS to The Nielsen Company for ongoing CCS operational support. Nielsen uses a mail survey specifically designed for the Consumer Confidence Survey. The new design uses a probability-design random sample, post-stratification weights (for gender, income, geography, and age), and the U.S. Census X-12 seasonal adjustment. The CCS concepts, questions and mail survey collection method remain unchanged.

From September 2010 to January 2011, a five-month pilot test of the new sample design was conducted in parallel with the existing design. Three months of previously published data (November 2010 to January 2011) have been restated to smooth the transition, which makes November 2010 the effective changeover month. (For a discussion of historical comparability, see page 3.)

#### Sample Design

The CCS concepts and questions used to compute the Consumer Confidence Index, Present Situation Index, and Expectations Index are still the same. The indexes are based on responses to five questions in the survey:

##### Consumer Confidence Index

###### Present Situation Index

1. Respondents' appraisal of current business conditions.
2. Respondents' appraisal of current employment conditions.



## Consumer Confidence Survey® Technical Note – February 2011

### Expectations Index

3. Respondents' expectations regarding business conditions six months hence.
4. Respondents' expectations regarding employment conditions six months hence.
5. Respondents' expectations regarding their total family income six months hence.

### Coverage

The Consumer Confidence Survey uses an address-based mail sample design. The sampling frame is derived from the files created by the U.S. Postal Service, which represent near-universal coverage of all residential households in the United States. The CCS frame is updated monthly to ensure up-to-date coverage of U.S. households.

### Sample Selection

The CCS uses a probability sample design to select each month's random sample from the household universe frame. The frame is first stratified geographically within the census division to provide a proportionate geographic distribution, after which a systematic sample of household addresses is selected. The sample addresses are then used for the mailing.

### Collection

The CCS mailing is scheduled so that the questionnaires reach sample households on or about the first of each month. Returns flow in throughout the collection period, with the sample close-out for preliminary estimates occurring around the eighteenth of the month. Any returns received after then are used to produce the final estimates for the month, which are published with the release of the following month's data. Completed questionnaires are checked in as they are received and then scheduled for data entry. Data fields are edited for invalid entries and, if necessary, are flagged for review. As part of the ongoing quality control process, a random sample of questionnaires is selected for independent review/validation by a senior member of the data collection staff. The targeted responding sample size—approximately 3,000 completed questionnaires—has remained essentially unchanged throughout the history of the CCI.

### Estimation

For the CCI, The Conference Board publishes U.S. totals and breakouts by census geography and demographic categories that include census division, age, and income. To improve the accuracy of the estimates and ensure the proportionate representation of these categories in the estimates, the CCS uses a post-stratification weighting structure covering the following categories:

- Census Division (9 Census divisions)
- Age of Head of Household (<30, 30-39, 40-49, 50-59, 60+)
- Gender of Head of Household (Male/Female)
- Income of Household (<\$15,000; \$15,000-\$24,999; \$25,000-\$34,999; \$35,000-\$49,999; \$50,000-\$74,999; \$75,000-\$99,999; \$100,000-\$124,999; \$125,000+)



## Consumer Confidence Survey® Technical Note – February 2011

The post-stratification weighting uses an iterative proportional fitting technique for simultaneously balancing sample weights across several different population control groups. This technique ensures that sample-based estimates of the household population categories match the independent census population controls within +/- 1 percent.

### **Calculation of the *Consumer Confidence Index*®**

Each of the five CCS survey questions has three response options: positive, negative, or neutral. The response proportions to each question are seasonally adjusted. For each question, the positive figure is divided by the sum of the positive and negative to yield a proportion, which we call the "relative" value. For each question, the average relative value for the calendar year 1985 is then used as a benchmark to yield the index value for that question. The indexes are then averaged together as follows:

- Consumer Confidence Index: Average of all five indexes
- Present Situation Index: Average of indexes for questions 1 and 2
- Expectations Index: Average of indexes for questions 3, 4, and 5

### Seasonal Adjustment

Data as of January 2011 (final) use the Census X-12 seasonal adjustment software for the publication series where needed. Seasonal adjustment helps remove periodic seasonal fluctuations in the series due to events such as weather, holidays, and the beginning and end of the school year. While the CCS series are typically not highly seasonal, the X-12 software helps reduce any residual seasonality in the various data series.

### **Historical Comparability**

The CCS has used the same concepts, questions, and mail survey collection method since the start of the series in 1967. In February 2011, after a five-month pilot test (September 2010–January 2011) of the new sample design, The Nielsen Company became the new data provider and now conducts the CCS. Accounting for differences in sample design and weighting, the resulting levels and over-the-month changes had a limited effect on most series. On average, the national level of the CCI increased by about 4.5 points over the five months, which is primarily attributable to the use of the age variable in post-stratification weighting.

November 2010 was chosen as the transition month to minimize any impact from noneconomic causes. The transition effect of changing the survey provider for the national CCI series is an increase of 3.5 points for the aggregate index for that month. The graph and tables on pages 4–7 show the comparisons between the originally published levels in November 2010 and restated values for November 2010, December 2010, and January 2011 (preliminary). The historical series before November 2010 has not been revised and can still be compared with the restated index values published beginning with November 2010.

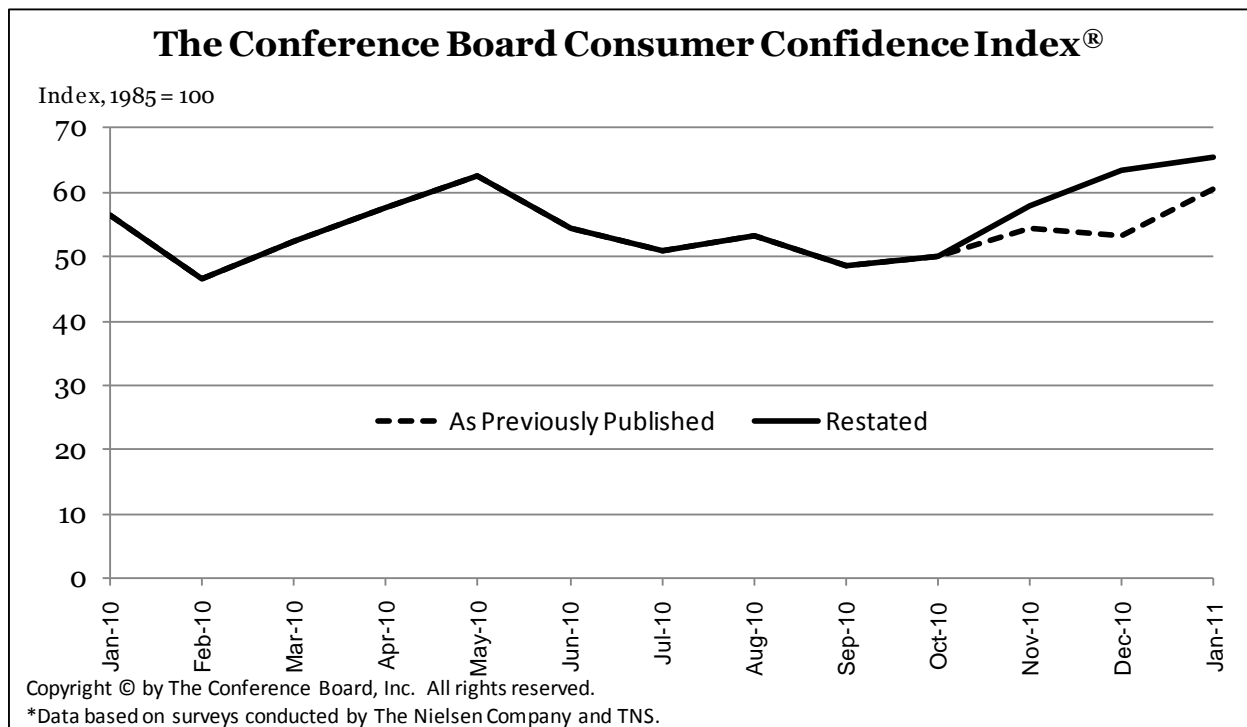


## Consumer Confidence Survey® Technical Note – February 2011

In contrast, the underlying series for "planned purchases" (autos, homes, and major appliances) and "vacation intentions" showed larger increases in November 2010 levels, primarily due to sample design differences. These level shifts will be treated as breaks, and there will be no historical revisions. Neither series is included in or has any impact on the Consumer Confidence Index.

The switch to the Census X-12 seasonal adjustment program produced only minor differences for both levels and month-to-month changes. As a result, The Conference Board did not find it necessary to undertake a full historical revision of the CCI time series based on the seasonal adjustment method. The restated data for November 2010, December 2010, and January 2011 (preliminary data) are based on the prior seasonal adjustment method.

### Impact on *Consumer Confidence Index*® of Change to New Survey Provider





# Consumer Confidence Survey® Technical Note – February 2011

The Conference Board

## Consumer Confidence Survey®

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	As restated*			As previously published**	
	2010 Nov.	2010 Dec.	2011 Jan.(p)	Nov. 2010	Difference
All series seasonally adjusted	(1)	(2)	(3)	(4)	(1) - (4)
<b>Composite Series: Index Numbers, 1985=100</b>					
Consumer Confidence Index®	57.8	63.4	65.6	54.3	3.5
Present Situation	24.7	28.8	32.5	25.4	-0.8
Expectations	79.9	86.5	87.6	73.6	6.3
<b>Appraisal of Present Situation: Percent</b>					
Business Conditions					
Good	9.3	10.7	11.1	8.5	0.8
Bad	45.6	41.4	40.1	42.9	2.7
Normal	45.1	47.9	48.8	48.6	-3.5
Employment					
Jobs plentiful	4.0	4.2	5.4	4.3	-0.3
Jobs not so plentiful	47.2	48.8	48.4	49.4	-2.2
Jobs hard to get	48.8	47.0	46.2	46.3	2.5
<b>Expectations for Six Months Hence: Percent</b>					
Business Conditions					
Better	17.8	21.7	23.8	16.4	1.4
Worse	13.7	11.3	12.1	12.4	1.3
Same	68.5	67.0	64.1	71.2	-2.7
Employment					
More jobs	18.1	18.1	19.5	15.1	3.0
Fewer jobs	19.8	18.0	20.8	19.1	0.7
Same	62.1	63.9	59.7	65.8	-3.7
Income					
Increase	15.4	15.2	15.1	11.1	4.3
Decrease	16.3	15.0	12.5	17.2	-0.9
Same	68.3	69.8	72.4	71.7	-3.4
<b>Plans to Buy Within Six Months: Percent</b>					
Automobile					
Yes	11.4	10.1	11.9	5.6	5.8
New	3.4	3.1	3.3	2.0	1.4
Used	6.5	6.1	7.3	2.9	3.6
Uncertain	1.5	0.9	1.3	0.7	0.8
Home					
Yes	3.7	3.5	4.4	1.7	2.0
New	0.8	0.3	0.9	0.4	0.4
Lived in	2.3	2.7	2.2	1.1	1.2
Uncertain	0.6	0.5	1.3	0.2	0.4
Major appliances					
Total plans	49.6	44.4	45.4	25.2	24.4
Refrigerator	5.8	4.8	6.0	3.9	1.9
Washing machine	6.6	6.1	5.2	3.1	3.5
TV Set	15.0	15.4	14.3	8.4	6.6
Vacuum Cleaner	7.7	7.6	8.9	3.5	4.2
Range	4.1	3.4	3.5	2.2	1.9
Clothes dryer	5.8	5.0	4.3	2.3	3.5
Air conditioner	4.6	2.1	3.2	1.8	2.8
Carpet	6.9	9.1	10.0	3.3	3.6
<b>Vacation Intended Within Six Months: Percent</b>					
Vacation Intended		51.1			
Destination					
U.S.		45.0			
Foreign country		11.2			
Means of Travel					
Automobile		32.0			
Airplane		21.9			
Other		3.6			

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	2010 Nov. (1)	2010 Dec. (2)	2011 Jan.(p) (3)	Nov. 2010 (4)	Difference (1) - (4)
Not seasonally					
<b>Expectations for Twelve Months Hence: Percent</b>					
Inflation Rate					
Average	5.2	5.2	5.5	5.1	0.1
Interest Rates					
Higher	45.0	47.7	53.7	43.1	1.9
Same	36.3	35.5	32.2	40.2	-3.9
Lower	18.7	16.8	14.1	16.7	2.0
Stock Prices					
Increase	33.2	33.0	38.2	33.5	-0.3
Same	35.6	36.5	34.3	41.3	-5.7
Decrease	31.2	30.5	27.5	25.2	6.0

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	2010 Nov. (1)	2010 Dec. (2)	2011 Jan.(p) (3)	Nov. 2010 (4)	Difference (1) - (4)
All series seasonally adjusted					
<b>Consumer Confidence Index®, 1985 = 100</b>					
AGE OF HOUSEHOLD HEAD					
Under 35	75.0	76.5	83.5	73.8	1.2
35-54	62.8	68.2	63.7	55.7	7.2
55 and over	45.6	53.1	59.2	45.7	-0.1
HOUSEHOLD INCOME					
Under \$15,000	39.8	33.4	44.8	39.3	0.5
\$15,000-24,999	37.4	40.4	44.4	39.9	-2.5
\$25,000-34,999	42.7	53.2	55.9	49.2	-6.6
\$35,000-49,999	50.3	57.7	57.5	54.2	-3.8
\$50,000 and over	74.1	80.7	82.0	62.8	11.3

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Not Seasonally Adjusted Index Numbers U.S. Average, 1985 = 100	As restated*			As previously published**	
	2010 Nov.	2010 Dec.	2011 Jan.(p)	Nov. 2010	Difference (1) - (4)
	(1)	(2)	(3)	(4)	
<b>NEW ENGLAND</b>					
<b>Consumer Confidence Index®</b>	61.2	50.8	82.7	49.7	11.5
Present Situation	30.1	21.7	42.0	18.1	12.0
Expectations	82.0	70.1	109.8	70.8	11.2
<b>MIDDLE ATLANTIC</b>					
<b>Consumer Confidence Index®</b>	56.9	63.6	60.4	46.3	10.6
Present Situation	20.5	26.9	28.6	23.0	-2.5
Expectations	81.2	88.1	81.6	61.8	19.3
<b>EAST NORTH CENTRAL</b>					
<b>Consumer Confidence Index®</b>	51.8	56.8	59.0	47.7	4.1
Present Situation	16.3	21.7	12.3	14.3	2.0
Expectations	75.4	80.2	90.1	69.9	5.5
<b>WEST NORTH CENTRAL</b>					
<b>Consumer Confidence Index®</b>	67.8	67.4	80.7	64.6	3.1
Present Situation	41.1	46.3	54.0	43.4	-2.3
Expectations	85.5	81.5	98.5	78.8	6.7
<b>SOUTH ATLANTIC</b>					
<b>Consumer Confidence Index®</b>	48.0	62.6	63.7	52.5	-4.5
Present Situation	21.8	28.6	23.6	27.0	-5.1
Expectations	65.5	85.3	90.4	69.6	-4.1
<b>EAST SOUTH CENTRAL</b>					
<b>Consumer Confidence Index®</b>	42.6	51.2	62.6	49.8	-7.2
Present Situation	20.0	24.3	35.3	23.6	-3.6
Expectations	57.7	69.1	80.8	67.3	-9.6
<b>WEST SOUTH CENTRAL</b>					
<b>Consumer Confidence Index®</b>	82.1	81.1	75.2	89.7	-7.5
Present Situation	65.1	72.3	68.6	81.0	-15.9
Expectations	93.5	87.1	79.6	95.5	-2.0
<b>MOUNTAIN</b>					
<b>Consumer Confidence Index®</b>	67.5	64.5	71.5	60.1	7.4
Present Situation	23.9	30.6	36.4	15.6	8.3
Expectations	96.6	87.1	95.0	89.8	6.8
<b>PACIFIC</b>					
<b>Consumer Confidence Index®</b>	62.7	54.7	72.4	52.2	10.5
Present Situation	18.3	15.4	23.4	17.6	0.7
Expectations	92.4	80.9	105.0	75.3	17.0

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