

These are findings from an Ipsos poll conducted for Thomson Reuters November 12-17, 2014. For the surveys, a sample of 1,707 adults 18+ was interviewed online. The precision of the Reuters/Ipsos online polls is measured using a [credibility interval](#). In this case, the poll has a credibility interval of plus or minus 2.7 percentage points. For more information about credibility intervals, please see the appendix.

The data were weighted to the U.S. current population data by gender, age, education, and ethnicity. Statistical margins of error are not applicable to online polls. All sample surveys and polls may be subject to other sources of error, including, but not limited to coverage error and measurement error. Figures marked by an asterisk (\*) indicate a percentage value of greater than zero but less than one half of one per cent. Where figures do not sum to 100, this is due to the effects of rounding. To see more information on this and other Reuters/Ipsos polls, please visit <http://polling.reuters.com/>.

### HOLIDAY SHOPPING

Q1. Thinking about all of the holiday shopping you will do for this holiday season (Christmas, Hanukkah, Kwanzaa, etc), how much of it have you already completed?

None	46%
Less than a quarter	24%
About half	11%
More than three-quarters	9%
All of it	5%
Unsure	4%

Q2. Which of the following best applies to your plans for holiday shopping this year?

I plan to shop only online (not in stores)	8%
I plan to shop primarily online	14%
I plan to shop about equally online and at stores	33%
I plan to shop primarily at stores	19%
I plan to shop only at stores (not online)	10%
Unsure	15%

Q3. At what type of store do you plan to do most of your holiday shopping this year? (Asked of all except those who will shop only online, n=1,598)

Discount Store (Wal-Mart, Target, Kmart, etc)	24%
Department store (Macy's, J.C. Penney, Nordstrom, Kohl's, Sears, etc)	10%
Specialty retailer (Toys 'R' Us, Best Buy, Zale's, etc)	4%
Warehouse Club (Costco, Sam's Club, BJ's, etc)	3%
Apparel store (Gap, Chico's, Abercrombie & Fitch, Old Navy, etc)	2%
Dollar store (Family dollar, Dollar Tree, etc)	2%
A mix of stores	40%
Unsure	15%

Q4. Thinking about your holiday spending last year compared to this year, are you planning to spend more or less on each of the following this year?

	Spending more this year	Spending less this year	Spending about the same	Unsure
Clothing	19%	25%	42%	15%
Food	18%	19%	46%	17%
Electronics	14%	30%	38%	18%
Toys	14%	27%	39%	20%
Jewelry	7%	37%	33%	23%

Q5. And thinking again about your holiday spending this season, how interested, if at all, are you in purchasing each of the following electronic items?

	Very interested	Somewhat interested	Not very interested	Not at all interested	Unsure	Very/ Somewhat interested (Net)
Tablet	14%	18%	15%	43%	10%	32%
Laptop	15%	17%	15%	43%	10%	32%
Desktop	8%	13%	16%	52%	10%	22%
Ultrabook	7%	8%	18%	55%	12%	15%

Q6. Which tablet product are you most interested in purchasing? (Asked of those who were very interested/ somewhat interested in purchasing a tablet, n=549)

iPad or iPad Mini	30%
Samsung Galaxy	19%
Amazon Kindle Fire or Fire Phone	14%
Microsoft Surface	13%
Google Nexus	7%
Other	5%
Unsure	12%

Q7. Please indicate whether you agree or disagree with the following statements:

	Agree	Disagree	Unsure
I'm more cautious about my spending this holiday season due to economic uncertainty	57%	26%	16%
Stores are offering much better prices online this year than they did last year	25%	21%	54%
Because of lower gas/heating/fuel costs, I plan to spend more on holiday shopping this year	16%	64%	20%
I am buying more items on layaway this year than I did last year (n=858)	14%	67%	18%
I will be eating out more than usual during this holiday season (n=413)	12%	69%	19%

Q8. When you shop in stores, how, if at all, do you use a mobile device while shopping? Choose all that apply.

I do not use a mobile device while shopping	50%
I use a mobile device to research the products I find in-store	20%
I use a mobile device to compare prices online while in the store	19%
I use a mobile device to call friends and family to discuss products I find in-store	16%
I use a mobile device to find coupons	16%
I use a mobile device to photograph or note down products I intend to purchase elsewhere (online or in other stores)	16%
Unsure	9%

Q9. Thinking about smart phone wallet apps (such as Apple Pay or Google Wallet), which of the following most applies to you?

I am already using a smart phone wallet app	8%
I may start using a smart phone wallet app once they become more widely accepted	16%
I don't intend to use a smart phone wallet app	62%
Unsure	14%

Q10. Which of the following smart phone wallet apps do you use, or do you intend to use? (Select all that apply)  
(Asked of those who already use or may use a wallet app, n=357)

Google Wallet	47%
Apple Pay	30%
Soft Card	14%
Some other app	9%
Unsure	18%

Q11. And what are your main reasons for choosing to do some or all of your holiday shopping online? (Asked of those who plan to do some shopping online, n=1,554)

Convenience	59%
Price comparison	44%
Product availability	38%
Delivery / shipping	37%
Selection / assortment of items	32%
Avoid sales tax	20%
Product descriptions and research	19%
Other reason	5%
Unsure	14%

Q12. Thinking about holiday shopping last year, did you encounter any issues with shipping/delivery of gifts?

Yes	13%
No	72%
Not applicable	15%

Q13. Who was to blame for the shipping/delivery issues? (Asked of those who encountered issues with shipping/delivery of gifts last holiday season, n=179)

The retailer	36%
The shipping/delivery service	51%
Both	14%

Q14. Will the shipping/delivery issues that you encountered last year impact your holiday shopping this year in any of the following ways? Please select yes or no for each. (Asked of those who encountered issues with shipping/delivery of gifts last holiday season, n=179)

	% Yes
I plan to do my online shopping earlier to allow more time for delivery	74%
I plan to do less of my shopping online this year	61%
I plan to upgrade shipping options on my holiday purchases	44%
I will not shop at certain retailers this year	36%

Q15. How much are you willing to spend on shipping (per order)?

I only plan to make purchases with free shipping	30%
Under \$5	15%
\$5 - \$9	20%
\$10 - \$14	8%
\$15 - \$19	4%
\$20 - \$24	2%
\$25 or more	6%
Not applicable	17%

Q16. Thinking about holiday shopping, please indicate whether you agree or disagree with the following statements:

	Agree	Disagree	Not sure	Not applicable
It is important that online retailers offer an overnight delivery option.	31%	31%	19%	18%
I plan to use in-store and/or locker pickups for my online purchases.	25%	28%	27%	19%
I am willing to spend more on shipping to have my purchases arrive more quickly.	17%	50%	17%	16%

Q17. Are you planning to use in-store and/or locker pickups for your online purchases for any of the following reasons? Please select yes or no for each. *(Asked if planning to use in-store and/or locker pickups at Q16, n=418)*

	% Yes
To save on shipping costs	87%
It's more convenient	83%
To help ensure that I get my purchases on time	78%

Q18. Now thinking overall about your holiday shopping, approximately how much TOTAL did you spend last year on your holiday shopping?

Less than \$100	15%
\$100-\$249	15%
\$250-\$499	24%
\$500-\$999	21%
\$1,000-\$2,500	11%
More than \$2,500	2%
Unsure	12%



# Ipsos Poll Conducted for Reuters

*Holiday Shopping Topline 11.17.2014*

Q19. And thinking overall about your holiday shopping, approximately how much TOTAL do you anticipate spending this year?

Less than \$100	14%
\$100-\$249	16%
\$250-\$499	24%
\$500-\$999	18%
\$1,000-\$2,500	11%
More than \$2,500	2%
Unsure	14%

## How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that  $Y$  has a binomial distribution conditioned on the parameter  $\theta$ , i.e.,  $Y|\theta \sim \text{Bin}(n, \theta)$ , where  $n$  is the size of our sample. In this setting,  $Y$  counts the number of “yes”, or “1”, observed in the sample, so that the sample mean ( $\bar{y}$ ) is a natural estimate of the true population proportion  $\theta$ . This model is often called the likelihood function, and it is a standard concept in both the Bayesian and the Classical framework. The Bayesian <sup>1</sup> statistics combines both the prior distribution and the likelihood function to create a posterior distribution. The posterior distribution represents our opinion about which are the plausible values for  $\theta$  adjusted after observing the sample data. In reality, the posterior distribution is one’s knowledge base updated using the latest survey information. For the prior and likelihood functions specified here, the posterior distribution is also a beta distribution ( $\pi(\theta/y) \sim \beta(y+a, n-y+b)$ ), but with updated hyper-parameters.

Our credibility interval for  $\vartheta$  is based on this posterior distribution. As mentioned above, these intervals represent our belief about which are the most plausible values for  $\vartheta$  given our updated knowledge base. There are different ways to calculate these intervals based on  $\pi(\theta/y)$ . Since we want only one measure of precision for all variables in the survey, analogous to what is done within the Classical framework, we will compute the largest possible credibility interval for any observed sample. The worst case occurs when we assume that  $a=1$  and  $b=1$  and  $y=n/2$ . Using a simple approximation of the posterior by the normal distribution, the 95% credibility interval is given by, approximately:

$$\bar{y} \pm \frac{1}{\sqrt{n}}$$

For this poll, the Bayesian Credibility Interval was adjusted using standard weighting design effect  $1+L=1.3$  to account for complex weighting<sup>2</sup>

Examples of credibility intervals for different base sizes are below. Ipsos does not publish data for base sizes (sample sizes) below 100.

Sample size	Credibility intervals
2,000	2.5
1,500	2.9
1,000	3.5
750	4.1
500	5.0
350	6.0
200	7.9
100	11.2

<sup>1</sup> *Bayesian Data Analysis, Second Edition, Andrew Gelman, John B. Carlin, Hal S. Stern, Donald B. Rubin, Chapman & Hall/CRC | ISBN: 158488388X | 2003*

<sup>2</sup> Kish, L. (1992). *Weighting for unequal Pi*. *Journal of Official, Statistics*, 8, 2, 183200.