Ipsos Poll Conducted for Reuters
Government Shutdown 10.08.2013

These are findings from an Ipsos poll conducted for Thomson Reuters from October 4-8, 2013 . For the survey, a sample of 1,300 Americans, including 511 Democrats, 440 Republicans, and 187 Independents ages 18+ were 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 3.1 percentage points for all adults,4.9 percentage points for Democrats, 5.3 percentage points for Republicans, and 8.2 percentage points for Independents. 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/.

GOVERNMENT SHUTDOWN

Q1. So far, the US Congress has been unable to reach an agreement on a spending bill that would fund the federal government. Congress has failed to settle on a plan to keep the government funded by Oct. 1, and the federal government has shutdown.   How concerned, if at all, are you about this issue?

	9/27 – 10/1 (n=1,707)	9/28 – 10/2 (n=1,897)	9/29-10/3 (n=1,558)	9/30-10/4 (n=1,516)	10/3-10/7 (n=1,424)	10/4-10/8 (n=1,300)
Very concerned	33%	33%	35%	36%	44%	45%
Somewhat concerned	32%	33%	31%	31%	26%	29%
Not very concerned	15%	13%	14%	14%	11%	10%
Not at all concerned	10%	10%	10%	9%	9%	8%
Don't know	9%	10%	10%	10%	10%	8%
TOTAL CONCERNED	*65%*	*66%*	*66%*	*66%*	*70%*	*75%*
TOTAL NOT CONCERNED	*25%*	*24%*	*24%*	*23%*	*20%*	*17%*

10/4-10/8	All respondents	Democrats	Republicans	Independents
Very concerned	45%	55%	38%	43%
Somewhat concerned	29%	33%	33%	31%
Not very concerned	10%	5%	16%	10%
Not at all concerned	8%	4%	9%	10%
Don't know	8%	3%	4%	5%
TOTAL CONCERNED	*75%*	*87%*	*71%*	*74%*
TOTAL NOT CONCERNED	*17%*	*10%*	*25%*	*20%*

Q2. Who would you say most deserves blame for a deal not being reached, causing the federal government to shut down?

	9/27 – 10/1 (n=1,707)	9/28 – 10/2 (n=1,897)	9/29-10/3 (n=1,558)	9/30-10/4 (n=1,516)	10/3-10/7 (n=1,424)	10/4-10/8 (n=1,300)
Democrats in Congress	6%	5%	5%	5%	4%	5%
Republicans in Congress	24%	25%	26%	26%	26%	30%
President Obama	13%	13%	14%	14%	15%	14%
All of the above	46%	46%	45%	45%	42%	40%
Other	1%	1%	1%	1%	1%	1%
Unsure	10%	9%	9%	10%	12%	10%

10/4-10/8	All respondents	Democrats	Republicans	Independents
Democrats in Congress	5%	2%	13%	*%
Republicans in Congress	30%	64%	5%	10%
President Obama	14%	5%	32%	14%
All of the above	40%	24%	45%	67%
Other	1%	1%	*%	1%
Unsure	10%	5%	5%	8%

Q3. As you may have heard, the Republican-controlled House has passed a spending bill that eliminates funding for Obamacare. Please indicate to the extent to which you agree or disagree that funding for Obamacare should be linked to measures that fund government operations.

	9/27 – 10/1 (n=1,707)	9/28 – 10/2 (n=1,897)	9/29-10/3 (n=1,558)	9/30-10/4 (n=1,516)	10/3-10/7 (n=1,424)	10/4-10/8 (n=1,300)
Strongly agree	19%	20%	19%	20%	19%	20%
Somewhat agree	16%	14%	14%	13%	13%	14%
Neither agree nor disagree	33%	34%	35%	35%	32%	29%
Somewhat disagree	10%	10%	10%	11%	10%	10%
Strongly disagree	22%	22%	22%	22%	25%	27%
TOTAL AGREE	*35%*	*34%*	*33%*	*33%*	*33%*	*34%*
TOTAL DISAGREE	*32%*	*32%*	*32%*	*32%*	*35%*	*37%*

10/4-10/8	All respondents	Democrats	Republicans	Independents
Strongly agree	20%	14%	34%	16%
Somewhat agree	14%	15%	20%	12%
Neither agree nor disagree	29%	23%	19%	39%
Somewhat disagree	10%	9%	9%	7%
Strongly disagree	27%	39%	18%	26%
TOTAL AGREE	*34%*	*29%*	*54%*	*28%*
TOTAL DISAGREE	*37%*	*48%*	*27%*	*33%*

PARTY ID	<u>All Adults</u>
Strong Democrat	12%
Moderate Democrat	20%
Lean Democrat	8%
Lean Republican	6%
Moderate Republican	13%
Strong Republican	9%
Independent	15%
None of these	11%
Don't know	7%
Total Democrat	*40%*
Total Republican	*28%*

How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that Y has a binomial distribution conditioned on the parameter $\theta\backslash$, i.e., $Y|\theta \sim Bin(n,\theta)$, 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 θ. This model is often called the likelihood function, and it is a standard concept in both the Bayesian and the Classical framework. The Bayesian [1] 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 θ 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 ϑ is based on this posterior distribution. As mentioned above, these intervals represent our belief about which are the most plausible values for ϑ 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:

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

For this poll, the Bayesian Credibility Interval was adjusted using standard weighting design effect 1+L=1.3 to account for complex weighting[2]

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

[1] *Bayesian Data Analysis, Second Edition, Andrew Gelman, John B. Carlin, Hal S. Stern, Donald B. Rubin, Chapman & Hall/CRC | ISBN: 158488388X | 2003*
[2] *Kish, L. (1992). Weighting for unequal Pi . Journal of Official, Statistics, 8, 2, 183200.*