Ipsos Poll Conducted for Reuters
Daily Election Tracking: 10.24.12

These are findings from an Ipsos poll conducted for Thomson Reuters from Oct. 20-24, 2012. For the survey, a sample of 1,621 American registered voters and 1,222 Likely Voters (all age 18 and over) was interviewed online. Likely voter model adjusted to include all respondents who have voted, as of 10.15.12. 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 2.8 percentage points for Registered Voters and 3.2 for Likely Voters. 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.

VOTING INTENTION

Q1. If the 2012 Presidential Election were being held today and the candidates were [ROTATE] Barack Obama for president and Joe Biden for vice president, the Democrats, and Mitt Romney for president and Paul Ryan for vice president, the Republicans [END ROTATE], for whom would you vote?

	All LIKELY Voters (LV)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Barack Obama for president and Joe Biden for vice president, the Democrats	46%	46%	88%	6%	31%
Mitt Romney for president and Paul Ryan for vice president, the Republicans	47%	42%	6%	87%	37%
Wouldn't vote	*%	2%	2%	1%	4%
None / Other	2%	4%	1%	3%	12%
Don't know / Refused	5%	6%	3%	3%	17%

Obama & Romney Vote Share Daily Data: 2012 Conventions to present (Likely Voters only)
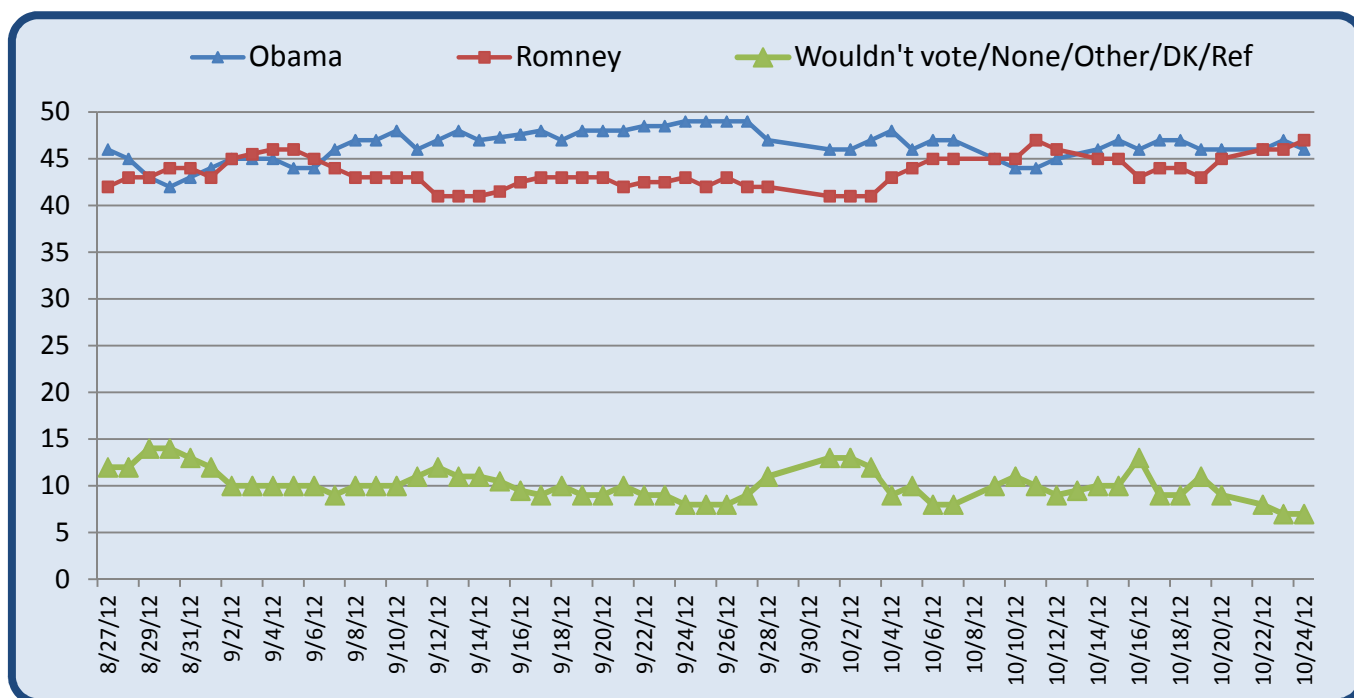
OTHER VOTING QUESTIONS

[ASK IF OBAMA OR ROMNEY SELECTED IN Q1]
Q2. Have you definitely decided to vote for [INSERT RESPONSE FROM Q1], or is there a chance you might change your mind before you vote?

(n=1,413)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Definitely will vote for candidate	86%	89%	88%	66%
Could change my mind	14%	11%	12%	34%

Q3. Have you already voted in the upcoming November general election by going to an early voting location, or by mailing in an early voting or absentee ballot, or not?

	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Yes	17%	19%	15%	16%
No	83%	81%	85%	84%

[IF "Yes" at Q3, ASK Q4]
Q4. For whom did you vote for President?

(n=225)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Barack Obama for President and Joe Biden for Vice President,	53%			
Mitt Romney for President and Paul Ryan for Vice President,	42%	*Base size too small to report data*		
Other	4%			

[IF "No" at Q3, ASK Q5]
Q5. And do you plan to vote at an early voting location or by mailing in an early voting or absentee ballot?

(n=1,396)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Yes – I plan to vote at an early voting location	17%	20%	14%	17%
Yes – I plan to mail in an early voting ballot	9%	8%	11%	4%
Yes – I plan to mail in an absentee ballot	5%	5%	6%	5%
No – I do not plan to vote early	69%	67%	70%	74%

PARTY ID	All Registered Voters (RV)
Strong Democrat	18%
Moderate Democrat	19%
Lean Democrat	7%
Lean Republican	8%
Moderate Republican	19%
Strong Republican	12%
Independent	12%
None of these	2%
DK	2%

PRESIDENTIAL DEBATE ON 10.23.12

Q6. How much, if anything, have you seen, heard or read about the most recent Presidential debate?

Post-debate (n=1,209)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)*
A great deal	40%	42%	45%	30%
A fair amount	38%	39%	36%	46%
A little bit	17%	17%	16%	18%
Not heard anything at all	5%	2%	4%	6%
Heard anything about the debate	**95%**	**98%**	**96%**	**94%**

Q7. Regardless of which candidate you happen to support, who do you think did the better job in the latest debate?

Post-debate (n=1.209)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV) *
Barack Obama, Democrat	47%	82%	14%	36%
Mitt Romney, Republican	33%	5%	68%	28%
Don't know	20%	13%	18%	36%

Q8. And has the debate changed your view of each candidate?

Post-debate (n=1,209)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV) *
Barack Obama, Democrat				
Yes – more positive towards candidate	23%	43%	6%	12%
Yes – more negative towards candidate	20%	4%	36%	23%
No – has not changed my view	50%	49%	52%	58%
Don't know	7%	5%	5%	7%
Yes – more positive towards candidate	25%	6%	46%	27%
Yes – more negative towards candidate	22%	42%	5%	12%
No – has not changed my view	45%	45%	44%	52%
Don't know	8%	7%	5%	8%

How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that Y has a binomial distribution conditioned on the parameter θ\, i.e., Y|θ~Bin(n,θ), 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 (π(θ/y)~β(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 . 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 . 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.*