



Ipsos Poll Conducted for Reuters

2nd Presidential Debate Poll: 10.17.12

These are findings from an Ipsos poll conducted for Thomson Reuters from Oct. 13-17, 2012 (Pre-debate), and Oct. 17 (midnight onwards), 2012 (post-debate). For the survey, samples of 1,491 and 655 American registered voters (age 18 and over) were interviewed online, respectively. The precision of the Reuters/Ipsos online polls is measured using a [credibility interval](#). In this case, the pre-debate poll has a credibility interval of plus or minus 2.9 percentage points for Registered Voters; the post-debate poll has a credibility interval of plus or minus 4.4 percentage points for Registered 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 a percent. Where figures do not sum to 100, this is due to the effects of rounding.

PRESIDENTIAL DEBATE ON 10.16.12

Q1. How much, if anything, have you seen, heard or read about the most recent Presidential debate?

Post-debate (n=655)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV) *
A great deal	39%	38%	47%	33%
A fair amount	36%	42%	31%	28%
A little bit	22%	19%	19%	34%
Not heard anything at all	3%	1%	2%	4%
Heard anything about the debate	97%	99%	98%	96%

Q2. Regardless of which candidate you happen to support, who do you think did the better job in the latest debate?

Post-debate (n=655)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV) *
Barack Obama, Democrat	48%	79%	7%	46%
Mitt Romney, Republican	33%	8%	75%	22%
Don't know	19%	13%	18%	32%

Q3. And has the debate changed your view of each candidate?

Post-debate (n=655)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV) *
Barack Obama, Democrat				
Yes – more positive towards candidate	27%	46%	3%	19%
Yes – more negative towards candidate	18%	3%	42%	10%
No – has not changed my view	49%	47%	51%	58%
Don't know	7%	4%	5%	12%
Mitt Romney, Republican				
Yes – more positive towards candidate	21%	4%	47%	16%
Yes – more negative towards candidate	26%	43%	4%	21%
No – has not changed my view	45%	46%	45%	49%
Don't know	8%	7%	4%	14%

* Small base among Independents for post-debate questions (n=77)



Ipsos Poll Conducted for Reuters

Daily Election Tracking

CANDIDATE FAVORABILITY

Q4. Would you say you are generally favorable or unfavorable towards these public figures?

	<u>All Registered Voters (RV)</u>		<u>Democrats (RV)</u>		<u>Republicans (RV)</u>		<u>Independents (RV)</u>	
	<u>Pre- Debate</u>	<u>Post- Debate</u>	<u>Pre- Debate</u>	<u>Post- Debate</u>	<u>Pre- Debate</u>	<u>Post- Debate</u>	<u>Pre- Debate</u>	<u>Post- Debate*</u>
President Barack Obama								
Very favorable	32%	34%	60%	63%	6%	3%	13%	15%
Somewhat favorable	14%	17%	21%	23%	5%	4%	16%	24%
Lean towards favorable	9%	9%	9%	6%	5%	8%	24%	21%
Lean towards unfavorable	11%	11%	5%	3%	15%	21%	18%	17%
Somewhat unfavorable	6%	7%	2%	2%	12%	12%	7%	8%
Very unfavorable	27%	22%	3%	3%	58%	51%	22%	16%
Total favorable	55%	60%	90%	92%	16%	15%	53%	60%
Total unfavorable	45%	40%	10%	8%	84%	85%	47%	40%
Republican Presidential Candidate Mitt Romney								
Very favorable	21%	19%	5%	4%	48%	47%	8%	6%
Somewhat favorable	16%	15%	6%	6%	30%	26%	16%	22%
Lean towards favorable	13%	14%	8%	7%	12%	16%	27%	23%
Lean towards unfavorable	15%	15%	22%	18%	5%	8%	20%	24%
Somewhat unfavorable	10%	11%	17%	18%	3%	1%	9%	8%
Very unfavorable	24%	26%	43%	46%	3%	3%	20%	17%
Total favorable	50%	48%	19%	17%	89%	88%	51%	51%
Total unfavorable	50%	52%	81%	83%	11%	12%	49%	49%

* Small base among Independents for post-debate questions (n=77)



Ipsos Poll Conducted for Reuters

Daily Election Tracking

CANDIDATE PREFERENCES ON POLICIES

Q5. In your opinion, which candidate for President has a better plan, policy or approach to each of the following?

		<u>All Registered Voters (RV)</u>		<u>Democrats (RV)</u>		<u>Republicans (RV)</u>		<u>Independents (RV)</u>	
		<u>Pre- Debate</u>	<u>Post- Debate</u>	<u>Pre- Debate</u>	<u>Post- Debate</u>	<u>Pre- Debate</u>	<u>Post- Debate</u>	<u>Pre- Debate</u>	<u>Post- Debate*</u>
Healthcare	Barack Obama, Democrat	41%	42%	75%	76%	7%	5%	31%	35%
	Mitt Romney, Republican	34%	32%	7%	6%	74%	77%	22%	19%
	Neither	13%	12%	7%	8%	10%	9%	32%	22%
	Don't know	12%	14%	11%	11%	9%	9%	15%	24%
The war on terror	Barack Obama, Democrat	39%	42%	69%	77%	8%	5%	30%	31%
	Mitt Romney, Republican	31%	29%	7%	6%	67%	69%	18%	17%
	Neither	12%	11%	8%	6%	9%	9%	31%	27%
	Don't know	18%	18%	16%	12%	16%	18%	21%	24%
The US Economy	Barack Obama, Democrat	37%	39%	69%	73%	5%	4%	24%	25%
	Mitt Romney, Republican	38%	37%	9%	8%	81%	84%	27%	29%
	Neither	13%	11%	9%	9%	7%	6%	34%	29%
	Don't know	12%	12%	12%	10%	7%	6%	15%	17%
Immigration	Barack Obama, Democrat	33%	37%	61%	68%	6%	3%	22%	27%
	Mitt Romney, Republican	31%	32%	8%	7%	67%	70%	18%	25%
	Neither	13%	12%	9%	9%	9%	12%	29%	18%
	Don't know	22%	19%	22%	16%	17%	15%	31%	30%
Social Security	Barack Obama, Democrat	40%	43%	72%	76%	6%	5%	33%	42%
	Mitt Romney, Republican	32%	30%	6%	5%	70%	71%	19%	20%
	Neither	14%	12%	9%	7%	12%	14%	26%	16%
	Don't know	15%	15%	13%	12%	12%	11%	22%	22%
Medicare	Barack Obama, Democrat	40%	40%	73%	72%	8%	5%	27%	33%
	Mitt Romney, Republican	31%	31%	6%	7%	68%	71%	20%	17%
	Neither	14%	13%	8%	8%	11%	12%	34%	26%
	Don't know	15%	17%	13%	13%	12%	12%	19%	24%
Taxes	Barack Obama, Democrat	40%	41%	72%	72%	7%	5%	33%	36%
	Mitt Romney, Republican	34%	35%	6%	7%	76%	79%	25%	25%
	Neither	13%	11%	9%	9%	9%	8%	29%	22%
	Don't know	13%	13%	13%	12%	9%	8%	13%	17%
Gay marriage	Barack Obama, Democrat	42%	45%	67%	73%	16%	16%	32%	32%
	Mitt Romney, Republican	25%	23%	7%	3%	54%	52%	15%	23%
	Neither	14%	11%	10%	8%	12%	12%	28%	17%
	Don't know	19%	21%	16%	16%	18%	20%	25%	28%
Jobs and employment	Barack Obama, Democrat	39%	41%	70%	72%	6%	3%	31%	37%
	Mitt Romney, Republican	38%	38%	10%	9%	79%	86%	26%	27%
	Neither	11%	8%	8%	7%	7%	5%	24%	19%
	Don't know	13%	13%	12%	12%	7%	6%	19%	18%
The federal government deficit	Barack Obama, Democrat	30%	33%	56%	61%	3%	2%	24%	23%
	Mitt Romney, Republican	37%	37%	10%	8%	76%	82%	32%	35%
	Neither	16%	15%	15%	15%	11%	10%	29%	24%
	Don't know	16%	15%	19%	16%	10%	6%	16%	17%

* Small base among Independents for post-debate questions (n=77)



Ipsos Poll Conducted for Reuters

Daily Election Tracking

CANDIDATE ATTRIBUTES

Q6. In your opinion, which candidate for President is stronger on each of the following?

		<u>All Registered Voters (RV)</u>		<u>Democrats (RV)</u>		<u>Republicans (RV)</u>		<u>Independents (RV)</u>	
		<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate*</u>
Eloquent	Barack Obama, Democrat	46%	51%	77%	81%	17%	20%	32%	44%
	Mitt Romney, Republican	28%	26%	7%	6%	57%	58%	24%	18%
	Neither	11%	10%	5%	5%	12%	13%	19%	13%
	Don't know	16%	13%	11%	9%	14%	9%	25%	25%
Presidential	Barack Obama, Democrat	47%	50%	83%	86%	10%	6%	36%	46%
	Mitt Romney, Republican	36%	34%	7%	6%	78%	80%	27%	29%
	Neither	8%	8%	5%	4%	7%	8%	20%	11%
	Don't know	9%	9%	5%	4%	6%	6%	17%	14%
Understands people like me	Barack Obama, Democrat	42%	45%	78%	81%	7%	4%	27%	32%
	Mitt Romney, Republican	29%	26%	5%	3%	66%	64%	18%	15%
	Neither	18%	18%	11%	10%	19%	24%	34%	30%
	Don't know	11%	11%	6%	5%	8%	7%	22%	23%
Is a good person	Barack Obama, Democrat	46%	49%	83%	86%	8%	6%	30%	35%
	Mitt Romney, Republican	33%	29%	6%	4%	72%	70%	20%	20%
	Neither	9%	7%	4%	3%	8%	10%	17%	10%
	Don't know	13%	15%	6%	6%	11%	14%	33%	36%
Likeable	Barack Obama, Democrat	51%	52%	85%	87%	17%	11%	37%	44%
	Mitt Romney, Republican	31%	30%	6%	4%	67%	73%	22%	19%
	Neither	9%	9%	4%	5%	9%	10%	21%	16%
	Don't know	9%	10%	5%	5%	7%	6%	20%	21%
Tough enough for the job	Barack Obama, Democrat	41%	45%	77%	83%	5%	5%	26%	27%
	Mitt Romney, Republican	37%	37%	9%	8%	79%	83%	26%	28%
	Neither	10%	7%	7%	4%	7%	6%	22%	17%
	Don't know	12%	11%	7%	5%	9%	7%	26%	28%
Represents America	Barack Obama, Democrat	43%	45%	80%	80%	6%	5%	30%	37%
	Mitt Romney, Republican	35%	35%	8%	8%	76%	80%	24%	26%
	Neither	11%	7%	5%	4%	12%	9%	23%	10%
	Don't know	11%	13%	8%	9%	7%	5%	23%	26%
Smart enough for the job	Barack Obama, Democrat	43%	45%	80%	82%	6%	5%	27%	29%
	Mitt Romney, Republican	37%	36%	8%	7%	80%	83%	27%	32%
	Neither	8%	6%	5%	4%	7%	4%	18%	13%
	Don't know	11%	12%	8%	8%	7%	8%	28%	26%
Has the right values	Barack Obama, Democrat	43%	46%	80%	84%	6%	4%	26%	30%
	Mitt Romney, Republican	36%	36%	8%	7%	79%	82%	24%	29%
	Neither	10%	8%	5%	3%	8%	8%	25%	18%
	Don't know	11%	11%	7%	7%	7%	7%	24%	23%

* Small base among Independents for post-debate questions (n=77)



Ipsos Poll Conducted for Reuters

Daily Election Tracking

Q6. In your opinion, which candidate for President is stronger on each of the following? (cont'd)

		<u>All Registered Voters (RV)</u>		<u>Democrats (RV)</u>		<u>Republicans (RV)</u>		<u>Independents (RV)</u>	
		<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate*</u>
Will protect American jobs	Barack Obama, Democrat	40%	43%	75%	80%	4%	3%	27%	30%
	Mitt Romney, Republican	37%	34%	7%	5%	80%	80%	28%	28%
	Neither	12%	10%	8%	7%	9%	9%	25%	21%
	Don't know	11%	12%	10%	8%	7%	8%	20%	21%
A man of faith	Barack Obama, Democrat	30%	32%	54%	58%	7%	4%	18%	19%
	Mitt Romney, Republican	43%	42%	21%	17%	75%	79%	37%	42%
	Neither	11%	11%	9%	9%	9%	8%	19%	21%
	Don't know	17%	15%	17%	16%	9%	9%	26%	18%
Would be fun to meet in person	Barack Obama, Democrat	46%	50%	82%	85%	12%	11%	31%	38%
	Mitt Romney, Republican	25%	21%	5%	2%	54%	52%	15%	9%
	Neither	17%	17%	7%	6%	23%	26%	32%	30%
	Don't know	12%	12%	6%	6%	11%	11%	22%	22%
Can be effective in Washington	Barack Obama, Democrat	38%	42%	72%	79%	5%	4%	23%	23%
	Mitt Romney, Republican	35%	35%	9%	6%	74%	79%	28%	31%
	Neither	14%	11%	11%	8%	11%	9%	26%	21%
	Don't know	13%	12%	9%	7%	10%	8%	23%	24%
Bipartisanship	Barack Obama, Democrat	31%	35%	59%	66%	5%	5%	17%	11%
	Mitt Romney, Republican	28%	25%	7%	5%	60%	57%	19%	16%
	Neither	19%	19%	14%	11%	19%	23%	33%	36%
	Don't know	22%	21%	21%	18%	15%	15%	31%	36%

VIOLENCE IN THE MIDDLE EAST

Q7. How much, if anything, have you heard about the violence in several Middle Eastern countries including Egypt, Libya and Yemen that included attacks on U.S. embassies or consulates?

	<u>All Registered Voters (RV)</u>		<u>Democrats (RV)</u>		<u>Republicans (RV)</u>		<u>Independents (RV)</u>	
	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate*</u>
Heard a great deal	34%	31%	31%	26%	45%	44%	22%	22%
Heard a fair amount	37%	40%	42%	46%	36%	38%	34%	35%
Heard a little bit	22%	19%	22%	20%	16%	15%	37%	31%
Not heard anything at all	6%	9%	5%	7%	4%	2%	6%	11%
Heard anything	94%	91%	95%	93%	96%	98%	94%	89%

* Small base among Independents for post-debate questions (n=77)



Ipsos Poll Conducted for Reuters

Daily Election Tracking

Q8. Do you approve or disapprove about the way each leader is handling the current situation in the Egypt and Libya?

	<u>All Registered Voters (RV)</u>		<u>Democrats (RV)</u>		<u>Republicans (RV)</u>		<u>Independents (RV)</u>	
	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>	<u>Pre-Debate</u>	<u>Post-Debate*</u>
Secretary of State Hillary Clinton								
Strongly approve	21%	21%	37%	37%	5%	5%	13%	13%
Somewhat approve	15%	16%	24%	25%	6%	6%	13%	19%
Lean towards approve	14%	12%	13%	12%	13%	13%	15%	5%
Lean towards disapprove	8%	10%	6%	7%	11%	14%	8%	14%
Somewhat disapprove	9%	8%	2%	1%	17%	16%	11%	8%
Strongly disapprove	17%	17%	4%	3%	33%	36%	13%	12%
Don't know	17%	17%	14%	15%	14%	10%	26%	29%
Total approve	50%	50%	74%	74%	24%	24%	41%	37%
Total disapprove	34%	34%	12%	11%	62%	66%	32%	34%
President Barack Obama								
Strongly approve	20%	21%	36%	38%	5%	2%	10%	8%
Somewhat approve	14%	16%	25%	27%	3%	2%	11%	19%
Lean towards approve	12%	9%	16%	13%	5%	6%	15%	8%
Lean towards disapprove	8%	9%	5%	6%	11%	14%	12%	10%
Somewhat disapprove	7%	7%	2%	2%	11%	12%	11%	11%
Strongly disapprove	25%	23%	4%	2%	54%	54%	17%	14%
Don't know	14%	15%	12%	13%	11%	10%	23%	30%
Total approve	46%	47%	77%	78%	13%	10%	37%	35%
Total disapprove	40%	38%	11%	10%	76%	80%	40%	35%
Presidential Candidate Mitt Romney								
Strongly approve	11%	10%	3%	4%	25%	23%	6%	2%
Somewhat approve	12%	8%	5%	2%	23%	18%	7%	6%
Lean towards approve	14%	15%	7%	4%	20%	25%	23%	21%
Lean towards disapprove	12%	12%	19%	18%	3%	3%	13%	15%
Somewhat disapprove	7%	6%	10%	11%	2%	%	7%	7%
Strongly disapprove	18%	19%	30%	32%	3%	3%	15%	14%
Don't know	27%	30%	27%	28%	25%	27%	30%	35%
Total approve	37%	33%	14%	11%	67%	65%	35%	29%
Total disapprove	36%	37%	59%	61%	8%	7%	35%	36%

* Small base among Independents for post-debate questions (n=77)



Ipsos Poll Conducted for Reuters

Daily Election Tracking

CHINA

Q9. Now thinking about the rest of the world, would you say your opinion is favorable or unfavorable towards the following countries?

<i>Post-debate (n=655)</i>	<u>All Registered Voters (RV)</u>	<u>Democrats (RV)</u>	<u>Republicans (RV)</u>	<u>Independents (RV)</u>
China				
Very favorable	4%	2%	0%	12%
Somewhat favorable	9%	11%	7%	8%
Lean towards favorable	19%	25%	13%	15%
Lean towards unfavorable	26%	27%	24%	28%
Somewhat unfavorable	22%	22%	26%	9%
Very unfavorable	20%	13%	29%	28%
Total favorable	32%	38%	21%	35%
Total unfavorable	68%	62%	79%	65%

Q10. In your opinion, what impact have the following had on the health of America's economy?

<i>Post-debate (n=655)</i>	<u>All Registered Voters (RV)</u>	<u>Democrats (RV)</u>	<u>Republicans (RV)</u>	<u>Independents (RV)</u>
China				
Very positive	2%	3%	2%	0%
Slightly positive	12%	15%	6%	15%
No impact	17%	16%	10%	22%
Slightly negative	32%	35%	31%	26%
Very negative	38%	31%	51%	36%
Total positive	14%	18%	8%	15%
Total negative	69%	66%	82%	63%

Q11. In your view, which Presidential candidate would be toughest when dealing with China on trade issues?

<i>Post-debate (n=655)</i>	<u>All Registered Voters (RV)</u>	<u>Democrats (RV)</u>	<u>Republicans (RV)</u>	<u>Independents (RV)</u>
Barack Obama	37%	65%	5%	23%
Mitt Romney	39%	13%	80%	31%
Unsure	24%	22%	14%	47%



Ipsos Poll Conducted for Reuters

Daily Election Tracking

GUN CONTROL

Q12. Do you support or oppose the following laws or regulations?

<i>Post-debate (n=655)</i>	<u>All Registered Voters (RV)</u>	<u>Democrats (RV)</u>	<u>Republicans (RV)</u>	<u>Independents (RV)</u>
Laws allowing law-abiding citizens to get a permit to carry a concealed weapon				
Strongly support	53%	45%	67%	51%
Somewhat support	21%	26%	16%	18%
Somewhat oppose	10%	12%	6%	14%
Strongly oppose	9%	10%	6%	11%
Unsure	7%	7%	5%	6%
Total support	74%	71%	83%	69%
Total oppose	19%	22%	12%	25%
Laws allowing citizens to use deadly force to protect themselves from danger in their own home				
Strongly support	68%	59%	80%	72%
Somewhat support	21%	30%	12%	13%
Somewhat oppose	4%	4%	4%	3%
Strongly oppose	3%	4%	2%	4%
Unsure	5%	4%	3%	8%
Total support	88%	88%	92%	85%
Total oppose	7%	8%	6%	7%
Laws allowing citizens to use deadly force to protect themselves from danger in public places				
Strongly support	36%	25%	49%	43%
Somewhat support	31%	31%	31%	28%
Somewhat oppose	14%	19%	11%	10%
Strongly oppose	11%	14%	6%	11%
Unsure	9%	11%	4%	7%
Total support	66%	57%	79%	71%
Total oppose	25%	33%	16%	22%
Laws limiting the sale of automatic weapons (i.e. machine guns)				
Strongly support	59%	71%	51%	54%
Somewhat support	19%	16%	23%	20%
Somewhat oppose	7%	3%	14%	4%
Strongly oppose	9%	6%	9%	14%
Unsure	5%	4%	4%	8%
Total support	78%	87%	73%	73%
Total oppose	16%	9%	23%	19%
Laws allowing law-abiding citizen to bring a firearm into a church, workplace or retail establishment				
Strongly support	17%	11%	28%	17%
Somewhat support	18%	15%	21%	20%
Somewhat oppose	19%	17%	24%	12%
Strongly oppose	39%	52%	21%	40%
Unsure	8%	6%	6%	12%
Total support	35%	26%	48%	36%
Total oppose	58%	69%	45%	52%
Laws requiring background checks before allowing the sale of a firearm				
Strongly support	84%	89%	80%	85%
Somewhat support	9%	5%	12%	9%
Somewhat oppose	2%	2%	3%	1%
Strongly oppose	1%	%	3%	0%
Unsure	4%	3%	2%	5%
Total support	93%	95%	93%	93%
Total oppose	3%	2%	5%	1%
Laws limiting the number of guns one person can purchase in a particular time frame				
Strongly support	49%	60%	36%	46%
Somewhat support	18%	20%	16%	19%
Somewhat oppose	13%	10%	18%	14%
Strongly oppose	14%	4%	26%	15%
Unsure	6%	5%	4%	7%
Total support	67%	80%	52%	65%
Total oppose	27%	14%	44%	29%



Ipsos Poll Conducted for Reuters

Daily Election Tracking

Q13. When thinking about gun ownership rights and gun laws, which of the following comes closest to your personal opinion?

<i>Post-debate (n=655)</i>	<u>All Registered Voters (RV)</u>	<u>Democrats (RV)</u>	<u>Republicans (RV)</u>	<u>Independents (RV)</u>
Gun ownership should have strong regulations or restrictions	44%	57%	26%	46%
Gun ownership should have moderate regulations or restrictions	18%	19%	19%	15%
Gun ownership should have basic regulations or restrictions	28%	15%	45%	30%
Gun ownership should have no or very few restrictions	5%	3%	8%	2%
Unsure	5%	5%	2%	6%

PARTY ID		
<u>All Registered Voters (RV)</u>	<u>Pre-Debate</u>	<u>Post-Debate</u>
Strong Democrat	15%	15%
Moderate Democrat	21%	22%
Lean Democrat	9%	9%
Lean Republican	6%	6%
Moderate Republican	17%	17%
Strong Republican	14%	12%
Independent	13%	13%
None of these	3%	3%
DK	2%	2%



Ipsos Poll Conducted for Reuters

Daily Election Tracking

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., $Y|\theta \sim \text{Bin}(n, \theta)$, 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 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 . 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:

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

For this poll, the Bayesian Credibility Interval was adjusted using standard weighting design effect $1+L=1.3$ to account for complex weighting²

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.