

## **IPSOS / REUTERS POLL DATA**

Prepared by Ipsos Public Affairs

#### **Ipsos Poll Conducted for Reuters**

Post-GOP Debate Topline 12.21.2015

These are findings from an Ipsos poll conducted December 16-21, 2015 on behalf Thomson Reuters. For the survey, a sample of 1,627 adults age 18+ from the continental U.S., Alaska and Hawaii was interviewed online in English. The sample included 655 Democrats, 623 Republicans, and 205 Independents.

The sample for this study was randomly drawn from Ipsos's online panel (see link below for more info on "Access Panels and Recruitment"), partner online panel sources, and "river" sampling (see link below for more info on the Ipsos "Ampario Overview" sample method) and does not rely on a population frame in the traditional sense. Ipsos uses fixed sample targets, unique to each study, in drawing sample. After a sample has been obtained from the Ipsos panel, Ipsos calibrates respondent characteristics to be representative of the U.S. Population using standard procedures such as raking-ratio adjustments. The source of these population targets is U.S. Census 2015 American Community Survey data. The sample drawn for this study reflects fixed sample targets on demographics. Post-hoc weights were made to the population characteristics on gender, age, region, race/ethnicity and income.

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. Where figures do not sum to 100, this is due to the effects of rounding. The precision of 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 all respondents (see link below for more info on Ipsos online polling "Credibility Intervals"). Ipsos calculates a design effect (DEFF) for each study based on the variation of the weights, following the formula of Kish (1965). This study had a credibility interval adjusted for design effect of the following (n=1,627, DEFF=1.5, adjusted Confidence Interval=4.3).

The poll also has a credibility interval plus or minus 4.4 percentage points for Democrats, plus or minus 4.5 percentage points for Republicans, and plus or minus 7.8 percentage points for (see link below for more info on Ipsos online polling "Credibility Intervals").

		Total	Democrat	Republican	Independent
	Seen or heard a great deal	20%	21%	30%	12%
TM656Y15 - How much, if anything,	Seen or heard a fair amount	30%	33%	30%	34%
have you seen or heard about the	Seen or heard a little bit	30%	32%	30%	28%
Republican Primary debate?	Not seen or heard anything at all	20%	13%	11%	25%
	Total	1627	655	623	205
	Chris Christie	4%	5%	5%	3%
	Jeb Bush	7%	9%	4%	6%
TM662Y15 - Regardless of which	Marco Rubio	10%	11%	8%	14%
candidate you happen to support,	Rand Paul	3%	5%	2%	3%
who do you think did the best job in	Ted Cruz	9%	5%	14%	12%
the Republican Primary debate?	Carly Fiorina	3%	4%	3%	2%
*Asked of those that had seen or	Benjamin Carson	8%	11%	7%	6%
heard something about the debate	Donald Trump	21%	15%	32%	13%
at TM656Y15	John Kasich	3%	3%	3%	%
	Don't know	31%	32%	22%	42%
	Total	1352	573	558	162
TM705Y15_2_1 - Would you	No	85%	91%	76%	80%

For more information about Ipsos online polling methodology, please go here <u>http://goo.gl/yJBkuf</u>

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19303					
trustChris ChristieTo serve as	Yes	15%	9%	24%	20%
Commander in Chief?	Total	1627	655	623	205
TM705Y15_2_2 - Would you	No	82%	86%	74%	77%
trust <b>Jeb Bush</b> To serve as	Yes	18%	14%	26%	23%
Commander in Chief?	Total	1627	655	623	205
TM705Y15 2 4 - Would you	No	83%	89%	68%	85%
trust <b>Marco Rubio</b> To serve as	Yes	17%	11%	32%	15%
Commander in Chief?	Total	1627	655	623	205
TM705Y15 2 7 - Would you	No	89%	91%	85%	85%
trust <b>Rand Paul</b> To serve as	Yes	11%	9%	15%	15%
Commander in Chief?	Total	1627	655	623	205
TM705Y15_2_8 - Would you	No	81%	90%	65%	78%
trust <b>Ted Cruz</b> To serve as	Yes	19%	10%	35%	22%
Commander in Chief?	Total	1627	655	623	205
		-	-	ar.	
TM705Y15 2 14 - Would you	No	88%	90%	82%	88%
trust <b>Carly Fiorina</b> To serve as	Yes	12%	10%	18%	12%
Commander in Chief?	Total	1627	655	623	205
				- 10	
TM705Y15 2 15 - Would you	No	80%	88%	68%	75%
trust <b>Benjamin Carson</b> To serve as	Yes	20%	12%	32%	25%
Commander in Chief?	Total	1627	655	623	205
		101/	000	010	200
TM705Y15 2 16 - Would you	No	73%	83%	58%	71%
trust <b>Donald Trump</b> To serve as	Yes	27%	17%	42%	29%
Commander in Chief?	Total	1627	655	623	205
	10101	1027	000	023	200
TM705Y15_2_19 - Would you	No	90%	91%	88%	84%
trust <b>John Kasich</b> To serve as	Yes	10%	9%	12%	16%
Commander in Chief?	Total	1627	655	623	205
	Total	1027	035	025	205
TM705Y15_2_33 - Would you	No	61%	48%	87%	62%
trust <b>None of these</b> To serve as	Yes	39%	52%	13%	38%
Commander in Chief?	Total	1627	655	623	205
commander in effet:	iotai	1027	000	023	205
TM705Y15_8_1 - Would you	No	84%	87%	75%	89%
trust <b>Chris Christie</b> To manage	Yes	84% 16%	87% 13%	25%	89% 11%
America's immigration policies?	Total	1627	655	623	205
America s minigration policies:	iotai	1027	000	023	205
TM705V15 8 2 - Would you	No	010/	83%	77%	80%
TM705Y15_8_2 - Would you trust <b>Jeb Bush</b> To manage	Yes	81% 19%	83% 17%	23%	80% 20%
America's immigration policies?	Total	1627	655	623	20%
America s minigration policies:	iUlai	1027	000	023	205
TM70EV1E 9 4 Mould vou	No	0.20/	88%	710/	0.00/
TM705Y15_8_4 - Would you	No	83%		71%	86%
trust <b>Marco Rubio</b> To manage	Yes	17%	12%	29%	14%
America's immigration policies?	Total	1627	655	623	205
TM705Y15_8_7 - Would you	No	85%	90%	80%	77%
trustRand PaulTo manage	Yes	15%	10%	20%	23%
America's immigration policies?	Total	1627	655	623	205
TM705Y15_8_8 - Would you trust <b>Ted Cruz</b> To manage	No Yes	80% 20%	87% 13%	66% 34%	79% 21%

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America's immigration policies?	Total	1627	655	623	205
		070/	020/	700/	700/
TM705Y15_8_14 - Would you	No	87%	92%	79%	79%
trust <b>Carly Fiorina</b> To manage	Yes	13%	8%	21%	21%
America's immigration policies?	Total	1627	655	623	205
TM705Y15_8_15 - Would you	No	81%	85%	72%	85%
trust <b>Benjamin Carson</b> To manage	Yes	19%	15%	28%	15%
America's immigration policies?	Total	1627	655	623	205
America's minigration policies.	10001	1027	033	023	205
TM705Y15_8_16 - Would you	No	73%	88%	52%	67%
trust <b>Donald Trump</b> To manage	Yes	27%	12%	48%	33%
America's immigration policies?	Total	1627	655	623	205
TM705Y15_8_19 - Would you	No	90%	91%	85%	92%
trust <b>John Kasich</b> To manage	Yes	10%	9%	15%	8%
America's immigration policies?	Total	1627	655	623	205
TM705Y15_8_33 - Would you	No	60%	49%	83%	62%
trust <b>None of these</b> To manage	Yes	40%	51%	17%	38%
America's immigration policies?	Total	1627	655	623	205
TM764AY15 - Regardless of your	Wouldn't vote	28%	0%	13%	35%
personal preference, if the	Ted Cruz	31%	0%	39%	30%
Republican Presidential Primaries	Donald Trump	41%	0%	48%	35%
came down to these candidates, for					
whom would you vote? **Asked only of Republicans and	Total	972	0	623	205
Independents					
independents					
TM764BY15 - Regardless of your	Marco Rubio	34%	0%	42%	34%
personal preference, if the	Wouldn't vote	27%	0%	11%	31%
Republican Presidential Primaries	Donald Trump	40%	0%	47%	35%
came down to these candidates, for					
whom would you vote?		070	0	622	205
**Asked only of Republicans and	Total	972	0	623	205
Independents					
TM6E1V1E 12 14+6- 2010	Donald Trump (Republican)	29%	9%	58%	29%
TM651Y15_13 - If the 2016 presidential election were being	Hillary Clinton (Democrat)	40%	69%	11%	34%
held today and the candidates were	Neither / Other	14%	13%	15%	21%
as below, for whom would you	Wouldn't Vote	9%	3%	7%	10%
as below, for whom would you vote?	Don't know / Refused	8%	6%	9%	6%
VOLET	Total	1627	655	623	205

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#### 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 |  $\theta$ ~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 ( $\overline{y}$ ) 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 ( $\pi(\theta/y)^{\alpha}\beta(y+a,n-y+b)$ ), 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:



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.

Credibility intervals
2.5
2.9
3.5
4.1
5.0
6.0
7.9
11.2