Topic: Election Forecasts: When Models Fail
Date: 11-22-2016
Class: INFX 573 – Extra Credit
Name: Pierre Augustamar

Introduction

The presidential election this year was not only unconventional but rather a shock to the entire world. Hillary Clinton was thought to have won it, and it was not a matter of if but rather when it will be announced. It was such a certainty that all over the country numerous people were ready to celebrate the first woman to be president of the United States so what when wrong. I will attempt to provide my thoughts based on the forecast models.

Polling

The polls on a regular basis had Clinton between 1 to 4 points ahead the days before the election. It is possible that there were potential issues with the survey results. One, pollsters tend to poll likely voters only, but then the issue with this is that the sampling chosen may not adequately reflect all the possible voters. Thus, the unexpected outcome. RealClearPolitics stated on November 7th, "The candidate who leads in pre-election polls typically has the advantage heading into Election day – which makes Hillary Clinton the favorite (but not a lock)"[i]. They noticed something in their model that lead them to being cautious on fully calling Clinton the overall favorite to win.

Wrong surveys or bad Data

Studies to find out who voters will most likely vote for have not changed since 2008. However, the problem is that this election is not as conventional compare to past elections. Both candidates had the lowest approval rating ever recorder for any candidates to the presidency. Also, both candidates had numerous baggage that made them not so popular among those of their own party. "Did we all believe Clinton would win because of bad data, or did we ignore bad data because we believed Clinton would win?" [ii]

Also, surveys taken after the exit polls may have been miss-calculated. Most exit Polls during the election day were showing a potential win for Hillary while actual votes were being cast for Trump. It is possible that some voters were not truthful about who they voted and or were hiding their real vote. It was maybe impossible to know the true feelings or intentions of the electorate. "Perhaps the lesson here about the Trump presidency is that it was truly unpredictable. Good models often fail to accommodate events outside of the bounds of their sensitivity, and sounding the alarm on their flaws would necessarily involve knowing or suspecting more about elections than the data we fed the polls." [iii]

Moreover, pollsters rely heavily on the norm and what they have seen on the past, but this is the same thing that happened during the Brexit vote. The British ignored sensitive data and relied on the traditional statistical model. "Most of the forecasters ultimately rely on Bayesian models. Bayesian models do best in data-rich environments. (For when there is a lot of data, the impact of priors on the outcome diminishes.) Even then they should not be treated as holy, but rather as one instrument among many. " [iv]

Election Bias

Pollsters were following the data momentum and thus ignore possible predictors that affected this election. In 2008 and 2012, there were many voters that were very excited about not only the first Black president but also a change from an eight-year Republican control. But this time there were not only a small turned out of the Black votes, but rather a large turned out of voters in the rural area and the evangelical. Both groups tend to vote Republican and were strongly against Hillary Clinton. The table below shows how Trump expanded his reached among nontraditional voters when compared to Romney.

State	Republican Two-Party Share - 2016	Republican Two-Party Share - 2012	Difference
Alabama	64.4%	61.2%	3.2%
Tennessee	63.6%	60.4%	3.3%
Pennsylvania	50.6%	47.3%	3.3%
Delaware	44.0%	40.6%	3.4%
Mississippi	59.5%	55.8%	3.7%
Wisconsin	50.4%	46.5%	3.9%
Montana	61.1%	57.0%	4.1%
Kentucky	65.7%	61.5%	4.1%
Hawaii	32.6%	28.3%	4.3%
Wyoming	75.7%	71.2%	4.5%
Indiana	60.0%	55.2%	4.8%
Michigan	50.1%	45.2%	4.9%
Missouri	60.1%	54.8%	5.3%
Rhode Island	41.8%	36.0%	5.8%
Ohio	54.5%	48.5%	6.0%
Maine	48.5%	42.1%	6.4%
South Dakota	66.0%	59.2%	6.8%
Iowa	55.1%	47.0%	8.0%
West Virginia	72.2%	63.7%	8.5%
North Dakota	69.8%	60.1%	9.7%

Trump Improved on Romney's Vote Share in a Variety of States

Reference taken from RealClearPolitics at:
http://www.realclearpolitics.com/articles/2016/11/18/how_trump_did_and_didnt_reshape_the_electoral_map__132385.html

"Exit polls show white evangelical voters voted in high numbers for Donald Trump, 81-16 percent, per exit poll results. That's the most they have voted for a Republican presidential candidate since 2004".[v] The table below shows the breakdown of religious faith and how they went all out for Trump.

Presidential vote by religious affiliation and race

	2000		2004		2008		2012		2016		Dem change '12-'16
	Gore	Bush	Kerry	Bush	Obama	McCain	Obama	Romney	Clinton	Trump	
	%	%	%	%	%	%	%	%	%	%	
Protestant/other Christian	42	56	40	59	45	54	42	57	39	58	-3
Catholic	50	47	47	52	54	45	50	48	45	52	-5
White Catholic	45	52	43	56	47	52	40	59	37	60	-3
Hispanic Catholic	65	33	65	33	72	26	75	21	67	26	-8
Jewish	79	19	74	25	78	21	69	30	71	24	+2
Other faiths	62	28	74	23	73	22	74	23	62	29	-12
Religiously unaffiliated	61	30	67	31	75	23	70	26	68	26	-2
White, born-again/evangelical Christian	n/a	n/a	21	78	24	74	21	78	16	81	-5
Mormon	n/a	n/a	19	80	n/a	n/a	21	78	25	61	+4

Reference taken from the Pew Research at: http://www.pewresearch.org/fact-tank/2016/11/09/how-the-faithful-voted-a-preliminary-2016-analysis/

Timing

Sometimes it's not always about the polls data and it is just about making the right move at the right time. One candidate wanted to keep the status quo while the other wanted a change from the current system. In most cases, conventional wisdom would say that after eight years under one party, it is time for a change. It just happened that it was the perfect timing for one party to take over from the other one. Even though the polls data favored Hillary Clinton the days leading to the election, the reality was that many voters were tired of the current system and wanted a change. Although this may have not been reflected through the polls data, but It maybe this was the perfect storm. And one that no polls should have taken into consideration.

Conclusion

Apparently, something went terribly wrong as most reputable polls had Hillary Clinton winning the election. It turns out that there is a little bit of truth to this as she won the popular vote. However, other predictors may not have been taken into consideration, like the predictor that her past baggage may have had on people changing their votes at the last minute or the lack of enthusiasm from some voters. Also, many unlikely voters were not accounted for as part of the survey.

In this age of social media, pollsters may want to go outside the box to fully get the true intentions of the voters. It may be time to change the way surveys are taken and instead make use of Facebook, Twitter, Google/Bing searches to get a right feel of voters' intuition. We should no longer rely on the quantity of the data, but rather the quality of the data.

i

http://www.realclearpolitics.com/articles/2016/11/07/poll_position_where_clinton_trump_stand_on_election_eve_132270.html

ii http://www.theatlantic.com/politics/archive/2016/11/what-went-wrong-polling-clinton-trump/507188/

iii http://www.theatlantic.com/politics/archive/2016/11/what-went-wrong-polling-clinton-trump/507188/

iv http://digressionsnimpressions.typepad.com/digressionsimpressions/2016/11/heres-a-quick-and-dirty-theory-of-what-went-wrong-with-the-election-forecasts.html

v http://www.pewresearch.org/fact-tank/2016/11/09/how-the-faithful-voted-a-preliminary-2016-analysis/