Assessment of Voter Intent Using Three Different Polling Methods in Venezuela October 2015: Evidence for Fear Bias in Traditional Polls and Media Bias in Online Polls

Ulf Erlingsson, PhD

Abstract

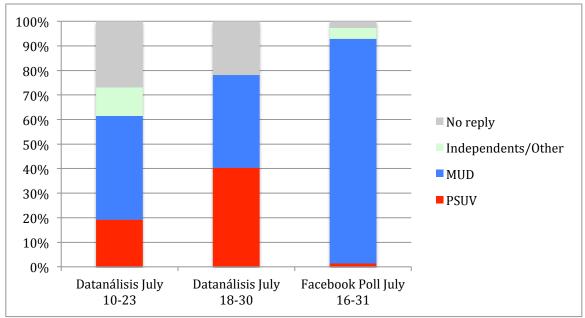
Public opinion polls in Venezuela are unreliable, and so are the election results. It has been argued that there is a fear bias in traditional polls. On the other hand it is now easy to conduct polls on Facebook, but the online responses are very different both from the public opinions polls and from the election results. This study was made to evaluate the accuracy of different polling methods, and to estimate the true regime support. To evaluate the factors that influence the response, a set of questions were asked on different topics at the door, on the street, and on Facebook. In each poll the respondents were assured anonymity, but the analysis suggests that the respondents distrust the pollster to various degrees depending on polling method. An analysis of the correlation between media use and responses reveals a correlation on certain issues that biases the Facebook results. Traditional polls are found to severely underestimate the support for the opposition, and the Facebook polls to underestimate the support for the regime. Based on this study, the true support for the regime is estimated to be $10\% \pm 5\%$.

Introduction

Venezuela is a competitive authoritarian regime, also known as an electoral dictatorship (cf. Abadi, 2014; Corrales, 2015). Ever since the recall referendum in 2004, both polls and election results have been put in question in Venezuela (e.g., Prado and Sansó, 2011; Delfino and Salas, 2011; Jiménez and Hidalgo, 2014). As Figure 1 illustrates, the poll results vary widely. A parliamentary poll made by Datanálisis (Hermoso, 2015) and carried out July 10 to 23 gives 42.2% to MUD, 19.2% to PSUV, and 11.8% to independents, with 26.8% as no reply. A municipal poll made by the same company (Datanálisis, 2015) between July 18 and 30, has the opposition party MUD with 37.8% and the regime party PSUV with 40.3%, which leaves 21.9% as "undecided" or no reply.

In an unpublished comparative poll in 2006, the pollster for the Manuel Rosales presidential campaign found that the replies when conducting a traditional door poll was about 15% more favorable to the sitting government, than when doing an anonymous street poll (Ekvall, 2012). It was concluded that the respondents to the door poll who intended to vote for the opposition, out of fear of being identified as dissidents, instead tended to reply that they had not made up their mind. This fear bias ('factor miedo') is well known in politically sensitive questions in repressive regimes (Horne, 2011). The polls in Venezuela typically have a large undecided group. The large undecided group in the opinion poll helps hide election fraud. It makes it appear that the undecided finally decided to vote for the governing party, and keeps from public view the vote switching that took place from the opposition to the governing party.

Since the Datanálisis poll results and others like it are simply not credible, a Facebook poll was made July 16 to 31, using the same method as in the present study (Fig. 1). It gave 91.5% to MUD, 1.4% to PSUV, and 4.4% to other, with 2.7% saying they would not vote (Erlingsson, 2015a). This result is also incredible, but in the other direction. The present study was therefore



devised in order to estimate the true level of support for the regime, and to evaluate the usefulness or lack thereof of Facebook polls for this purpose.

Fig. 1. These three polls made in July of 2015 gave widely divergent results on voter intent. The second was for municipal elections, the first and third for parliamentary elections. The Facebook poll (n=958) was executed virtually identically to the poll in the present study, the question being "¿Por cual partido votarías si las parlamentarias serían hoy?" Those who replied "Other" could write in their choice. Write-in answers for Voluntad Popular (n=39) have been added to MUD since the party later decided to run on the unity ballot. The "no reply" category refers to "neither" replies in the Facebook poll.

In the present study, the exact same poll (cf. Appendix A) was conducted with three different methods: A door poll (similar to traditional polls in that the respondent knows that the pollster knows where he lives); a street poll (the respondent has a realistic expectation of being anonymous); and a Facebook poll (the respondent's expectations of anonymity depends on his own actions and knowledge).

One purpose of the study was to find out if a non-random sample (such as achieved in a Facebook poll) can be made useful by weighing the responses based on factors for which there are objective data for the population as a whole. Four objective measures were included for this purpose: Genus, age, social class, and state (location of residence).

Furthermore, considering the inherent difference in media consumption between Internet users and non-Internet users, a question about media consumption was included, so as to measure if that factor is decisive in determining attitudes.

1. Methods

Three different methods of polling were used. Table 1 summarizes the three samples. The same date range was used, October 10 to 25, 2015. The methods are described in the following. See Appendix A for the form used. All analyses, including of Chi-square, were made in the open source software SOFA Statistics ver 1.4.5.

Table 1. Basic information about the three samples collected. The uncertainty at the 95% level is calculated as half of 1.96 divided by the square root of the number of samples.

Sample method	Size	Response rate	Uncertainty	Area	Selection
Facebook	1796	59%	2.3%	National, with extra samples in Cumaná (Sucre)	All over 18 in Venezuela using Facebook
Street	400	90%	4.9%	Barcelona (Anzoátegui), Cumaná (Sucre)	All adults passing or being in the selected points
Door	114	77%	9.2%	Benítez, Bermúdez, Rivero (Sucre)	All adults living in the selected neighborhoods
Facebook subsample "Orient"	133	N/A	8.5%	Anzoátegui and Sucre states	Facebook sample filtered by state

1.1. Facebook sample

An online poll was promoted to all Facebook users at least 18 years old in Venezuela (Erlingsson, 2015b). After filtering out the replies from outside the country, 1796 respondents remained. The online poll was placed on the Facebook page http://fb.com/OLVzla and promoted so as to reach a much larger number of persons who had *not* "liked" the page, than those who *had* "liked" it, in an effort to minimize bias. It was also published on http://fb.com/OLVSucre and promoted stronger in the city of Cumaná, to assure a number of online respondents from the same city as the biggest cluster of Street data (see below).

Some 3080 persons visited the Facebook poll and 1812 replied, giving a response rate of 59%. 96% of participants were direct, 3% came from a friend's timeline, and 1% were invited by a friend. 26% of participants shared the poll on their timelines, and 5% invited friends. Of 1812 respondents, 823 also wrote comments, most of which expressing that a change is needed. The subsample "Orient" consists of the same dataset filtered for Sucre (n=62) and Anzoátegui (n=71) states.

1.2. Street sample

Polling was made in two states, with 100 responses from Barcelona, Anzoátegui state, and with 300 from Cumaná, Sucre state. The response rate was about 90% of those approached. These two cities are only 60 km apart, so the Street data were merged in the analysis. The states of Anzoátegui and Sucre are located in the east of Venezuela, separated from the rest of the country of a zone of lower population density.

In an effort to limit the so-called "fear bias", i.e. that the respondent biases his answers in favor of the regime alternative or "don't know," the respondents were sought out in public places (bus stations, public squares, university campuses, etc), and were asked to fill out the forms themselves and deposit them in a container anonymously. One person took advantage of the opportunity to write a comment on the rear of the paper, saying that a change is needed.

1.3. Door sample

Polling was made in Sucre state, with 114 responses collected from about 50 households in three municipalities from different parts of the state. About 15 households refused to participate, yielding 77% participation. The sample area partly overlapped the Street sample area. Both urban and rural areas were sampled. Also in this case, the respondent filled out the form himself and deposited it in a closed container. Thus, it is still more anonymous than the traditional polling method where the pollster asks the questions and fills out the form.

2. Results

The answers to the questions are here presented side by side for the three sample methods, Door, Facebook, and Street. The justification for comparing all Facebook samples, although they represent a different geographic area, is as follows. All replies in the Facebook sample were analyzed with the Chi-square test to see if there is a correlation with State, but no significant spatial variation was found. Furthermore, the Facebook data were divided in five regions (see Appendix B) and the test repeated, but again no correlation was found except with age. In the following all Facebook data will therefore be compared to all Door and Street data, except as otherwise noted. Summary statistics are available in Appendix B, while the original poll data is available in Erlingsson (2015c).

The questions can be divided in 6 conceptual groups, as follows (for geographical location responses refer to Appendix B and the raw data).

2.1 Demographics

Questions of age, social group, and genus were included in order to detect demographic differences in the polled samples. The age of the Facebook respondents is significantly higher than in the other samples, and than the population as a whole (Fig. 2). This is probably an artifact of the promotion caused by the Facebook algorithm.

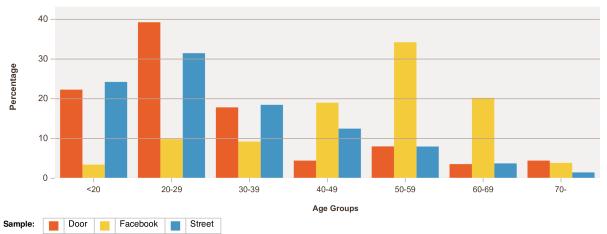


Fig. 2. Age distribution of the respondents in the three samples.

In Venezuela it is customary to use five social classes or groups (Fig. 3). In the data they are represented as 1 through 5. The average of the door sample is 2.82, of the Facebook sample 2.46, and of the Street sample 2.38. The distribution in the population as a whole is approximately as follows: low 44%, middle-low 36%, middle 18%, middle-high 2%, high <1% (El Universal, 2011). It is clear that all three groups are above the average of the population. It is not known if it reflects a psychological effect in the answering of the question, or an actual bias in the sample.

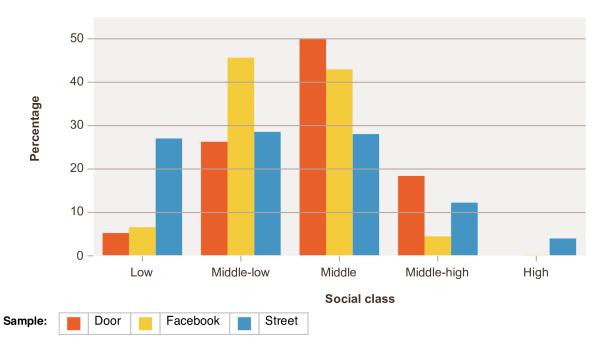


Fig. 3. Distribution of respondents on self-identified social classes.

2.2 Economical Situation Questions

Two questions can be said to concern the situation of the respondents. On the issue of economical situation (Fig. 4) the street respondents considered themselves worse off than Facebook and door respondents.

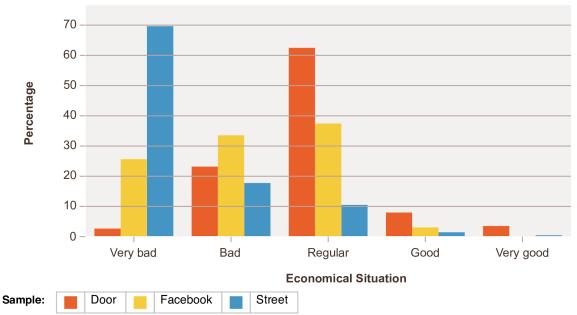


Fig. 4. Responses to the question "how is your economical situation?"

A related but separate question is if the respondents can find enough food (Fig. 5). The lack of food is a huge problem in Venezuela, as reflected by the answers to this question.

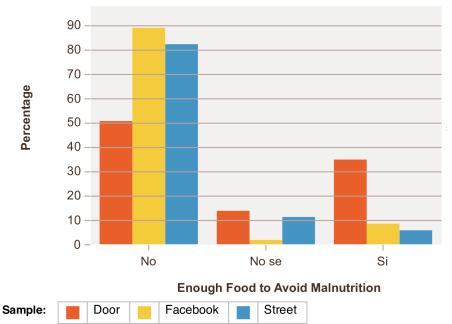


Fig. 5. The replies to the question "can you find enough food from the basic food basket to avoid malnutrition?"

When comparing the responses to the two questions of Figures 4 and 5 it is striking that almost half of those reporting their economical situation as good or very good still cannot find enough food to eat to avoid malnutrition (Table 2).

Table 2. Cross-tabulation of economical situation with food supply responses. Facebook, door, and street samples combined.

		Enough Food to Avoid Malnutrition								
		Ν	lo	Don't	know	Y	TOTAL			
		Col % Row %		Col %	Row %	Col %	Row %	Col %		
	Very bad	34.1%	91.5%	39.8%	5.0%	11.8%	3.5%	32.2%		
	Bad	31.2%	89.1%	29.0%	3.9%	22.2%	7.0%	30.3%		
Economical	Regular	32.9%	83.4%	25.8%	3.1%	48.0%	13.5%	34.0%		
Situation	Good	1.6%	43.7%	4.3%	5.6%	16.3%	50.7%	3.1%		
	Very good	0.2%	44.4%	1.1%	11.1%	1.8%	44.4%	0.4%		
	TOTAL		86.4%		4.0%		9.6%	100.0%		

2.3 Political Attitude Questions

The three questions in this group relate to the attitude in politically sensitive topics where one may expect answers that follow the party line. The question on Maduro's performance (Fig. 6) is a pure opinion question, and there was no option for "no opinion" (8.5% of street respondents and 2.6% of door respondents did not reply to this question).

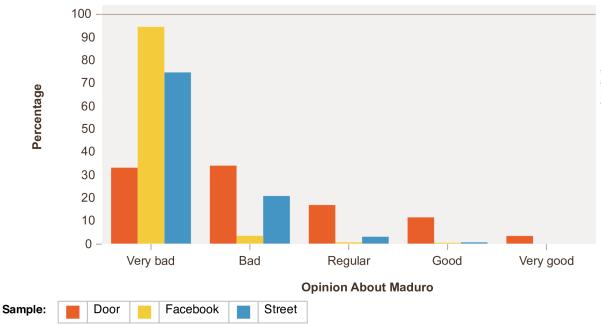


Fig. 6. Answers to the question "what do you think of the performance of Maduro?"

A contentious issue in contemporary Venezuela is if the country is a democracy or a dictatorship (Fig. 7). The regime is adamant that it is a democracy. The disproportionate number of respondents who allegedly "don't know" in the door sample is an indication that something isn't right.

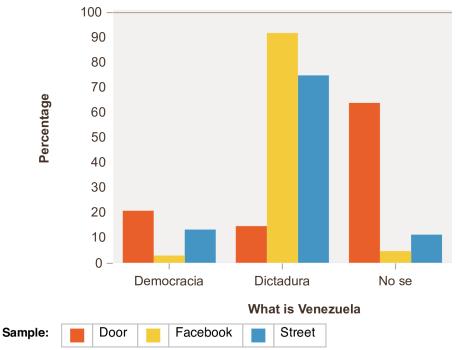


Fig. 7. Replies to the question "how do you characterize Venezuela today?" with the choices democracy, dictatorship, and don't know.

Who do people blame for this widespread food shortage? This question (Fig. 8) is also one of believing or not in the regime propaganda. The regime – following the Cuban rhetoric – accuses what they call "the oligarchy" and the opposition of having caused the lack of food by (among other things) storing food instead of selling it. They call this the 'economic war' ("guerra económica"; a term that even appears in the Cuban constitution). Most economists, on the other hand, say that the shortages are a result of a plan economy that is ignoring the economical reality. Again we observe that many door respondents don't know the answer.

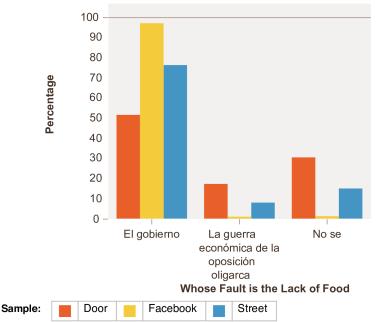


Fig. 8. Answers to the question "whose fault is the lack of food?" All sample groups mainly blame the regime (left), and only a minority believes the regime propaganda that it's to blame on the oligarchic opposition and it's economic war (middle). "No se" means 'don't know'.

2.4 Non-Partisan Attitude Question

It was expected that the responses would differ between the different samples due to the "fear bias". In order to test this, a non-partisan question was included (Fig. 9) with the intension of measuring the difference when no fear bias is present. This is non-partisan because the regime and the opposition agree on that the territory west of the Essequibo River in Guyana belongs to Venezuela (the so-called "reclamation zone"; the case was referred to the UN in 1966).

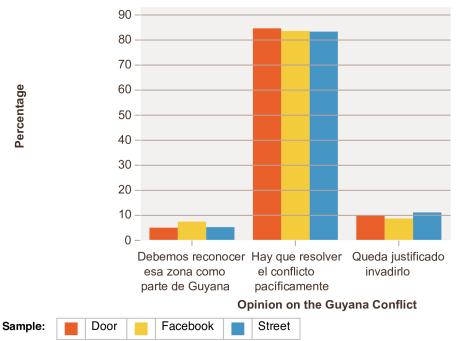


Fig. 9. Responses to the question "what is your opinion about Guyana-Essequibo?". The alternatives are, from left to right, "we should recognize the zone as a part of Guyana", "the conflict must be resolved peacefully", and "it is justified to invade it."

As expected, the difference in replies between the three different samples was not statistically significant (the Chi-test p-value being 0.318). This was the only issue question where the difference between the samples was *not* statistically significant at the 99.9% level.

2.5 Media Consumption Question

An alternative explanation to the "fear bias" for the difference in observed responses is that the samples really represent different sub-populations that are different in some way, a bias caused by something else than demographics. One may hypothesize that if so, then that difference could be caused by different consumption of state propaganda, caused in turn by the use of different media for information and news.

To measure this, the poll included a question about which 2 media sources were most important for news and information for the respondent. The alternatives were Internet, social media, international TV, national TV, radio, and press. Naturally the Facebook respondents relied most on Internet and social media, while very few listened to radio, watched national TV, or read newspapers (Table 3).

Table 3. Percentage of respondents who identified the media as one of two main sources of news and information. Since not all door or street respondents gave two answers, the sum for them is less than 200%. The Facebook sample is set apart by a much higher Internet and Social Media reliance, as expected. The Door sample relies more on national TV, while the Street sample relies relatively more on radio and newspapers. International TV is about evenly used between the sample groups.

	Door	Facebook	Street
National TV	57.0%	4.6%	35.8%

Newspapers	11.4%	8.4%	28.3%
Radio	5.3%	3.6%	15.0%
International TV	42.1%	36.1%	31.8%
Internet	40.4%	77.4%	37.5%
Social Media	38.6%	70.0%	44.3%
SUM	194.8%	200.1%	192.7%

To evaluate how informed or misinformed the respondents were, a couple of "quiz questions" were included.

2.6 Knowledge Questions

These two questions test the effectiveness of the regime's propaganda. The first of these relates to the death of Hugo Chávez (Fig. 10). The official version is that he died in March 2013 in Venezuela, but an overwhelming body of evidence points towards that he never woke up after the operation in early December of 2012, and was finally disconnected on December 30th. His death was tweeted on that date but the tweet was later deleted, and the regime tried to make the world believe that Chávez was still alive, signing bills into law even.

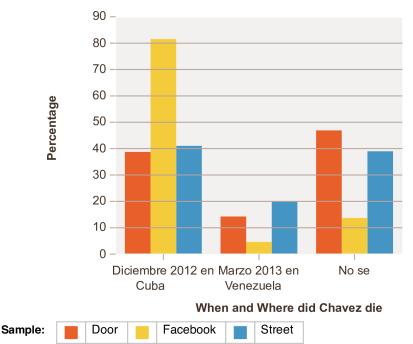


Fig. 10. Answers by polling method to the question "when and where did Chávez die?" with the alternatives "December 2012 in Cuba", "March 2013 in Venezuela", and "Don't know". The first is the correct answer, the second the lie promoted by the regime.

The difference between the Facebook sample and the others is clearly significant, but the Door and Street samples are effectively identical (Chi-square test p=0.238). This excludes the "fear bias" as a reason for the observed differences in response rates to this question. The observations may instead reflect a difference in propaganda effectiveness. If so, the response in the Door and Street groups ought to correlate to their media use (since all in the Facebook sample by definition are users of social media and internet, they were excluded from this test).

Figure 11 shows the plot of the resulting data. The users of "modern media" gave responses that are reminiscent of those given by members of the Facebook sample, albeit with significantly

more "don't know" answers. The responses to the question were indeed found to correlate with media use (p < 0.001). This means that it is impossible to evaluate the level of knowledge on this issue in the population as a whole by means of a Facebook poll, since the polling method is correlated to the issue being measured.

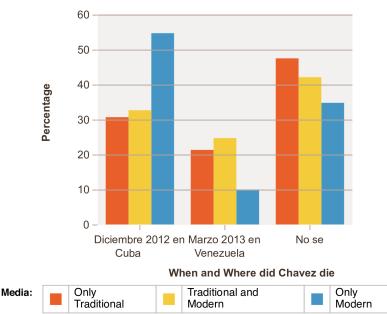


Fig. 11. Answers to the same question as in Fig. 10, by media use. Only Door and Street samples were included. The "traditional media" was defined as press, radio, and national TV, while "modern media" was defined as international TV, Internet, and social media.

The second "knowledge question" is an overlap with a political attitude question. Also, admittedly, the whole situation in 2002 was complex, and the label "coup d'état" can be interpreted in several ways. There is thus significant room for political attitude to color the reply on the question in Figure 12. Figure 13 shows the same data analyzed by media use.

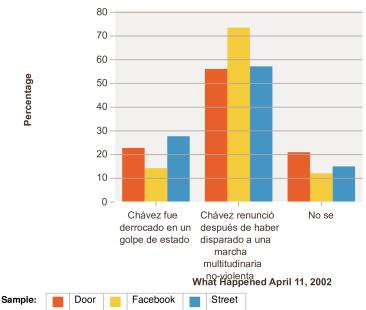


Fig. 12. How the respondents view the events of April 11 to 13, 2002, by polling method. The first alternative is "Chávez was overthrown in a coup d'état", the second "Chávez renounced after having opened fire on a large non-violent march", and the third "Don't know".

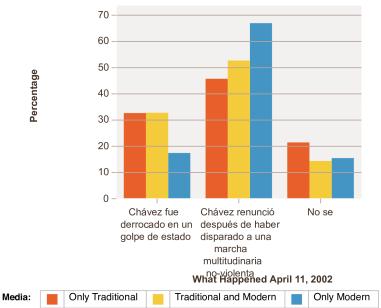


Fig. 13. The same question as in Figure 12, by media, excluding Facebook responses (cf. Fig. 11 for definitions).

These "quiz questions" show that the determining factor for the response is the media the respondent uses, not the polling method. The knowledge is a function of media use.

2.7 Vote Intent Question

On December 6, 2015, parliamentary elections will be held in Venezuela. This poll was made shortly before the start of the official election campaign, and one of the questions was, "for whom would you vote if the elections were held today?" (Fig. 14).

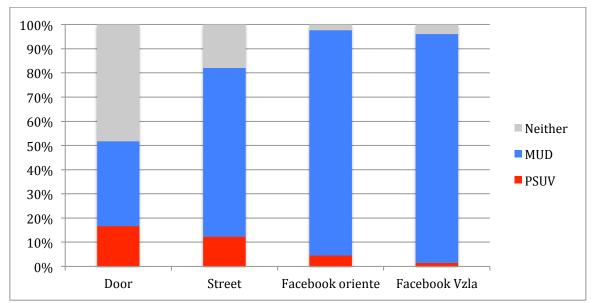


Fig. 14. Intention of vote. The three options were: PSUV or other regime-friendly party; MUD or other opposition party; and neither. A few in the door and street polls left the question blank; their replies have been entered as "neither" so as to be comparable to the Facebook poll, where the question could not be left blank.

The Facebook replies in Figure 14 are similar to those for the other political attitude questions (Figs. 6 to 8). The national Facebook data is virtually identical to the July poll conducted in the same medium (Fig. 1). The door sample is very similar to the first Datanálisis poll in Figure 1, although with an even higher percentage of respondents declining to name a party preference. If we combine response rates to the poll, with those who replied "neither" on this question, we find that the net response rate (those who gave a name of a party) was 74% on the street, 57% in Facebook, but only 40% at the door. It would seem that the street gave the highest rates, but keep in mind that many who didn't finish the Facebook poll may have failed to do so due to a poor Internet connection; the connection has become very unreliable and slow the last few years.

3. Analysis

The correlation between demographic data and replies to the questions was tested with the Chisquare test. There were no strong correlations. The key question, vote intent, did not correlate to any demographic question, but did correlate to polling method. The idea that one could weigh the Facebook results based on demographics thus had to be rejected. In other words, the Facebook poll cannot be used alone.

The analysis next turned to finding a way to evaluate the true support for the regime by understanding the reasons for the differences in the replies, and correct for them. The discrepancy between the Facebook poll in Figure 1, and the traditional polls, seems to be traceable to two different effects: The fear bias (a psychological factor in the polling), and the media factor (a sampling bias that causes an error).

3.1. Fear Bias

Significant differences were found between the door and street polls on politically charged questions, with higher rates of politically correct replies where the respondent is less anonymous. In the politically neutral control question, no difference between polling method was detected.

The fear bias causes the traditional polls in Figure 1 to severely underestimate the support for the opposition; to somewhat overestimate the support for the regime; and to significantly overestimate the number of undecided (and the "ni-ni", as the independents are called in Venezuela). A high number of undecided is all a regime needs if it's planning to commit fraud. The consistency of the responses on Facebook from July to October suggests that the public opinion has not changed much. This allows us to draw a conclusion based on the similarity between the door poll (Fig. 14) and the first Datanálisis poll (Fig. 1), namely that the Datanálisis poll has a large systematic error due to the polling method. It underestimates the opposition support by 30% or more, while it overestimates the regime support by several percent. *The fear bias causes traditional polls in Venezuela to underestimate the support for the opposition*.

3.2. Media Use Bias

Chi-square tests made of the vote intent and media use (traditional, modern, and both) show that there is a statistically significant correlation between the media a person uses, and the vote intent (p<0.001). Political attitudes correlate similarly with media use. Internet and social media users are much less likely for vote for PSUV than the average in the population. Since all respondents to the Facebook poll are users of Internet and social media, this causes the Facebook poll result to be biased against the regime, compared to the true value for the population as a whole. *The media factor causes the Facebook polls in Venezuela to underestimate the support for the regime*.

3.3. Vote Intent Estimate

Having found that all the polls in Figure 1 are in error, and having shown that there is a fear bias and a media bias involved in the other two polling methods, we conclude that the best and most bias-free estimate is the one from the street poll. It gives the PSUV 12.3% \pm 4.9% at the 95% confidence level. Converted to election results, counted as percent of ballots cast in a realistic election, it represents about 15% \pm 5% for PSUV, and 85% \pm 5% for MUD. This result is for Anzoátegui and Sucre states.

Using the national Facebook sample, this can be extrapolated to the rest of the country as follows. The Facebook sample is split with Sucre and Anzoátegui in one group, which we call the Orient, and the rest of the country in the other. The PSUV score was 4.5% in the Orient, but only 1.1% in the rest of the country (the MUD score was 93.2% and 94.8%, respectively). The Chi-square test gave a 99.6% probability that the observed difference is real. In other words, the Orient, where we did the street poll, is a regime stronghold. The rest of the country most likely has a lower PSUV vote. This means that the PSUV vote quite possibly is *less than 10%* in the country as a whole with 5% uncertainty.

Conclusions

The fear bias in the polling is real, as seen in the difference between the percentage of "neither" replies between the door and street respondents: 30% more "neither" responses in the vote intent question in the former group than in the latter.

The difference in results of the three July polls in Figure 1 is due to difference in the way the polls were conducted, namely a combination of fear bias for the traditional polls, and media bias for the Facebook poll.

The best estimate is that the support for the regime is less than $10\% \pm 5\%$ in the country as a whole. This is based on the street poll extrapolated with support from the Facebook poll.

Since the door sample is severely affected by the fear bias, the only purpose it can possibly serve is to give an absolute maximum estimate of the support for the regime by a populace under duress. This absolute max is estimated as $17\% \pm 9\%$ in Sucre state, and less in the rest of the country.

The media consumption influences the views of the respondents. Those getting their news from traditional sources are more inclined to believe the propaganda lies from the regime. However, this is a difference on the attitude level, not in how they respond to polls conducted in different manners. The problem is just that one cannot poll on Facebook those who don't use Facebook, let alone Internet. A street poll therefore seems indispensable as a complement to the online poll, where the former measures the bias in the latter, and the latter extrapolates to areas not polled in the former.

Acknowledgments

The work with carrying out the poll inside the country was made by volunteers whose identity cannot be revealed at this time since the activity is outlawed by the present regime.

References

- Abadi, Anabella, 2014: "Busting the myth of democracy in Venezuela". Caracas Chronicles, Feb 14, 2014. Link <u>http://caracaschronicles.com/2014/02/25/busting-the-myth-of-democracy-in-venezuela/</u>
- Corrales, Javier, 2015: "Autocratic Legalism in Venezuela". Journal of Democracy, Vol. 26, No. 2, 37–51. Link: <u>http://www.journalofdemocracy.org/sites/default/files/Corrales-26-2.pdf</u>
- Datanálisis, August 26, 2015: "Encuesta Datanálisis: 40,3% votaría por el PSUV y 37.8% votaría por la MUD". Link <u>http://www.eleccionesvenezuela.com/noticia-encuesta-datanalisis-elecciones-municipales-2013-621.html</u>
- Delfino, Gustavo, and Guillermo Salas. 2011. "Analysis of the 2004 Venezuela Referendum: The Official Results Versus the Petition Signatures". Statistical Science 26 (4). Institute of Mathematical Statistics: 479–501. http://www.jstor.org/stable/23208737.
- Hermoso, Jesús, 2015: "Oficialismo mantiene piso electoral y oposición lo supera en respaldo (Encuesta Datanálisis)". Efecto Cocuyo, August 12, 2015. Link <u>http://www.efectococuyo.com/efecto-cocuyo/oficialismo-mantiene-piso-electoral-y-oposicion-lo-supera-en-respaldo-encuesta-datanalisis</u>
- El Universal, 2011: "Estrato social E arropa a 44,1% de la población venezolana". Link <u>http://www.eluniversal.com/2011/06/17/estrato-social-e-arropa-a-441-de-la-poblacion-venezolana</u>
- Ekvall, Eric, 2012: Video of presentation at forum "Elecciones Presidenciales en Venezuela 2012". Link <u>https://youtu.be/nSa0kgHgcjs</u>
- Erlingsson, Ulf, 2015a: Facebook poll in July 2015. Link to public results: https://apps.facebook.com/my-polls/results/fwbwws
- Erlingsson, Ulf, 2015b: Facebook poll in October 2015. Link to public results: https://apps.facebook.com/my-polls/results/rtvhag
- Erlingsson, Ulf, 2015c: "Replication data for: Assessment of Voter Intent Using Three Different Polling Methods in Venezuela October 2015", TBD, 2015.
- Horne, Cale, 2011: "Measuring Public Opinion under Political Repression". American Diplomacy, April 2011. Link http://www.unc.edu/depts/diplomat/item/2011/0104/comm/horne measuring.html

Jiménez, Raúl, and Hidalgo, Manuel, 2014: Forensic Analysis of Venezuelan Elections during the Chávez Presidency. PLoS ONE 9(6): e100884. DOI:10.1371/journal.pone.0100884

Prado, Raquel, and Sansó, Bruno, 2011: *The 2004 Venezuelan Presidential Recall Referendum: Discrepancies Between Two Exit Polls and Official Results*. Statistical Science, Vol. 26, No. 4, 517–527 DOI: 10.1214/09-STS295

Appendix A: Questionnaire

The following form was used in the Street and Door polls. The Facebook poll had the same questions and the answer alternatives in the same order, only with a question about state of residence added.

Encuesta: Situación del País
Favor marcar con una "X" una sola opción por pregunta
Edad
menor que 20 años20 a 2930 a 3940 a 4950 a 5960 a 6970 años o
más
Sexo
hombre mujer
Grupo social al que pertenece
AltaMedia-altaMediaMedia-bajaBaja
¿Cómo está tu situación económica?
muy mala mala regular buena muy buena
¿Consigues suficientes alimentos de la cesta básica para no sufrir de malnutrición?
sinono se
¿Si te hace falta comida, quien tiene la culpa?
el gobierno la guerra económica de la oposición oligarca otro, no se
¿Qué opinas sobre el desempeño del gobierno de Maduro?
muy maloregularbuenomuy bueno
¿Por cual partido votarías si las parlamentarias fuesen hoy?
PSUV u otro oficialistaMUD u otra oposiciónNinguno, no votaría
¿Cómo caracterizas a Venezuela hoy?
democracia dictadura no se
¿Cuándo y donde murió Hugo Rafael Chávez Frías?
diciembre 2012 en Cuba marzo 2013 en Venezuela no se
¿Qué opinas sobre Guyana Esequibo?
queda justificado invadirlo hay que resolver el conflicto pacíficamente
debemos reconocer esa zona como parte de Guyana
¿En tu opinión, qué pasó el 11 a 13 de abril del 2002?
Chávez renunció después de haber disparado a una marcha multitudinaria no-violenta
Chávez fue derrocado en un golpe de estado no se
¿Cuáles son tus 2 fuentes principales para información y noticias? (marca dos X)
Internetredes socialesTV internacionalTV nacionalprensaradio
Si quieres compartir cualquier tipo de comentario u observación lo puedes hacer al revés.
; Favor depositar el formulario en el lugar indicado! Lo abajo es para uso del encuestador
Número de hoja: Fecha: Sitio: Municipio:

Appendix B: Summary statistics

		Door	Sample Door Facebook Region Region					Street
			Andean	Capital	Central	East	Zulia	
	No	58	194	450	531	267	160	330
Enough Food to Avoid	No se	16	5	9	10	6	7	46
Malnutrition	Si	40	18	50	55	18	16	24
	FALSE	70	73	121	196	94	55	223
Social Media	TRUE	44	144	388	400	197	128	177
	Amazonas	0	0	0	400	137	0	0
	Anzonas	0	0	0	0	71	0	101
	v	-						
	Apure	0	0	0	12	0	0	0
	Aragua	0	0	0	141	0	0	(
	Barinas	0	0	0	30	0	0	(
	Bolivar	0	0	0	0	79	0	(
	Carabobo	0	0	0	156	0	0	C
	Cojedes	0	0	0	19	0	0	
	Delta Amacuro	0	0	0	0	4	0	(
	Dtto Capital	0	0	279	0	0	0	(
	Falcon	0	0	0	46	0	0	C
	Guarico	0	0	0	34	0	0	C
	Lara	0	0	0	107	0	0	0
	Merida	0	68	0	0	0	0	0
	Miranda	0	0	213	0	0	0	0
	Monagas	0	0	0	0	27	0	0
	Nueva Esparta	0	0	0	0	47	0	C
	Portuguesa	0	0	0	26	0	0	(
	Sucre	114	0	0	0	62	0	299
	Trujillo	0	36	0	0	0	0	200
	Táchira	0	113	0	0	0	0	(
	Vargas	0	0	17	0	0	0	C
	Yaracuy	0	0	0	25	0	0	0
State	Zulia	0	0	0	0	0	183	0
Sidle	Hombre			230	335		103	197
0		59	113			151		
Genus	Mujer	55	104	279	261	140	80	203
	<20	25	12	11	23	10	6	97
	20-29	44	31	43	62	28	13	126
	30-39	20	26	34	61	27	18	74
	40-49	5	57	89	93	69	34	50
	50-59	9	59	174	226	94	62	32
	60-69	4	30	133	106	53	42	15
Age Groups	70-	5	2	25	25	10	8	6
	FALSE	66	131	322	375	199	121	273
International TV	TRUE	48	86	187	221	92	62	127
	FALSE	108	206	485	581	281	178	340
Radio	TRUE	6	11	24	15	10	5	60
	Debemos reconocer esa zona como parte de Guyana	5	22	34	40	25	13	21
Opinion on the Guyana	Hay que resolver el conflicto pacíficamente	83	177	430	511	239	147	327
Conflict	Queda justificado invadirlo	10	18	45	45	27	23	44
	Very bad	37	209	487	557	272	175	274
	Bad	38	6	15	31	10	5	77
	Regular	19	0	5	4	5	1	12
	Good	13	2	2	3	3	2	3
Opinion About Maduro	Very good	4	0	0	1	1	0	0
	FALSE	68	55	131	132	55	33	250
Internet	TRUE	46	162	378	464	236	150	
Internet								150
	El gobierno	59	213	497	578	281	177	306
Whose Fault is the Lack	La guerra económica de la oposición oligarca	20	2	5	7	7	2	33
of Food	No se	35	2	7	11	3	4	61
What Happened April 11,	Chávez fue derrocado en un golpe de estado	26	38	60	81	48	30	111

		Sample						
		Door	Facebook Region					
			Andean	Capital	Central	East	Zulia	
2002	Chávez renunció después de haber disparado a una							
	marcha multitudinaria no-violenta	64	147	397	439	204	134	229
	No se	24	32	52	76	39	19	60
	Diciembre 2012 en Cuba	45	175	438	471	232	149	167
When and Where did	Marzo 2013 en Venezuela	16	9	12	33	22	8	78
Chavez die	No se	53	33	59	92	37	26	155
	Democracia	24	5	14	18	15	5	54
	Dictadura	17	201	472	548	258	171	300
What is Venezuela	No se	73	11	23	30	18	7	46
	FALSE	101	195	479	533	264	175	287
Newspapers	TRUE	13	22	30	63	27	8	113
	Very bad	3	52	106	165	88	50	278
	Bad	26	73	185	188	93	64	71
	Regular	70	81	201	230	99	62	42
	Good	9	10	17	13	10	6	6
Economical Situation	Very good	4	1	0	0	1	1	2
	FALSE	49	208	498	567	271	170	257
National TV	TRUE	65	9	11	29	20	13	143
	MUD	40	206	485	566	272	171	279
	PSUV	19	2	5	6	9	3	49
Intention of vote	ninguno	55	9	19	24	10	9	72