## A SAMPLE SURVEY OF VOTERS' PREFERENCE IN THE PHILIPPINES ${ }^{1}$

by

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## INTRODUCTION

About two years ago, I reported to the general conference of this Association the results of the first phase of a study entitled "A Sample Survey of Voters' Preference in Quezon City." It was stated in that paper that the main aim of the study was to find if it is possible to make a pre-electtion prediction by sample survey of the voters' preference in this country. This paper which I am reading today reports the results of the second of the three phases into which the study was divided. Originally intended to cover only the election of the Mayor in the City of Manila, it was nevertheless expanded so as to include the senatorial election for the whole country. The procedure used in the first phase of the study was adopted with very minor changes.

## MAYORALTY ELECTION

In the election for the Mayor of Manila, three sets of samples were used: 1) a survey by mail; 2) survey by the use or tield interviewers; and 3 ) another survey a month later by the use of field interviewers also.

## SURVEY RESULTS

| 1. LACSON | 565 | LACSON | 184 | LACSON | 205 |
| :--- | ---: | :--- | ---: | :--- | ---: |
| 2. ROCES | 145 | FRANCISCO | 96 | MARINO | 91 |
| 3. FRANCISCO | 130 | MARINO | 86 | ROCES | 89 |
| 4. MARINO | 127 | ROCES | 61 | FRANCISCO | 78 |
| 5. GONZAGA | 22 | GABRIEL | 11 | GABRIEL | 4 |
| 6. GABRIEL | 13 | GONZAGA | 3 | GONZAGA | 4 |

[^0]Number of sample ballots issued for the mail survey ..... 1,130
Number of respondents ..... 1,007

After knowing the results of the mail survey, I concluded that the election of Mayor Arsenio Lacson was certain, and as far as the study is concerned, the prediction of the final outcome became unimportant. I continued the study for the sole purpose of predicting the percentage of votes that Mayor Lacson will finally receive in the election, but the results of the survey by the use of field interviewers showed that there were significant changes occurring in the voting trend, thus making it hazardous to predict the final percentage which will be obtained although his election was confirmed by the succeeding survey results. The number of sample ballots for the second and third sets, when combined, is the same as the sample ballots for the mail survey. They were split into two for observation of changes in the trend of voting.

## COMPARISON OF ACTUAL RESULTS AND SURVEY RESULTS

| Commission on <br> Election Results |  | Survey Rerults <br> (3rd Set Expanded) | Deviation <br> in $\%$ |
| :--- | :---: | ---: | ---: |
| 1. LACSON | 95,320 | 110,151 | $15.5 \%$ |
| 2. ROCES | 55,315 | 47,822 | $-13.5 \%$ |
| 3. MARINO | 49,659 | 48,896 | $-1.5 \%$ |
| 4. FRANCISCO | 48,400 | 41,911 | $-13.4 \%$ |
| 5. GABRIEL | 2,751 | 2,149 | $-21.8 \%$ |
| 6. GONZAGA | 1,646 | 2,149 | $30.5 \%$ |

Average Deviation in \%
All Candidates ............. $16.0 \%$
First Four Candidates ..... $11.0 \%$

## SENATORIAL ELECTION

For the senatorial election, two sets of sample ballots are issued and the following results were obtained:

|  | Votes Obtained |  | Votes Obtained <br> By The Survey |
| :---: | :---: | :---: | :---: |
| Candidates | The Survey |  |  |
| (First Set) |  |  |  | Candidates | By Tecond Set) |
| :---: |


| 1. MARCOS | 3,752 | 1. MARCOS | 3,471 |
| :--- | ---: | :--- | ---: |
| 2. MAGSAYSAY | 3,556 | 2. MAGSAYSAY | 3,392 |
| 3. CUENCO | 3,478 | 3. CUENCO | 3,188 |
| 4. PELAEZ | 3,443 | 4. PELAEZ | 3,134 |
| 5. MANAHAN | 3,349 | 5. MANAHAN | 3,046 |
| 6. TANADA | 3,297 | 6. MANGLAPUS | 2,916 |
| 7. LOPEZ | 3,231 | 7. LOPEZ | 2,987 |
| 8. MANGLAPUS | 3,190 | 8. TANADA | 2,853 |
| 9. RODRIGUEZ | 2,808 | 9. FERNANDEZ | 2,574 |
| 10. FERNANDEZ | 2,624 | 10. RODRIGUEZ | 2,578 |
| 11. ADEVOSO | 2,122 | 11. CEA | 2,078 |
| 12. CEA | 2,114 | 12. ALMENDRAS | 2,009 |
| 13. VARGAS | 2,046 | 13. VARGAS | 1,862 |
| 14. ALMENDRAS | 1,881 | 14. ADEVOSO | 1,789 |
| 15. VILLAREAL | 1,783 | 15. VILLAREAL | 1,674 |
| 16. PAJO | 1,668 | 16. PAJO | 1,504 |
| 17. BORJA | 1,348 | 17. BORJA | 1,256 |
| 18. QUIMSON | 1,254 | 18. QUIMSON | 1,239 |
| 19. MONDONEDO | 1,049 | 1. PIMENTEL | 1,051 |
| 20. PIMENTEL | 1,030 | 20. MONDONEDO | 955 |
| 21. ECO | 872 | 21. ECO | 817 |
| 22. SINSUAT | 601 | 22. SINSUAT | 575 |

$$
\begin{aligned}
& \text { Number of Respondents .................... 6,083 } \\
& \text { Number of Sample Ballots Issued ........... 12,739 }
\end{aligned}
$$

Commission on Election Results Compared to Results of Second Set of Survey After These Results Were Expanded by a Multiplier

| $\begin{array}{lc} & \text { Vo } \\ & \text { By } \\ \text { Candidates } \\ \text { sio }\end{array}$ | Votes Obtained By The Commission On Election | Votes Obtaincd By The Survey Expanded By A Multiplier (Second Set) | $\begin{aligned} & \text { Deviation } \\ & \text { in } \% \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 1. MARCOS | 2,661,153 | 2,528,345 | - $4.9 \%$ |
| 2. MAGSAYSAY | Y 2,437,218 | 2,470,800 | 0.5 \% |
| 3. LOPEZ | 2,366,166 | 2,175,790 | - $8.0 \%$ |
| 4 FERNANDEZ | Z 2,071,865 | 1,874,953 | - $9.4 \%$ |
| 5. CUENCO | 2,046,842 | 2,322,202 | 13.4 \% |
| 6. RODRIGUEZ | Z 2,037,682 | 1,877,866 | - $7.8 \%$ |
| 7. TANADA | 2,029,200 | 2,078,182 | 2.4 \% |
| 8. ALMENDRAS | AS 1,855,186 | 1,463,395 | -21.1\% |
| 9. CEA | 1,764,436 | 1,513,656 | -14.1\% |
| 10. PELAEZ | 1,734,330 | 2,212,868 | 31.6 \% |
| 11. MANGLAPUS | US 1,651,097 | 2,124,072 | 28.6 \% |
| 12. PAJO | 1,623,637 | 1,095,543 | -32.5\% |
| 13. MANAHAN | 1,512,512 | 2,218,767 | +46.7\% |
| 14. QUIMSON | 1,272,525 | 902,512 | - 29.0 \% |
| 15. VILLAREAL | L 1,266,826 | 1,219,375 | - 3.7 \% |
| 16. ADEVOSO | 1,035,147 | 1,303,143 | +25.9\% |
| 17. BORJA | 1,021,281 | 914,895 | -10.4\% |
| 18. VARGAS | 1,001,981 | 1,356,318 | 35.3 \% |
| 19. ECO | 947.261 | 595,119 | -37.1\% |
| 20. SINSUAT | 687,622 | 418,841 | -39.0\% |
| 21. PIMINTEL | 621,915 | 765,569 | 22.8\% |
| 22. MONDONEDO | DO 537,729 | 695,641 | 29.3 \% |
| Average Deviation tor All |  |  | Percent |
|  |  |  |  |
| Candidates |  |  | 20.61 |
| Average Deviation for first |  |  |  |
| Twelve Ccandidates |  |  | 15.70 |

## PHILIPPINE STATISTICIAN - SEPTEMBER, 1960

Number of Senators Who Occupied the First Eight Places in the Survey Results

TWELVE TEN EIGHT

| National | 8 | 7 | 5 |
| :--- | :--- | :--- | :--- |
| Manila | 8 | 8 | 8 |
| Northern Luzon | 8 | 7 | 7 |
| Central Luzon | 7 | 7 | 5 |
| Southern Tagalog | 8 | 8 | 7 |
| Bicol | 8 | 8 | 7 |
| Eastern Visayas | 8 | 6 | 5 |
| Western Visayas | 8 | 8 | 7 |
| Mindanao | 8 | 7 | 5 |

## EVALUATION OF ESTIMATES OBTAINED FROM SURVEY RESULTS

In my opinion, the conformity of the estimates obtained from survey to the actual results is good. This opinion is supported by the following analysis:

|  | Eight | Over the first <br> Twelve |
| :--- | :---: | :---: | :---: | :---: |
| National | Twelve |  |

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(Cont'd)


Arrows pointed towards the left indicate the group from which some of the first eight senators who occupy the first eight positions in the final results come.

Arrows pointed towards the right indicate some of the first eight senators who occupy the first eight positions in the survey results were placed in accordance with the final results.

I shall try to explain the figures for the entire nation since the other items can be explained in the same way. Of the three candidates who were among the first eight of the survey estimates but who were not elected, one is included in the first ten, one in the first twelve, and the third in the over the first twelve. They were replaced by two candidates from the first ten and one from the first twelve. In the case of

Manila, the first eight in the survey is identical with the first eight in the actual results.

## THE GRAND ALLIANCE CANDIDATES

One striking fact about the results of the survey is the failure of the three Grand Alliance candidates to get elected although they occupied the fourth, the fifth, and the sixth positions in the survey results. There are several reasons advanced for this failure of the Grand Alliance candidates to get elected, but I am of the opinion that the principal contributing factor to their failure is the absence of an organized political party with party workers and supporters through out the country.

In order to estimate the advantage of having an organized party supporting the candidates over those that are without one, I I studied the deviations of the survey results from the actual results. These deviations are shown in the following tables :

|  | Ave. Dev. <br> in $\%$ | Min. Dev. <br> in $\%$ | Max. Dev. <br> in $\%$ |
| :--- | :---: | :---: | :---: |
|  | 14.42 | 0.50 | 32.50 |
| NACIONALISTA | 17.97 | 3.70 | 39.00 |
| LIBERAL | 32.38 | 22.80 | 46.70 |
| GRAND ALLIANCE | 20.61 | 0.50 | 46.70 |

## CANDIDATES IN THE FIRST TWELVE OF SURVEY ESTIMATES TO BE ELECTED

(Second Set)

| NACIONALISTA | 8.96 | 0.5 |  | 21.1 |
| :--- | ---: | ---: | ---: | ---: |
| LIBERAL | 9.23 | 4.9 |  | 13.4 |
| GRAND ALLIANCE | 33.63 | 28.6 | . | 46.7 |
| OVER ALL | 15.70 | 0.5 |  | 46.7 |

The advantage of an organized party may be as high as $25 \%$ and appears not to be lower than $15 \%$.

## OBSERVATION

The fact that it is not possible to include the newly registered voters in the sample except in a few places make the results liable to about five percent error from this source alone. In this particular survey, since the average deviation for the first twelve candidates was about $16 \%$ for all cases it is believed that the error arising from the non-inclusion of the registered voters was included in this average deviation. This average deviation may in some elections reach as much as $20 \%$.

## CONCLUSION

The method that was used in this experimental study for the prediction of election results in the Philippines seems to be acceptable since the margin of error is within tolerable limits when undertaken by any one with sufficient experience in the work.

## REMARKS

I am sincerely grateful for the interest that some of my colleagues have shown in my paper as it gives me the opportunity to explain some of the difficulties which the subject had presented to me.

The main theoretical difficulty is the absence of a theory on changing universes. The two sample values obtained on the two rounds of the survey relates to universes which may be different from the final universe which elected the winners of the elections. I did not use the conventional measures of variation from the true value because even if I do so, the true population values during the two rounds of the survey may not be the true value on election day.

Moreover, it is not the true value of the votes which is important but rather the rank. It is therefore changes in the rank to which I attached more importance rather than the
total number of votes obtained. It is important to remember that changes in the rank are not independent of each other.

It is true that the three sample values for the Mayor of the City of Manila do not show significant differences judged by the convention measures but to me the change in the rank of Roces was significant enough as to give me confidence that while Lacon would certainly win the election, there arose some uncertainties in my mind over the percentage of votes he (Lacson) would have in the election in view of the rise in the rank of Roces.

In the absence of any theory on changing universes, I deliberately ignored the conventional measures of deviation from the true value and used the crude deviations of the sample results from the election results.


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