

ON THE ACCURACY OF PHILIPPINE NATIONAL INCOME ACCOUNTS: REPLY

BY

GERARDO P. SICAT¹

The reaction of B.G. Bantegui to my article is most welcome, especially because he is in charge of the estimation of national income accounts.

While the first comment (regarding publication policy) is not directed at me, it is stated that I did not bother to consult with authorities to verify facts. I would like to refer him to my documentation — including the ones published by the National Economic Council. And certainly, since I alone wrote this article, I am responsible for its contents.

For the remainder of this rejoinder, I shall try to follow Bantegui's format in his "observations" regarding my article.

1. It is suggested that I should have tried a more complicated consumption function. This is unnecessary, since the data could not even yield sensible results for the simplest functional form.² Nor was it necessary to estimate it for a shorter period. However, for further information, I am also showing my estimates for 1950-1960, as follows.

	<i>a</i>	<i>b</i>	<i>r</i>	<i>c/y</i>
current	-190.72	1.048	0.989	1.01
constant	-495.61	1.087	0.983	1.02

¹ Without sharing any of my errors and dragging them into this controversy, I would like to acknowledge the stimulating discussions with my colleagues, José Encarnación, Jr., Richard W. Hooley, Agustin Kintanar, Jr., Tito A. Mijares, and Stephen A. Resnick.

² Incidentally, Bantegui mistakes a hypothetical example for a factual U.S. case in citing Gardner Ackley's textbook example about the proportional vs. the non-proportional consumption function. Moreover, the example is entirely different because Ackley was demonstrating how a strictly linear consumption function with a positive intercept which is used for either forward or backward projection can lead to nonsense results if carried too far in time. Who can dispute that? This is far from the spirit in which the consumption function estimates for Philippine data were reported in the paper, where some evaluation of the direct estimates obtained was just what was intended.

2. My statistical results are questioned. The 0.99 estimates of the correlation coefficient, r , in a regression indicate that the variation explained by the equation is 97 per cent. What more can one ask for? For this note, I am reporting my estimates of the standard errors of b , which are 0.039 and 0.043, respectively, for the regressions employing current and constant price data. Any t - or F -test will reject the null hypothesis of no-relationship between the variables at the 1 per cent level of significance. Bantegui's use of the "chi-square" test is not only irrelevant but also a misapplication of the statistical test.¹ That b is not significantly different from 1 surprises me the least considering that its value is very close to 1. This does not prove that the estimates of b reflect correct aggregates for consumption or income.²

3. While errors could very well be present in Hooley's estimates, as in *any* attempt to measure data, his attempt was a more direct assault on a national income aggregate which is of considerable importance. In the national income accounts, private consumption expenditures were made to depend on shaky estimates of capital formation. Other national income aggregates are also built on the procedures, benchmarks, and allocation ratios adopted by W.I. Abraham, more than a decade after he had devised them. Given all the difficulties confronting Abraham and the short time he had to construct the basic estimating framework, we can only congratulate him for coming out with the first national income accounts for the Philippines. But with all the statistical resources of the government behind them and the surveys conducted in the late 1950's, it would have been in order for the national income authorities to make a direct assault on the problem.

4. The additional information on the sample of Trinidad's otherwise important paper is certainly welcome. Bantegui, as editor of the *Statistical Reporter*, could have done the profession more service if he did not allow the withdrawal of such vital information in the report when it was published in 1960.

But despite the fact that the responses are from a very limited sample of 12 establishments, one could not help wondering why Trinidad's results were not followed up to enable national income estimators

¹ The chi-square test is useful only when one is interested if observed frequencies "fit" in accordance with an expected theoretical frequency (i.e., a distribution function). For instance, we may be interested to know if certain observed frequencies fit a Poisson or a normal distribution. It is never applied to testing regression fits.

² It should be pointed out here that when the intercept is negative and the estimate of b exceeds unity, dissaving need not be present in the range where the consumption line is below the 45-degree line. However, a $b > 1$ implies that an increase in income leads to marginal dissaving. The c/y estimates, which are greater than 1, also reveal that the national income figures show "dissaving."

to render more precise coverage of such an important concept as capital formation.

5. I have been read out of context. It is suggested that I want surveys unavailable as yet to be used for national income estimation. It is a pity that other scholars have to use their time trying to estimate national income magnitudes based on the available census and survey data.

6. Let me offer my congratulations for the ambitious projects to improve the national income accounts and to build more sets of statistics. I only hope that these ambitious projects do not divert *scarce* statistical resources from improving the national income accounts.

7. I would like to take this opportunity to correct some of the more important typographical errors in my article.”¹

¹ (a) An entry in Table 2 for 1949, page 29: “24.00” should read “-24.00”

(b) Read with the bracketed words inserted:

1) Page 34, Paragraph 2

... Serious attempts should be made by the [statistical agencies to increase] the precision of the national income statistics....

2) Page 34, Paragraph 3

... indebted to William I. Abraham in 1952 for building out [of] a mass of unrelated statistics....

3) Page 39

fn. 28, see above, p. [25].

fn. 29, see above, p. [26].