DIVIDING GOVERNMENT PRODUCT BETWEEN INTERMEDIATE AND FINAL USES: A COMMENT

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In a recent paper in this journal,[2] K. Horz and U. P. Reich correctly note that their approach to the problem of segregating government product into its intermediate and final uses entails some valuation questions.

> . . . . inserting rows of the use of government product in an input–output table implies that a new set of costs is inserted, too, in the business sector as well as the government sector itself. The question arises how to deal with these costs in respect to the total value of output. Either one leaves the output value unchanged by subtracting the government costs in an additional row within the third quadrant, or one enlarges gross output. Both solutions have their advantages and their difficulties.[3]

Although Horz and Reich do not spell out the advantages or difficulties, both solutions may have broader implications for the National Accounts than perhaps the authors have considered. Although the introduction of government costs as intermediate expenses of the business sector, for example, would be offset by a reduction in the latter's profits, and as a result, the balance between the product and expenditure side of the National Accounts would be maintained, it leaves open the possibility that the National Accounts may be interpreted to suggest that business is paying twice for government services—once as an intermediate expense, and once through tax payments. If this contention were accepted, the problem could be circumvented by a downward adjustment in business direct or indirect taxes, or some combination of the two. The question which then arises is on what basis the allocation should be made. Furthermore, even if some means could be found to make a perfect allocation of these taxes, the results obtained could be queried on the grounds that they would not be reflecting economic reality—that is, the true profits earned and taxes paid, but would now be measuring economic variables which in a sense are fictitious and have been derived to suit the particular methodological constraints of the national income accountant.

With respect to the second solution proffered by Horz and Reich of making the necessary adjustment by raising the price of gross output, another fundamental problem arises. Apart from the fact that it could be argued that consumers are already paying for government services in the prices charged by business,

[1]I am indebted to P. S. Sunga for his valuable comments. All views expressed are those of the author and do not reflect any Statistics Canada position.

[2]Horz, K. and Reich, U. P., Dividing Government Product Between Intermediate and Final Uses, *The Review of Income and Wealth*, 28 (Number 3) (September 1982), pp. 325–344.

[3]*Ibid* pp. 338–339.

any assumption regarding higher prices would be based entirely on the notion that there would not be an accompanying reduction in output. Accordingly, it would have to be accepted that business has the ability to pass all of its new higher costs on to the consumer. Even if we were to concede this and accept the authors' contention (and it is a moot point indeed), the National Accounts would no longer be measuring business output at market prices, but business output at national accountant's prices!

The significant lesson to be derived from the article is twofold. First, the National Accounts must be recognized as an interrelated system. Adjustments made in one part of the system must be matched by corresponding adjustments elsewhere. Second, the more these kinds of artificial adjustments are made, the less the National Accounts will measure observable economic conditions which, after all, is its prime objective. Furthermore, if national income accountants lose sight of this objective, the difficulties of identifying how changes in one part of the system affect other parts will be made more difficult, if not impossible. It will also become far more arduous to identify the true complex relationships that exist among the major macroeconomic variables, and National Accounts data will become less useful for analysis.

In conclusion, the upshot of this note then is that the authors' paradigm would appear to be severely limited in a National Accounts' framework—although its logic would seem to be impeccable. This is not to say that their approach to dividing government product between intermediate and final uses does not have any practical uses. Conceivably, it could be used for some special purposes such as the measurement of total consumption.

REPLY

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Berger addresses the problem of valuation that arises when intermediate government output is imputed to its direct user. He is right that a solution is not offered in our paper, although without one the distinction between intermediate and final use cannot be implemented in national accounts. The paper is incomplete, indeed, in this respect.

Berger proceeds to evaluate briefly different alternatives, and finding none satisfactory he concludes that the proposed distinction between intermediate and final use of government product is inapplicable in a national accounts framework.

Before entering into the substance a short note on the method of the argument is in order. Berger alludes to "economic reality", giving it preference over "the methodological constraints of the national income accountant." Yet, on the next page he submits to the limitations which a national accounts framework may impose on a paradigm, the logic of which seems otherwise "impeccable". The lesson of this apparent contradiction is to get away from the