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 idealistic notion of an economic reality beyond and opposed to national accounts. There is no such thing ("Ding an sich") as an economic reality independent of the way in which we view it. National accounts not only describe the economy, but they constitute the terms in which we think about, in fact perceive, the economy. In this context questions of right and wrong are much more a matter of internal consistency and practical use than a matter of approximation to some exogenous "reality". The criticism of "unreality" is thus an objection on the basis of a different paradigm about reality, which may or may not be correct, but the correctness of which cannot be asserted by reference to a third item, "pure" (i.e. unconstructed) reality.

This is particularly pertinent in the field of valuation It is a commonplace in national accounting to oppose market prices to national accounting prices, qualifying the first as the only real values. This is a paradigm in itself, and derived from no other reality than today's economic theory. In this theory, true, there exist only market prices. More precisely, current theory of economic value is concerned almost exclusively with market prices. However, in other paradigms such as the national accounts as well as, by the way, the value theory of the classical economists, more than one notion of value are defined and have meaning, each in its own right. To see market prices as the only real values is a theoretical claim and not just an impartial finding about reality. It is within a theory that one defines what is meant by "reality".

Entering into the argument directly, it goes without saying that the valuation problem is one of the most complex areas in national accounts, last but not least because there is so little guidance provided by current value theory. Valuation of intermediate government services is particularly difficult, because it touches on a sore point in national accounts: the link between market and non-market sectors. In the concept of "domestic product at market prices" valuation at market prices is mixed with valuation at factor cost, not a very consistent procedure. The solution which disturbs these present conventions least would be to add intermediate government services as an additional row in the first quadrant and to subtract it from indirect taxes in the third. This would reduce product at market prices, but leave invariant product at factor cost. Profits would not be reduced nor would it be suggested that "business is paying twice for government services". But we would have a record of how much of government output is used as input elsewhere and this I presume is the paradigm of national accounts.

It was a big step forward to incorporate production of the government sector in national accounts. It is in this tradition only that we propose to make one more step towards fully integrating this sector in the production accounts.