

COMMENT ON PRYOR, PRYOR, STADNIK, AND STALLER:
CZECHOSLOVAK AGGREGATE PRODUCTION IN THE INTERWAR
PERIOD

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I have read with much interest the article on Czechoslovak Aggregate Production in the Interwar period, by Frederic L. Pryor, Zora P. Pryor, Miloš Stádník and George J. Staller, in the March 1971 issue of *The Review of Income and Wealth*.

I welcome any improvement in this field and I do hope that a more detailed computation both in physical units or in statistically deflated money terms may bring our cognizance to a higher level than hitherto. The article by the above-mentioned authors is surely a step forward. On the other hand I cannot subscribe to their reliance on the single method approach only, which although based on more accurate computations lacks the advantage of checks by other data.

This is apparently the case of weights by sectors of origin which the above-mentioned authors have applied. I have checked my results against the number of persons engaged and arrived at relative values per person employed in primary, secondary and tertiary industries of 0.58, 1.22 and 1.39 respectively. (All sectors without housing equal 1.00.) In applying the authors' weights we arrive at relative values per person employed of 0.58, 1.05 and 1.66 respectively. In view of my comparisons with other countries (Austria and Great Britain, in *Politická ekonomie* 10/1969, p. 895) my productivity differentials are more realistic. I also see no improvement in lumping together business and budget services (authors' table 2 on page 38).

Further, I cannot accept the authors' criticism or rather critical hints on page 37. Referring to my estimate of the Czechoslovak GDP by sectors of origin they say:

“Although his estimation procedures are described in only the most sketchy fashion, we believe his calculations to contain considerable double accounting and impermissible inclusions”.

And to this a footnote is added:

“More specifically, social insurance contributions by employers and distributed profits appear to be counted twice and, furthermore, certain pensions are included in the wages estimates. These and a series of other shortcomings of the Krejčí estimates are outlined in considerable detail by Miloš Stádník in ‘Poznámky k práci Jaroslava Krejčího’ (Intertemporal Comparability of National Income in Czechoslovakia), forthcoming.”

There is some confusion and also unfairness in this statement. The main points criticized concern my computation of national income by distributive shares. Here the mention of sketchiness would be a fair reproach did the authors not know Czech and would they not have at their disposal the monthly review *Politická ekonomie*. As this is not the case (they quote my article in No. 6, 1968), I wonder why they have overlooked my article in No. 11 of the same year, p. 1043 and ff. There on pp. 1046–48 I give the details on sources and methods used for calculation of national income and product account from 1929 to 1937. The derivation of my end-use sectors, the lack of which the authors complain about on page 42, is also explained there.

I have stated explicitly that I am using the standard concept of the UN Statistical Office in New York. Whatever views individual authors may have on the philosophy of this concept, it is, in my opinion, the only possible way of getting national income estimates in different countries to a comparable basis. Then there is no sense in pondering over whether a certain item should or should not be included. One has to comply

with the established pattern. One also has to proceed consistently. When all labour income is to be computed as gross (i.e. including the employers' contributions to social insurance and pension funds) then of course this practice has to be analogically applied to the government sector, and the equivalent of pensions has to be included as the sum put aside for this purpose. This has been explicitly stated in the respective UN publications. Double counting, especially if allegedly considerable, has to be proved and not only hinted at, as a matter of "belief" or "appearance". Reference to an unpublished paper as proof is not a means of serious procedure.

My aggregate figures of national income estimate are substantially higher than those of a previous estimate made by Stádník, not only because I have used the above-mentioned UN concept, which, by the way, has been elaborated only after Stádník had published his book, but also for several other reasons. Although I leaned towards Stádník's calculations whenever it was possible (this is amply shown in my article which has been overlooked by the authors), I tried to fill some of his gaps to which my attention was drawn during the preparations for the first (two years) Czechoslovak economic plan. I did so later on, in 1951–1952. Nevertheless I was rather restrictive in my estimates. Thus I estimated the amount of undeclared profits at 20 per cent of the declared profits only. (I did it after a series of consultations with pre-war experts available at that time.) In dealing with interest I used also a restrictive definition of productive credit. Here I could lean on well documented studies by other authors such as Karel Karásek, Pavel Smutný and Karel Maiwald. In view of the cross-checks with other data, I had also to recalculate some of Stádník's series such as undistributed profits and rents (including the rental value of owner-occupied dwellings). From Stádník's production costs in agriculture I had to exclude the direct taxes and increases in real capital because both make up a constitutive part of gross profits and their exclusion from the factor costs is impermissible by any standard. Above all, however, I had to complete Stádník's one-sided approach by another one based on a quite different kind of statistics. I did so by drawing up an estimate of gross national expenditure at market prices. (For detail see my article in *Politická ekonomie* 11/1968.)

I am of course aware of the fact that any improvement which may be done in computation method may again bring approximate results only. Therefore I stress particularly a multi-lateral approach, a "polymethodism" in national income computations. If a national aggregate arrived at by two different methods of computation yields a discrepancy to the tune of -1.7 to $+1.6$ per cent of the total only, as it is in the case of my figures, I think I can be more confident in this estimate than had I arrived at it by using one way only, however sophisticated it might have been.

Although the individual production series in the Pryors-Stádník-Staller paper may be better, i.e., more accurate than mine, on the whole they do not arrive at significantly different results. On the other hand, my bi-methodical approach gives me a subsidiary, independent confirmation of the plausibility of aggregate totals into the bargain.