

# MACROECONOMIC RELATIONS IN CZECHOSLOVAKIA, 1929–1966: CHALLENGE AND RESPONSE

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## I

In the *Review of Income and Wealth* [No. 3, 1968], Dr. J. Krejčí published an article entitled “Intertemporal Comparability of National Income in Czechoslovakia” in which he commented on my book *National Income and Its Distribution with Special Reference to Czechoslovakia* [in Czech, Prague 1947]. I and Professors F. L. Pryor, Z. P. Pryor, and G. J. Staller responded in a subsequent issue of the same *Review* [No. 2, 1971] to Krejčí’s remarks. Krejčí, in turn, has replied with some additional comments in the present issue of this journal. Thus, in the following pages, I want to answer Krejčí’s position in somewhat greater detail than heretofore.

Dr. Krejčí objects that the criticism of his 1968 article ignored his other articles appearing in *Politická Ekonomie*, the official Marxist review published by the Economic Institute of the Academy of Sciences in Prague. I was, however, acquainted with all his articles which have stimulated my decision to criticize Krejčí’s methods and conclusions.

In an exchange of views on the topic under consideration, we have to deal above all with methods and statistical data. Therefore, I shall limit my remarks to those criteria, although the subject of macroeconomic statistics in Czechoslovakia after World War II merits a more comprehensive analysis.<sup>1</sup> More specifically, I shall initially concentrate on those of Krejčí’s statements which clash with some results published in my rather detailed book *National Income and Its Distribution with Special Reference to Czechoslovakia*. On pages 180 and 181 of the latter, there appears a table on the Czech and Slovak National Income at factor cost at current prices which includes many items subsequently cited by the United Nations Statistical Office and, indeed, by an official Marxist publication.<sup>2</sup>

<sup>1</sup>Although such a definitive analysis is yet to be accomplished, some attempts to elucidate this area were made during the period of relative relaxation in Czech politics in 1967–1968. Among these were the following works published in mimeograph by The Economic Institute of the Czechoslovak Academy of Sciences: M. Toms, *Outline of National Income Development During 1937–1948 in Czechoslovakia* [in Czech], Economic Institute of the Czechoslovak Academy of Sciences, Prague, 1966 [mimeographed]; V. Nachtigal, *National Income Statistics in Czechoslovakia* [in Czech], by the same publisher, Prague, 1970 [mimeographed]; M. Stadnik, *The Conception of National Income in Czechoslovakia* (A Study in Doctrinal History for Research in Income and Wealth), [in English], Prague, 1967; *Some Macroeconomic Aspects of Food Industry in Czechoslovakia* [in English], Prague, 1967; *The Concept of National Income in Hungary 1967* [in Czech], Prague, 1967; *Some Statistical and Non-statistical Views of the Economic Reform in Yugoslavia*, Prague, 1967. The works by Dr. Stadnik were mimeographed and published by Economic Institute of the Czechoslovak Academy of Sciences.

<sup>2</sup>*Economic and Social Development of Czechoslovakia* [in Czech], published by the State Statistical Office, Prague, 1968 on the occasion of the 50th anniversary of the Czechoslovak Republic.

I compare these figures of mine with general figures published by Krejčí in his 1968 article. Both figures are for 1929 in billions of Kc.

	<i>J. Krejčí</i>	<i>M. Stadnik</i>	<i>Major differences</i>
Wages	18.3	18.3	—
Salaries	16.5	16.5	—
Extensions of incomes from work	3.7	3.7	—
Income of independent persons in agriculture and forestry	16.6	12.3	4.3
Incomes of other entrepreneurs	10.7	8.94	1.8
Income from activities of individual private corporations	3.9	0.50	3.4
Income from public enterprises	2.0	1.38	—
Income from credit	4.0	4.14	—
Income from house ownership	2.1	0.74	1.3
Domestic income	77.8	66.1	11.4

The difference of 11.4 billions is a substantial one (17.2 percent of total domestic income according to my calculations). Krejčí asserts in the previous issue of this journal that the difference of 11.4 billions Kc is explained in his article "Development of the Czechoslovak Economy in Global Analysis", *Politická Ekonomie* [No. 6/1968, pp. 581–597, in Czech.] However, a rereading of the latter reveals that the only explanation to be found there (p. 582) is the following statement: "For more detailed information see Jaroslav Krejčí, *Intertemporal Comparability of National Income in Czechoslovakia*, which is to be published in the *Review of Income and Wealth* [No. 3, 1968]. Hence, we are back to where we started, i.e., no explanation whatever of the 11.4 billion Kc.

A further example of Dr. Krejčí's tendency to present controversial statistics without explaining them appears in *Politická Ekonomie* [No. 11, 1968]. On pages 1046 and 1047 he shows the Incomes of Independent Persons in Agriculture and Forestry as follows: (in billions Kc)

Year	<i>J. Krejčí</i>	<i>M. Stadnik</i> <sup>3</sup>
1929	16.6	11.7
1930	13.3	11.6
1931	10.6	9.59
1932	8.7	7.12
1933	10.1	8.31
1934	8.8	8.39
1935	7.4	6.45
1936	9.1	6.74
1937	9.8	7.73

Even after the deduction of direct taxes and increases of real capital we find substantial differences when comparing both series not only in the level of

<sup>3</sup>Not included in my above figures are the following items: rental value of farmers' houses and decrease of wealth in agriculture and forestry explained in my detailed analysis appearing on pp. 46–105 of *National Income and its Distribution with Special Reference to Czechoslovakia*.

individual items but also in the shape of the curve for the period 1929–1937. J. Krejčí cites my data about production costs in agriculture, including data about wood disposal; thus his own estimates of income from hunting and collection of forest plants, which are only a small fraction of the total incomes, cannot explain vast differences evident in Krejčí's resulting figures. Similarly, I cannot accept his assertion regarding a sudden and remarkable increase in agricultural income during 1933 when Czechoslovakia was already involved in a deep global crisis. With the exception of wheat, crop statistics did not deviate in individual years, and in 1933 the weighted prices of rye were substantially lower than previously. The same is true for payments by sugar factories for sugar beet as well as for hops. (For details, see *National Income and Its Distribution with Special Reference to Czechoslovakia*, p. 55 ff.) The percentage of farmers who were not self-supporting remained very high (in 1938, 70.8 per cent).

Agricultural prices began to decline soon after World War I, and with the deflation in 1922 agricultural prices decreased substantially more than industrial prices. This problem of price scissors or price disparity was quantitatively described in detail by V. Brdlik. Since this entrepreneurial disparity in agriculture was strengthened by the disparity in personal consumption of farmers, the natural consequence was the increasing indebtedness of the peasant, seizures, and proletarianization of the country. The debts in agriculture were estimated in 1936 as being ca. 30 billion Kc, with 1.5 billion Kc per year in interest payments. The emigration of farmers to the towns and foreign countries reached 305,000 in the mid-1930's. This was a very high figure amounting to 66 percent of all emigrés who left Czechoslovakia during 1933–1937.

I have explained non-agrarian entrepreneurial income in connection with the item of undistributed profits in individual corporations, and I have warned that some apparently large gains were in reality economic losses, and I have stated that it is necessary to judge this item in individual corporation balances with utmost care. (See *National Income and Its Distribution with Special Reference to Czechoslovakia*, pp. 161 ff.) In Czechoslovakia, the real amount of undistributed profits was never large. In connection with the State auditing budgets, I was informed by experts of the High Auditing Board and of the Ministry of Finance that results for particular years were not always quite comparable, and thus I have pointed to the need for caution. I have stated where my results were based on official tax statistics and where I have used informed estimates.

Krejčí asserts that the period before 1929 was one of great booming development. However, although there is a lack of basic statistics for these years, I would cite the budget speeches of the Minister of Finance, K. Engliš. He stated that the year 1926 was not particularly favorable. Indeed, it was this year that Germany, Czechoslovakia's main trade partner, reached the lowest point of the depression. Although in 1928 Engliš cautiously spoke about economic revival from the middle of 1927 on, he nevertheless pointed to recurrent elements of deflationary crisis, and stressed that no country followed as rigorous a deflationary policy as did Czechoslovakia. He also mentioned the pessimistic views of other observers that the economic revival in Czechoslovakia would soon end because of Germany's economic difficulties.

## II

Krejčí states that he was obliged to increase the cited items because he felt it was necessary to complete my “one-sided” methodology by “another methodological approach based on a quite different sort of statistics”. In his article in *Politická Ekonomie* [No. 4, 1968], he had stressed the importance of a multi-lateral approach or, to use his term, “polymethodicism”, in national income calculations. Krejčí’s remarks regarding my “one-sided” approach are startling, indeed, in that my quantifications and macrorelations were rooted not only in the distributive method (or in the production method where agriculture was concerned), but also in the consumption method as well. Surely, the first assumption of a fruitful discussion is the necessity to be acquainted with the literature in the field, which in this case was not very difficult because of the limited number of Czech and Slovak works in this particular area. In so far as Krejčí claims the priority of the consumption method, I must in all modesty contest such a statement, and express my doubts about the seriousness of such an attitude towards the whole complex of problems connected with this type of macroeconomic calculations. I make the foregoing assertion because in 1947, long before Krejčí made any contributions to this topic, the Ministry of Information published my book *National Income and National Consumption* [in Czech]. The information contained therein added to my “one-sided approach” a rather detailed analysis of national consumption expenditure in 1937 and 1946. Moreover, it is relevant to note that my book was received with interest by several of the statisticians assembled on the occasion of the founding of the International Association for Research in Income and Wealth at Washington, D.C. in 1947. In addition, the information in my book was discussed by the Czech and Slovak members of the Central Planning Commission in Prague in the pre-totalitarian period in planning, and included in the budgets of the Ministry of Finance of 1948 and 1949. My data were also published in the Czechoslovak Statistical Yearbook for 1948.<sup>4</sup>

In his recent articles Krejčí again presents himself as an authority and cites the year 1951–1952 when he discovered, as he says, some lags in my deductions which he fails to identify. Putting aside Krejčí’s observations for the moment, I personally would consider as a much more important document of the time an article published in 1949 by Otto Sik, ironically in the review of socialist humanism, *Nová Mysl* (New Mind), which carried an extremely sharp attack against me and my Western concept of national income.<sup>5</sup> What followed was a time of obscurity, of purges, troubles and feeling of uncertainty everywhere, and this explains why only after a considerable time (in 1968) I had the opportunity to complete my distributive and consumption methods through an input–output procedure for selected years during 1929–1948.

<sup>4</sup>The Statistical Yearbook for 1948 was later placed on the classified list.

<sup>5</sup>I ought to acknowledge that after nearly twenty years Sik, shortly after his nomination as vice-prime minister, publicly apologized at the General Meeting of Employees of the Economic Institute for his attacks on me. This was a gesture which documents the willingness of revisionists to collaborate with non-communist specialists. The apology, however, does not change the fact that such attacks arrested the development of macroeconomics for two decades. The belated invention of “factography”, i.e., the acceptance of macroeconomics, by the revisionists does not repair the damage done.

I would like to add some more remarks about my volume on consumption. I have tried to calculate several aspects of consumption in detail for the Western provinces (with special reference to the Sudetenland and Slovakia). I did not, however, conceive of this methodological procedure as the main one. I was aware of imprecisions in official statistical data, particularly in connection with the items of public consumption, subsidies, and, of course of all types of investments. Nevertheless, even for armaments investments we can get some crosschecks in the wages of workers in building activities in the excellent Czech statistics of obligatory social insurance according to districts and branches until 1939. These statistics do *not* confirm the extremely high level of military investments given by Krejčí, for example, the construction after 1936 of small bunkers in the borderland for one defender with machine gun. For all these reasons I have conceived of the consumption method only as a subsidiary one to my main distributive-share calculations. As far as possible, I have tried to present well-documented, published data, citing all sources exhaustively. I was also aware, as Krejčí apparently is not, of the danger of projecting the consumption weights from family budgets into macrodimensions.

I was, and still am, persuaded that one of the contributions of my analysis in *National Income and Its Distribution with Special Reference to Czechoslovakia* was my critical attitude toward the earlier guesses by R. Hotowitz and P. Smutny, especially in the sphere of agriculture. I came to the conclusion that their calculations resulted from a methodical and statistical error, a deep underestimation, or complete neglect, of costs. In *National Income and Its Distribution with Special Reference to Czechoslovakia* I cited agricultural and tax experts, with whom I was in personal contact, such as Brdlik, Bucek, Kunovsky, Leippert, Novotny, Fiala, Benes, Sauer, Lom, Reich, etc. The book was favorably reviewed by several experts and among the agricultural reviewers (Bruthans and others) there were no objections to my arguments.

The utility of a theoretical book can possibly diminish with time, but the ethics of theory demands that those who bring something new, especially when they change the results previously attained, explain the reasons why they have decided to see things in a different light. Krejčí has not done so. The magnitude of the difference between his calculations and mine, from the point of view of consumption (this time for 1937) is evident in the following table (in billions Kc):

	<i>J. Krejčí</i>	<i>M. Stadnik</i>	<i>Difference</i>
Private consumption	57.5	52.5	5.0
Public civil consumption	10.8	8.1	5.6
Military expenditures	2.9		
Building gross investment	5.7	8.4	6.1
Machinery gross investment	8.8		
Balance of exports and imports	0.4	-0.2	—
Total use	86.1	68.8	—
Hypothetical movement of stocks	-1.4	—	—
Gross national expenditure	84.7	68.8	16.7

(The horizontal disharmony was caused by different evaluations of depreciation.)

The analysis of wages and salaries according to the statistics on social insurance mentioned earlier, as well as analyses of tax statistics, are contained in my recent calculations of input-output tables for selected years (1929, 1935, and 1937). I have tried here to apply an enlarged production method by using and extending L. Sauer's elaboration of official results for industrial establishments. Even from Sauer's conclusions it is evident that Krejčí's data on the gross investments, etc. are exaggerated.<sup>6</sup> The value of total building activities in 1937 represented about 4,900 million Kc. According to Sauer's statistics, which however, must be complemented by official statistics of handicraft, i.e., establishments of 1-5 persons, the total value of production in metallurgy represented 8,470 million Kc, with the share of transport, machines and instruments amounting to about 35 percent. I also have objections to Krejčí's statements on national wealth, number of employed persons, weight of wages and salaries, public consumption, imputed services, etc. However, lack of space precludes any analysis of his deviations from official statistics. In any event, such an attempt would be fruitless, given the absence again of any explanation of his figures by Krejčí.

### III

My main objections, however, are related to Krejčí's claim that he has renewed the quantitative approach in connection with his GNP "balance" for 1966. Krejčí's main conclusion of his article in *Politická Ekonomie*, No. 6, 1968, namely that investments of the Communist regime in Czechoslovakia correspond approximately to the investment quotas in West European countries, and that these quotas were not at all exaggerated and that the only serious problem will be the composition of investments, is so far reaching and represents to my view such a macroeconomic blunder that it merits to be critically analysed in a special article.

<sup>6</sup>M. Stadnik, *Some Problems of Economic Growth in Czechoslovakia*, published by the Economic Institute of the Czechoslovak Academy of Sciences, Prague, 1968 [in English].