brought to you by TCORE View metadata, citation and similar papers at core.ac.uk provided by Illinois Digital Environment for Access to Learning and Scholarship Repository UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
BOOKSTACKS

Digitized by the Internet Archive in 2011 with funding from University of Illinois Urbana-Champaign

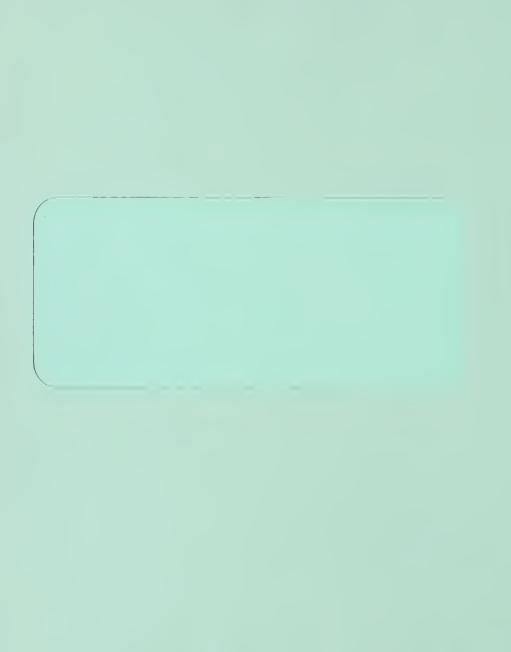
## **Faculty Working Papers**

FINANCING DEVELOPMENT AND TAX STRUCTURE CHANGE IN THE USSR

James R. Millar and Donna Bahry

#363

College of Commerce and Business Administration
University of Illinois at Urbana-Champaign



## FACULTY WORKING PAPERS

College of Commerce and Business Administration University of Illinois at Urbana-Champaign

January 4, 1977

FINANCING DEVELOPMENT AND TAX STRUCTURE CHANGE IN THE USSR

James R. Millar and Donna Bahry

#363

0.00

teril alt de aleitades en la lista de la l

12 14 E 20 20 1

.

\

## FINANCING DEVELOPMENT AND TAX STRUCTURE CHANGE IN THE USSR

The course of economic development produces significant and predictable changes in government revenues. Transition from traditional agricultural to modern industrial economy has involved, and may even require, differences in both the types and incidence of various taxes. The dominant pattern, according to Harley Hinrichs, involves three phases: first, reliance on "traditional" direct (land and poll) taxes, then a shift toward greater use of indirect levies (such as customs duties and excise taxes), and finally the relative growth of "modern" direct (income and profits) taxes as the economy becomes industrialized. Plotted over development time, the historical process may be portrayed by the ratio of direct to indirect taxes (D/I), and the result is a shallow U-shaped curve, with underdeveloped and developed stages at either terminus.

Hinrichs' analysis was based upon data for sixty non-socialist economies, derived from the 19th as well as the 20th centuries. Socialist experiences with taxation, however, were not considered, and it is interesting to discover that the pattern of tax structure change during the Soviet period conforms to Hinrichs' model. The ratio of direct to indirect taxation for the years 1924/25 through 1972--when the USSR was transformed from an agrarian to an industrial economy--traces out the familiar U-shaped curve (Figure 1), with one relatively brief departure during World War II.

In order to compare socialist and non-socialist tax systems, we shall address two questions. First, what were the specific historical reasons for the changes in Soviet taxation? Second, to what extent does the USSR provide additional confirmation of Hinrichs' hypothesis about a systematic nexus between tax structure (as represented by the D/I ratio) and level of



economic development? Our principal finding is that the Soviet experience does confirm Hinrich's hypothesis in broad outline, although, of course, there are specific differences in the Soviet case. Thus the historical behavior of taxation adds another bit of evidence challenging the widely held notion that the Soviet development pattern has been unique. Tax structure in the USSR does indeed appear to be determined by level of development, although cultural or ideological preferences and specific historical events (such as WWII) have led to some divergences from the general model.

Consider Figure 1, which charts the D/I ratio for the Soviet Union from 1924/25, the earliest date for which reasonably complete Soviet data are available. 4 The pattern traced out by the ratio may be divided into several distinct segments, ending in 1925/26, 1935, 1968, and in the current period. The first phase, extending back to the revolution(s) of 1917 (off the chart), witnessed a sharp drop in direct taxation. Most traditional direct taxes (primarily poll and land taxes) that had formed the backbone of tsarist budgets were abolished or abrogated. Formal taxation as a whole plummeted because of both economic dislocations (especially during the Civil War of 1918-1921) and ideological biases against government taxes. In fact, leading Bolshevik economic theorists explicitly argued for the deliberate destruction of pecuniary institutions, including the budgetary system.<sup>5</sup> But by the close of the Civil War it became clear that no substitute for money could be devised. The pressing need to finance economic reconstruction and normalization led to the first serious efforts to control rampant inflation and strengthen financial institutions.

Economic normalization included the introduction of Lenin's New Economic Policy (NEP), the rebuilding of the budgetary system, and the reimposition of indirect taxes (e.g., excises on food and nonfood staples) as retail trade resumed, leading to an ever greater reliance on indirect taxes. By the end



of the first period in 1925/26, the D/I ratio had dropped from a value greater than .80 to .50.

It continued to decline during the next decade, reaching its nadir of .15 by 1935. The overall revenue pattern in this second period involved a relative growth of indirect excises and "industrial taxes" (a combined lump-sum license fee and a graduated levy on gross enterprise turnover) that came to be the basic sources of budgetary revenues. Most direct taxes, on the other hand, were used only to regulate (or eliminate) specific and ideologically undesirable economic activities.

The predominance of excises, "Industrial taxes," and other indirect levies stemmed from two advantages: one, they provided a generally steady and predictable flow of receipts to the budget (especially important in view of the slow development of budgetary institutions) and two, they were viewed as relatively unobtrusive sources of revenue and therefore less of a political liability for a government uncertain of popular support (especially among the peasantry). In contrast, direct taxes on the population meant negative political capital and in any event were difficult to assess and collect. They were imposed primarily on private trade and production (for example, on gross agricultural output), and were increasingly differentiated over time so as to maintain strict limits on the accumulation of wealth in the private sector.

The restricted tax base, coupled with poor reporting and compliance, minimized the impact of these redistributive direct taxes, and the state budget actually collected more revenue by means of direct borrowing from the population during the latter part of this second period than by direct taxes on individuals. At the same time, however, one other source of direct taxation began to play a more prominent role. Although a small item at the outset, deductions from the profits of socialized industry represented a



growing source of revenue, especially after the economy was fully nationalized and set on a course of rapid industrialization.

Although the uses and importance of direct and indirect taxes were thus already determined during the 1920s, the forms and rates of various taxes shifted frequently as budgetary policy and financial institutions developed. By the introduction of the First Five Year Plan in 1928, the revenue system had proliferated into a cumbersome network of taxes--loopholes in one were often remedied by creating another, a practice that increasingly complicated and delayed revenue collections. At the same time, the budget assumed a greatly expanded role in financing capital investment, thus increasing pressure on the Finance Commissariat to collect revenues more quickly and efficiently. To streamline revenues, a series of tax and non-tax payments (including the old excises and "industrial taxes") were consolidated in 1930 into two basic sources: the turnover tax and profit withdrawals from socialist enterprises. The first, levied as a percentage of trade turnover (primarily on consumer goods) was by far the most important, accounting for an average of 67% of budget revenues during the 1930s. Like previous indirect taxes, it was relatively easily and quickly collected, and, more important, it could be levied and paid independent of any short-term fluctuations in production. 7

More narrowly differentiated than the turnover tax (which was initially assessed by branch of production), profit withdrawals served mainly to "equalize" net enterprise receipts within various branches of production. 8

These revenues, (treated here as a profit tax), were collected both as a percentage of enterprise receipts and as a residual after all other deductions from enterprise income had been paid out. Profit tax receipts thus depended



on enterprise success in meeting production plans, which made them difficult to budget and less stable than the turnover tax. For these reasons, profit taxes played a relatively minor role in the early decades of Soviet rule, though after 1935 they actually came to dominate budget proceeds along with the turnover tax.

Other forms of direct taxation raised only a small amount of revenue, since they were viewed primarily as instruments for restructuring production or ownership and were not intended as revenue devices. Local taxes and fees (mainly taxes on property and construction that went exclusively to local budgets) were the main exceptions to this rule, and they grew steadily throughout the first two Five Year Plans. They provided funds to finance the expansion of local public services and apparently were intended, as Davies observes, to be spend "visibly" on local needs. 9

By the close of the second period (1935), Soviet budgetary institutions were well-developed and the major current tax sources already dominated budget revenues. In 1935 the D/I ratio stood at its lowest point ever in Soviet history: 0.15. The turnover tax was by far the most important source of revenue throughout the first two Five Year Plans, and in this sense to it must be attributed the main credit for financing successful rapid industrialization in the USSR. It is important to note that the incidence of the turnover tax fell partly on the producer of agricultural products (the collective farmers primarily) and partly on the (primarily urban) consumer of these products. Sales of industrial consumer goods yielded little turnover tax revenue, and industrial producer goods yielded even less. Consequently, it is fair to say that it was the rural and urban poor who bore the brunt of financing investment during the first decade of rapid industrial-ization.



The third period in our schema extends from 1936 to approximately 1968—shortly after the introduction of the 1965 "Kosygin reforms." This period reveals a gradual but persistent shift from primary reliance upon indirect taxation (especially the turnover tax) toward profit taxes (and to a lesser extent, personal income taxes). As a result the D/I ratio rose from 0.15 in 1935, to its historical peak in the USSR of 1.45 in 1968.

The war years form an exception to this pattern. During WWII the upward trend in the D/I ratio was greatly accelerated, reflecting the drop in output and trade, the loss of territory, and the conversion of productive capacity to wartime ends. Receipts from both profit withdrawals and the turnover tax fell precipitously, but these losses were partially offset by increases in direct taxes on and by direct borrowing from the population. The regime increased the rates of income, agricultural and local taxes (by as much as 100%), and imposed a war poll tax and a special levy on bachelors and families with few members. As a result, direct taxes grew from 15.7% of total revenue in 1938 to 27.6% in 1943. Meanwhile, indirect taxation dropped from 69.1% to 36.2% of total budgetary proceeds. Net borrowing produced 13% of all revenues in 1943—up from an average of approximately 5% during the mid 1930s. As lending to the state was not really voluntary, these funds ought properly to be regarded as additional direct taxation on the population.

It is clear from Figure 1, however, that the war period was exceptional. Postwar recovery restored the relative prominence of the turnover tax in budgetary proceeds, and the more gradual prewar upward trend in the D/I ratio was quickly reestablished after 1946. Basically, profit withdrawals and personal income taxes grew more rapidly than the turnover tax. Profits



gradually assumed greater significance in the budgetary system after 1947 as a measure of and means for promoting enterprise efficiency, especially in sectors that traditionally had been subsidized by the state. The new emhpasis meant increases in wholesale prices and in transport rates that tended to raise the net profits of beneficiary enterprises, thus increasing profit withdrawals from sectors that previously contributed relatively little budgetary revenue.

Direct personal income taxes also expanded following WWII as the wage bill rose. The increase in revenues to the budget, however, was partly offset by a reduction of direct taxes on collective and private agriculture introduced by Stalin's heirs: the agricultural tax (basically, from the mid-1950s, a tax on private plots) was gradually but consistently reduced after 1953, and income taxes on collective farms were reduced after 1960. At the same time, the turnover tax declined in importance. Its base narrowed as retail prices were reduced (between 1947 and 1954) and agricultural procurement prices were raised (throughout the 1950s and 1960s). 14

The changing relative significance of the turnover and profit taxes actually shifted the incidence of Soviet taxation. Given the relative constancy of retail food prices and the rise in agricultural procurement prices, effective rates of taxation on producers and consumers of agricultural products declined throughout the third period. On the other hand, a general rise in productivity meant increased profit margins for enterprises producing non-food consumer goods. As retail prices in this branch stayed virtually unchanged, profits were inflated (with allowance for some upward wage drift, of course). Consequently, the rising D/I ratio in the USSR reflected a changing incidence of taxation (which seems reason enough for treating the turnover tax and profit withdrawals as distinct forms of taxation).



Following the 1965 managerial reforms, the D/I ratio rose sharply. The reforms placed even more emphasis on profitability, rather than gross output, as the main standard for evaluating enterprise performance. One key element shifted responsibility for financing most capital repairs and working capital from the government budget to enterprises. As a result, the average rate of deductions from profits paid into the budget declined from 70% in 1965 to 61% in 1969. At the same time a new round of price reforms (especially in wholesale prices in 1967) increased the profit margin and further narrowed the base of the turnover tax. In fact, 1967 marked a turning point in budgetary revenues, when profit taxes actually exceeded proceeds from the turnover tax for the first time in Soviet history.

Since 1968, the D/I ratio has leveled off, apparently breaking the upward trend of period three. Provisionally, then, we can identify the years since 1968 as a separate, fourth period, one in which the D/I ratio has remained virtually constant at about 1.35. Dissatisfaction with the pace and results of the Kosygin reforms has led to a tightening of control over profits and an increase in the share deducted into the budget. New price reforms, moreover, have narrowed the enterprise profit margin and expanded proceeds from the turnover tax. Yet in spite of the retrenchment, budget revenues are still dominated by profits and by direct taxes in general, in sharp contrast to the reliance on indirect taxation during the years of rapid industrialization.

The Soviet experience leads to the conclusion that changes in taxation have generally followed the pattern outlined by Hinrichs for developing non-socialist countries, although some elements of the Soviet experience are quite distinctive. For example, direct taxes on individuals and foreign trade duties in the USSR suggest points of departure from the broad outline of the Hinrichs model.



Direct taxes on the population had been defined by Bolshevik leaders before the Revolution as a political weapon to expropriate the wealthy or landowning strata. High rates of taxation would thus be used to further class policies of the Soviet state, which automatically limited the revenue potential of most forms of direct taxation. On one hand, widespread imposition of income-related taxes on workers and peasants was avoided. On the other hand, when direct taxes were employed, they tended in many cases to be self-liquidating. As taxes on the "wealthier strata" (kulaks and private entrepreneurs) inexorably increased in the 1920s and 1930s, they affected fewer and fewer people: a 100% levy on private production virtually assured the elimination of the tax base. Thus direct taxes during the "transitional" phase of Soviet development were limited not only by the low levels of income and compliance common to pre-industrial economies, but by political bias as well.

The relative unimportance of customs duties has also diverged from the predictions of the Hinrichs model. Although the growth of foreign trade commonly provides a major source of indirect revenue during the middle or transitional phase of development, Soviet policy explicitly minimized foreign economic ties. Customs revenues thus provided a small share of budget receipts. Their importance, however, is difficult to measure precisely, since customs duties have been omitted from postwar Soviet budget accounts. Indirectly, the relatively small proportion of foreign trade in current national income (estimated at 6%) suggests that this source remains a minor one. 18

The two elements of Soviet fiscal policy indicate the importance of "cultural tradition" (as Hinrichs calls it) along with developmental influences in determining the sources and incidence of government revenues.



Ideological and political constraints have made Soviet leaders reluctant to impose substantial direct taxes on individuals or to rely on foreign trade as a primary source of funds for development.

What Hinrichs calls the influence of "cultural tradition" on the level of the D/I ratio might just as well be called irrationality from an economic standpoint. In other words, the model can explain only the relative level of the D/I ratio over time, not its absolute level. Soviet reluctance to impose personal income tax rates comparable to those of the West appears irrational in this same sense. The preference for direct taxes on profits of socialist enterprises (profit withdrawals) reflects in part this decision to avoid high personal income taxation, but it also reflects a political fact. Experience both in the USSR and in Eastern Europe has shown the political danger of raising retail prices, especially on food products. The campaign to raise wholesale prices paid to farmers for agricultural products during the 1950s and 1960s led, therefore, to a great reduction or disappearance of the turnover tax margin. (In fact, some products are in fact subsidized today, which is a kind of negative turnover tax.)

Of course, the Soviet leadership could have raised turnover tax margins on manufactured consumer goods rather than to allow increases in productivity in manufacturing to accrue as net enterprise revenue, and thus to appear in budgetary sources as profits withdrawals. This may simply be a result of budgetary inadvertance, but it may, on the contrary, reflect an ideological preference. That is, the leadership may prefer to think of budgetary receipts as mainly profits from state-owned enterprises, rather than as sales tax revenue, collected so obviously from the population. In any event, the structure of Soviet taxation today is dominated by profit withdrawals, and the relative shift from the turnover tax to profit withdrawals as the main budgetary source of funds has been accompanied by a shift (of uncertain



dimensions) in the incidence of Soviet taxation. The poor pay less today, relatively, than they did during rapid industrialization.

In general, the Soviet tax policy demonstrates the relevance of Hinrichs' theory of tax structure change for socialist states undergoing economic development. The Soviet case also illustrates the importance of political and cultural biases in determining tax structure, and more detailed analysis of such biases ought to help to refine current theories of taxation.

James R. Millar, Professor of Economics University of Illinois at Urbana-Champaign

Donna Bahry, Asst. Professor of Political Science, VPI



## Notes

- Hinrichs, <u>A General Theory of Tax Structure Change During Economic</u>
   Development (Cambridge, Mass., Harvard Law School, 1966).
- 2. His omission of socialist data stems, in part, from a lack of readily available data or background research in English on centrally planned economies. For example, only two studies have dealt comprehensively with Soviet taxation, both relying largely on data from the pre-WWII period: Franklyn Holzman, Soviet Taxation, (Cambridge, Mass., Harvard University Press, 1955); and R.W. Davies, The Development of the Soviet Budgetary System (Cambridge, Eng.: Cambridge University Press, 1958).
- 3. Dates with a slash (e.g., 1924/25) represent the early system of defining a fiscal year--from October to October (harvest to harvest). The definition was changed to a calendar year basis in 1931.
- 4. The distinction between direct and indirect taxation follows as closely as possible the distribution used by Hinrichs. The principal direct taxes in the Soviet case include deductions from the profits of state enterprises as well as income related taxes on individuals, cooperatives, and property. The principal indirect tax is the turnover tax and its predecessor, the excise tax.
- 5. See, for example, R.W. Davies' description of the debate over money in The Development of the Soviet Budgetary System, pp. 38-45.
- 6. In 1931, for example, gross land proceeds equalled 327 million rubles, while taxes on individuals produced 188 millions rubles (1960 decimal), accounting for 13% and 7% of budget revenues, respectively. See K.N. Plotnika, Ocherki istorii sovetskogo gosudarstva, (M., Gosfinizdat, 1954), p. 106.



- 7. K.N. Plotnika, <u>Biudzhet sotsialisticneskogo gosudarstva</u> (M., Gosfinizdat, 1948), p. 23.
- 8. Ibid.
- 9. Davies, The Development of the Soviet Budgetary System, pp. 74.
- 10. For a discussion of the incidence of turnover taxes, see Holzman, Ch. 10.
- 11. A.N. Malafeev, Istoriia tsenoobrazovanie, v SSSR, 1917-63, (M., Mys1', 1964), Ch. III.
- 12. D.A. Allakhverdian, et. al., <u>Soviet Financial System</u>, (M., Progress Publishers, 1966), p. 114.
- 13. J.R. Millar, "History and Analysis of Soviet Domestic Bond Policy," Soviet Studies, Vol. XXVII, No. 4 (October 1975).
- 14. Malafeev, pp. 257-71.
- 15. Tssu. Narodnoe khoziaistvo SSSR v 1969 g. (M., 1970), p. 742.
- 16. The changes were especially great in several branches of heavy industry:

  between 1965 and 1970, profits in electrical energy quadrupled, those
  in oil production multipled nearly seven times, and those in coal

  production shifted from a negative value (a subsidy of roughly a billion
  and a half rubles) to a positive one (844 million rubles). Increases
  in the light and food industries increased by substantial but less
  dramatic amounts. See, Narodnoe khoziaistvo SSSR v 1974 g., (M., 1975), p. 741.
- 17. Gertrude Schroeder, "Post-Khrushchev Reforms and Public Financial Goals," paper presented at the International Slavic Conference, Banff, 1974.
- 18. Michael Dohan, "Foreign Trade Specialization and its Determinants in the Post-War Soviet Economy, 1950-1970," presented at the International Slavic Conference, Banff, 1974, p. 4.



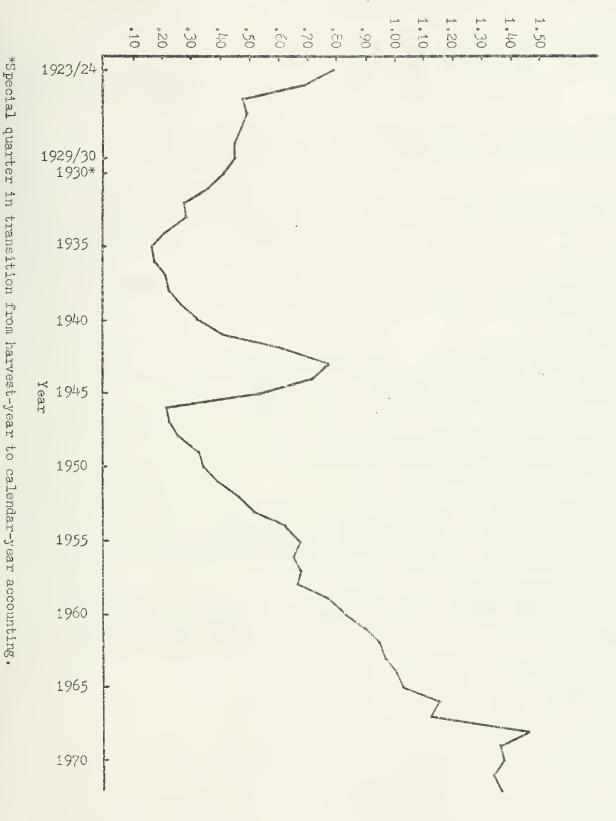


FIGURE I SOVIET D/I RATIO, 1923/24 - 1972



Sources for Figure 1:\*\*

R. W. Davies. The Development o Lae Soviet Budgetary System, (Cambridge: Cambridge University Press, 1958).

Gosudarstvennyi biudzhet SSSR i biudzhety soiuznykh respublik. Statisticheskii sbornik, (M., Finansy, 1962, -966, 1972).

Gosudarstvennye biudzhety soiuznykh respublik v Piatoi Piatiletke.
(M., Gosfinizdat, 1957).

Narodnoe khoziaistvo SSSR v 1972 g., (M., Statistika, 1973).

- K. N. Plotnikov, "Dokhody gosudarstvennogo biudzheta SSSR v 4-oi Stalinskoi Piariletke," Finansy i kredit, #1, (1953).
- , Ocherki istorii biudzheta Sovetskogo gosudarstva, (M., Gosfinizdat, 1954).
- A. G. Zverey, "Finansy SSSR za 40 let Sovetskoi vlasti," in N. Laptev, (ed.), Finansy i sotsialisticheskoe stroitel'stvo. (M., Gosfinizdat, 1957).
- \*\* An appendix with the data broken down into major tax categories is available from the authors on request.











