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Evidence that Soviet plan fulfillment figures are not seriously fudged or fabricated, but need be interpreted with care.

THE VALIDITY OF SOVIET ECONOMIC STATISTICS

Edward L. Allen

The publication, beginning in 1956, of a variety of Soviet statistical handbooks on the economy of the USSR signalled the end of a twenty-year data drought. This shift from the Stalin-imposed era of virtually complete concealment, when even a report on the production of samovars was considered a state secret, has been most welcome. No longer is the student of the Soviet economy forced to function like an archeologist, spending most of his time digging for individual isolated facts. He now can start with figures which, while far from complete, indeed quite skimpy by comparison with data published on the U.S. economy, provide a sufficient basis for serious analysis.

A sufficient basis, if a valid one. Can we accept these Soviet-supplied data as reliable and bona fide? Has the Central Statistical Agency at the bidding of N. S. Khrushchev perhaps erected a Potemkin village of false figures, deliberately fabricated to deceive the West? Or, alternatively, are the data so distorted at their source on the enterprise level as to be meaningless when aggregated? Both these possibilities are briefly examined in this paper.

Checks at the Enterprise Level

First, let us look at the possibility of falsification at the source. Consider at the outset the environment in which the enterprise director works. He is an instrument of the centrally directed, government-owned and -operated economy. The government collects economic data in order to facilitate planning and as a basis for the allocation system which channels materials and supplies where they are needed to fulfill its objectives. The operation of an economy through a system of material balances, by allocation, requires accurate data. It is therefore to the interest of the central control authorities

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that enterprises provide accurate statistics, and falsification has been made subject to severe punishment.

Yet plant managers do manipulate output and inventory data, at the risk of their careers and stiff jail terms, as evidenced by the many horrible examples cited in the Soviet press and technical journals. Why is it they resort to extra-legal practices? The usual reason is that the centrally determined production goal for the enterprise is very high; and also the director is at the mercy of his suppliers in his efforts to fulfill the plan. The successful industrial leader in the Soviet Union, as in the United States, plays the game by the rules which are actually in force, not according to a strict interpretation of legal statutes. The question is whether these manipulations are so widespread or of such a magnitude as to invalidate production figures across the board.

There are a number of in-built controls over the director within the enterprise itself. The chief accountant is responsible to the state for refusing to execute any orders from the director or other senior officials to fudge his accounts and for reporting such demands "up the line." Another plant official, the chief of the quality control department, is subject to imprisonment if he falsely certifies substandard products as meeting stipulated technical requirements. A more knowledgeable representative of central authority within the enterprise is the secretary of the Party organization in the plant, and his salary is paid from Party funds, not by the enterprise. The role of the Party apparatus in guiding and monitoring the activities of enterprises has been greatly increased since Stalin's death.

Another completely independent plant official is the chief of the "special section," or secret police, who is extremely well paid and who maintains dossiers on all key enterprise personnel. This enforcement officer is almost certainly aware, through his network of informers, of any shady or illegal activities being carried on in the plant. If some such activities, however, are necessary to carry out the government's plans—black-market purchase of materials needed to meet the current production goals of the enterprise, for example—he may decide to tolerate them.

Finally, the books of the enterprise are subject to inspection by outside agencies reporting directly to the Council of

Ministers. Representatives of the Ministry of Finance, periodically collecting profits and taxes, check this aspect of the enterprise's financial performance against the plan. The Ministry of State Control polices all enterprises charged with carrying out the decrees of the Council of Ministers and has broad powers to subpoena the records of any unit under suspicion.

The State Bank also plays an important role as a control and inspection arm of the Council of Ministers. Virtually all financial activities of an enterprise—its purchases, wage payments, sales, etc.—are reflected in the transactions recorded in its account at the Bank's local branch. The Bank is responsible for auditing these transactions to insure that they correspond in detail to the specifications of the plan for production. Capital expenditures of the enterprise are similarly controlled and reviewed by the Construction Bank of the Ministry of Finance, which disburses investment funds.

As long as the enterprise is functioning successfully, the watchdogs of the central authorities permit the director legal elbow-room. Thus, if he needs to "borrow" one percent of next month's expected output to reach this month's plan goal no one is likely to object to his reporting the plan as fulfilled. But this borrowed production must be made up in the next accounting period by subtraction from the then current production. If the director continues to fall behind, one or another of the enterprise watchdogs will denounce him to the higher authorities and receive credit for uncovering the "skandal."

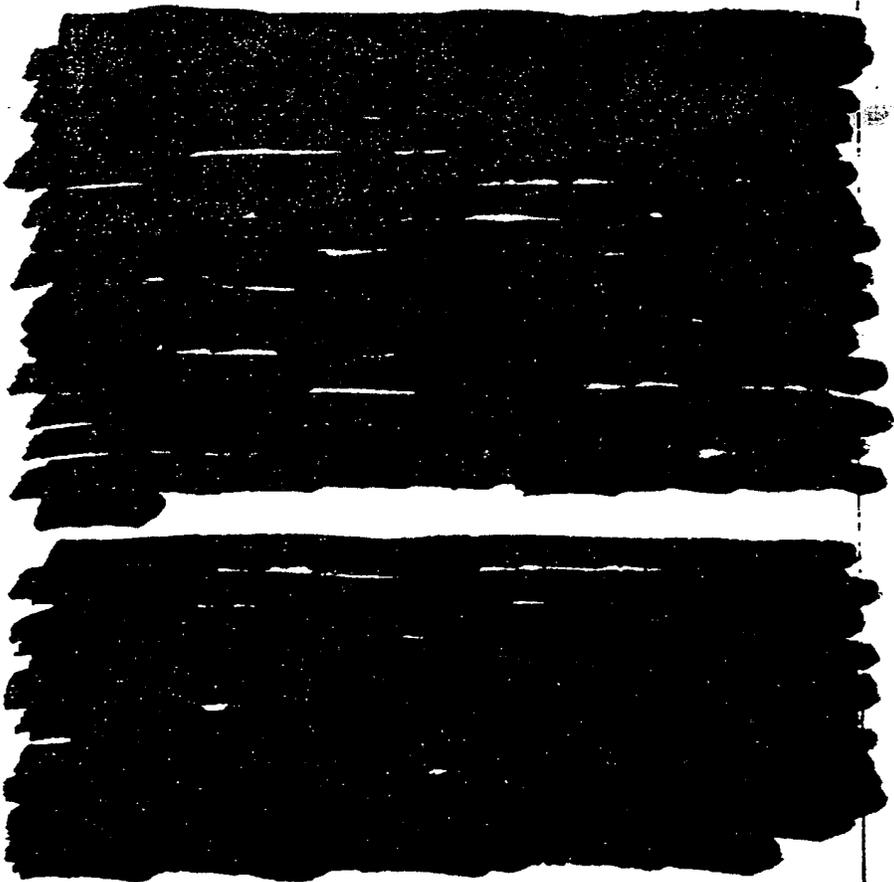
The system, as it is reported by hundreds of Soviet refugees to operate in practice, thus lets only marginal and discontinuous manipulation of output data go unpunished. The error introduced into Soviet production figures by such distortions, one would then conclude, is in all likelihood too small to interfere with their usefulness.

Intelligence Verifications

We in intelligence have further means to check the reasonableness of individual enterprise reports. Military and civilian embassy officials have been engaged in observational reporting from iron curtain countries for many years.

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Within the past few years, opportunities for observational reporting have been multiplied as a result of the East-West exchange program. Visits to the USSR by U.S. experts which followed the signing of the Lacy-Zaroubin agreement of 27 January 1958 have been particularly valuable in providing a check on official reports of industrial production. In 1958 and 1959, U.S. technical personnel visited Soviet factories in the iron and steel, electronics, plastics, electric power, and antibiotics industries. Similar exchanges have taken place between USSR and United Kingdom experts.

¹ See H. H. Hemenway's [redacted] Studies II 4, p. 7.

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In some cases, though not in all, the Western experts have been able to check production records against observed plant capacities. In the Soviet iron and steel industry such a check was extensively carried out, plants representing 40 percent of total Soviet capacity being included on the itineraries. No case of falsification has been reported, although some data given the U.S. delegates by the Soviets are regarded with skepticism.

Agricultural Enterprise

Special mention should be made of particular problems which affect the collection of agricultural statistics. First of all, there is the problem of the competence of the rural collector. Despite the sweeping claims made for Soviet education, only 40 percent of the adult population in 1959 had had eight years of schooling, and the proportion in the rural areas was undoubtedly lower than this nation-wide average. The quality of Soviet agricultural statistics has suffered from the consequent lack of adequate training given the collectors.

Secondly, the typical peasant expertise at *ochkovtiratel'stvo*—throwing dust in the eyes—had developed to a fine art in response to the challenge of the Tsar's tax collectors. That it continued to be practiced long after the Communist take-over was shown by the 1951 Soviet decree that no report of a collective farm claiming the death of an animal from natural causes would be accepted without a veterinary's corroboration.

Through most of the years of the Soviet regime, the final authority for estimating crop production lay with the Office of the Chief Inspector for Estimating Crop Yields, attached to the Council of Ministers. This office relied on a staff of local agents to inspect reports and used historical correlations of weather conditions with crop yields to check the validity of local reports and determine output. It is interesting that U.S. intelligence officers now use this same technique to judge the reasonableness of official Soviet claims for agricultural crop production. Agricultural output statistics are still regarded as generally less reliable than industrial production data, and the agricultural delegations which have gone to the USSR under the exchange program have provided few, if any, checks on the published figures.

There are, however, a number of current developments favorable to improved agricultural reporting, to wit:

The rapidly increasing size and decreasing numbers of collective farms—from 250,000 in 1950 to about 55,000 in 1959—must be resulting in the assignment of better qualified personnel to prepare statistical reports.

The increasing percentage of agricultural output given food-industry processing before going to consumers requires that the center receive relatively accurate data in order to plan for the food processing plants.

The progressive substitution of money wages for payments in kind to labor will reduce independent marketing of collective farm produce, putting more of it under state control and facilitating the spread of economic accountability.

Integrity at the Center

We can move now from the origination of statistics at the farm or factory to their collation and publication at the center. Statistics are an essential operating tool for an economy that relies on allocation rather than a market price system as its controlling mechanism. Lenin's decree of 1918 set up the first Soviet statistical organization, and an industrial census was taken the same year. Since 1948 the Central Statistical Administration has been an independent agency reporting to the Council of Ministers, with jurisdiction over reporting forms and authority to check on the accuracy of reports received from subordinate echelons. The CSA runs its own schools for training accountants and statisticians, writes textbooks, and develops calculating machinery. It receives quantities of reports covering quarterly, monthly, ten-day, and, if the subject is important enough, even daily results.

The reports that CSA receives must be reasonably accurate if the central system of allocations is to work. Despite cut-backs, from 700 to 800 commodities were still reported under centralized distribution in 1959, including the most important ferrous and non-ferrous metals, fuels, chemicals, and machinery. The question of the integrity of the CSA statistics is thus reduced to whether it publishes total production figures unrelated to the sum of the plant production figures it receives.

In other words, does it keep two sets of books, one for the internal operation of the economy, and another to throw dust in Western eyes?

Our most comprehensive check on centralized reporting became available at the close of World War II. The German Army, in its penetration of the USSR, had captured a 750-page statistical document carrying the official Soviet security classification *Not for Publication* and entitled "State Plan for the Development of the National Economy of the USSR in 1941." This document was recovered from the Germans by U.S. intelligence personnel, and the data contained in it were compared with openly published statistics, particularly those given at the 18th Party Congress. It was found that the openly published data were identical, except for minor discrepancies that could be accounted for, with those in the classified document intended for the official use of Soviet planners.

It should also be remembered that Soviet officials need not falsify data to keep the West uninformed. The USSR can easily withhold information either for security reasons or because it would reflect unfavorably on the regime. Since the Communists first came into power they have followed a policy of selective release of data. The controlled release of information, although usually designed to mislead, is conceptually and practically quite different from falsification.

One of the best examples of Soviet manipulation of data for propaganda purposes was in reporting grain production, when they shifted, for the years 1933-1954, from quantity harvested (barn yield) to the larger figures for the size of the crop in the field (biological yield). Although they made no secret of this switch from standard world-wide procedure, some unsuspecting and careless Western writers accepted the biological yield figures without correction for comparison with Western barn yields.

Need for Interpretation

The interpretation of Soviet commodity statistics, in common with those of other countries, depends upon definition of the categories being measured. Soviet definitions and usage are often different from those commonly accepted in the United

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States. Some such lack of direct statistical comparability exists, of course, in the economic data of any two countries, but the reconciliation of Western data is usually an easy task because of explanatory notes appended or explanations available in convenient source books.

Such is not the case in the USSR. Often terms are not explicitly defined, and their meaning must be determined by laborious cross-checking. For these reasons, the statistics released by the Soviet Union must be screened very carefully and not assumed to be comparable to U.S. figures unless so proved by rigorous analysis.

Finally, Soviet aggregate statistics, such as those stating total industrial and agricultural production and national income, whatever merits they may have for internal measurement of progress or external propaganda purposes, cannot be compared with similar measures of total economic activity released by Western nations. The conceptual differences between East and West are too great. For example, the Soviet definition of national income is one of physical production, excluding most of the governmental, professional, and domestic services included in Western income definitions. Variant methods of pricing manufactured products probably introduce another area of noncomparability.

The Soviets have released enough data on physical production, however, to enable us, by augmenting it with additional commodity figures obtained through intelligence research, to compute reasonably satisfactory indexes of both industrial production and national income in terms of Western concepts. These computations will remain a necessity: no matter how liberal the data disclosures of the Soviet leadership in the future, it is unlikely that they will supply us with computations of aggregate indexes based on non-Marxist definitions.

We can be reasonably sure that economic data presented by the Soviet Union will continue to have both meaning and significance. The major research problem will remain in the future what it has been in the past—to find out just what this meaning and significance is.