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## INDUSTRIAL PLANNING IN THE US AND THE USSR

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The past 18 months has been a period of unprecedented free discussion within the borders of the Soviet Union, of organizational and managerial techniques. We have already witnessed a sweeping reorganization of industry. But there are a number of other basic economic problems nagging Soviet leaders. For example, given the objective of rapid growth, what price structure would act as the best stimulant? What tools of analysis are really needed to decide among investment alternatives or to develop an optimum procedure for equipment replacement?

This brief article is "methodological" only in the sense that it calls attention, once again, to the necessity of studying developments in many countries to provide a background and a framework of reference for getting at the meaning of trends in any one nation. It is broadly focused on industrial planning in the US and in the USSR. Whatever communication barriers are brought into being by iron curtains, they rarely affect the transfer of ideas on economic organization between national managerial elites.

Widespread borrowing of American production techniques by the USSR has been a well-publicized feature of that nation's industrial development since the institution of the first Five Year Plan. In the last years of Stalin's life the notion was temporarily advanced that Soviet excellence made a study of capitalist accomplishment unnecessary and even unpatriotic. This policy, which was part of a broader campaign against "kowtowing to the West," was quickly ridiculed after 1953 and replaced by an insistence on constant attention to the technical achievements of capitalism. That there has been a counterpart borrowing of certain Soviet methods by US industry is not so well known.

Although an absolute causal relationship may be difficult to prove, some key components of Soviet planning are being widely adopted by industrial corporations in the US. The most striking adoption has been the five year plan, which is now a routine practice in virtually all large corporations as well as in many smaller firms. Further, long-range planning, a blue-print for the next 10 to 15 years, is becoming common in American industry. The preparation of detailed 15-year pro forma profit and loss statements as well as balance sheets is frequently reported. Increased use of this tool is being widely advocated by management consultants. For example, Bruce Payne recently stated, "Long-range planning is the one really new technique left to management that can give a company a major competitive advantage." 1

Long-range planning in a predominantly free enterprise economy has been made much more possible by a growing realization that techniques are freely at hand to dampen the traditionally wide swings of the business cycle. Given such knowledge, plus the government decision to use countercyclical measures as necessary, which was embodied in the Employment Act of 1946 and reaffirmed by subsequent administrations, a much more solid base for future planning now exists, compared with the years prior to World War II.

What general guidelines are available to the planner in a free enterprise system? Unlike his Soviet counterpart, he does not start with a given politically imposed decision from a body similar to the Presidium of the Central Committee of the Communist Party, defining the basic goals of future economic development. Certainly he is not told that the company objective is to overtake and surpass company X in the shortest possible period of time.

However, the American industrial planner's general frame of reference is the same as that of his Soviet counterpart—the entire economy—even though the former's efforts are devoted to furthering the future of a single firm. This is true for two

Bruce Payne, "Steps in Long-Range Planning," Harvard Business Review, March-April 1957, p. 95.



reasons: first, company planning must begin with projections of the future economic growth of the country (or countries) which constitute the potential market; and second, because there are few long-run institutional limitations on the types of products a single firm can manufacture.

The general facts of life in a dynamic free enterprise society are best mirrored in national income data. Projections of estimated gross national product and of its components, such as purchases by consumers, government expenditures, and the investment of private business, set the broad limits of market possibilities, whether the firm is concerned with the manufacture of consumer products or with capital goods. These subaggregates of gross national product become the first analytical tool of future planning, as the sales of many industries are closely related to them. The post-World War II years have been marked by the setting up of company planning teams including economists skilled in the use and limitations of such data, financial executives, engineers, and legal advisers.

The second reason given for long-range planning in an economy-wide frame of reference — product selection — deserves some elaboration. Broadly speaking, any company is free to choose what it will make in the future, within the limitations of its financial capabilities. There are numerous examples of firms whose product line today was virtually nonexistent ten years ago. These firms, by careful analysis of consumption and investment trends and projections, have successfully anticipated what the market would demand. Such planning methods are in sharp contrast to Soviet practices, for they affirm the sovereignty of the consumer, the fact that his decisions, freely arrived at, are reflected back in the structuring of American industry. It inevitably is the consumer who decides how much to save as well as the pattern of his expenditures.

To summarize, in the USSR, an industrial goal has been set as a result of a political decision, an arbitrary division between consumption and investment, and a set of rigid priorities, traditionally giving primacy to heavy industry. The Soviet planner then works out the necessary number of simultaneous equations to shape the economy to the will of the leadership. In the US, the industrial goal of a firm has been set by weighing such factors as sales and profit potentials for individual products against the background of key marketing variables, including projections of sub-sectors of national income, population, rate of family formation, and so on.<sup>2</sup>

Once the industrial plan goals have been set in the USSR, they are usually given extensive publicity, except for the military-end-product sector and for certain related industries, such as nonferrous metals. This is not the case in the US. In a competitive economy, future plans are shrouded in secrecy. The reason for this attitude is of course the competitive nature of our industry — long-range plans of a leading manufacturer would be most valuable to rival firms.

Although future planning is a relatively new technique in American industry, there is an extensive body of literature dealing with the "how to do it" phase.<sup>3</sup> In comparing Soviet and American planning literature, one finds a number of striking similarities. For example, the need for annual plan revisions, the necessity of "proportional development," and the importance of maintaining the tempo of growth are common to both. In the techniques of plan execution, there are other parallelisms. In the use of cost accounting to control the operations of subsidiary enterprises, the American term is "responsibility accounting," whereas the Soviet term is "economic accountability" (Khozraschet).

However, in the Soviet Union, the primary success of "Socialist competition" is measured in units of physical production. Whereas the Soviets devote a great deal of attention to reducing production costs, when faced with a choice the planners require plant managers to meet the physical production quotas at the expense of all other goals. Furthermore,

<sup>&</sup>lt;sup>2</sup> For an exposition of many factors considered in such an analysis, see Gilbert Buick and Sanford Parker, "The Changing American Market," Fortune, August 1953.

<sup>&</sup>lt;sup>3</sup> See, for example, "Industry Plans for the Future," Conference Board Business Record, August 1952.

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as was true in the US during World War II, when the Soviet leaders assign a very high production priority to a product, they will pay almost any price to insure its availability. It is questionable that this is entirely Marxian, for while Marx did advocate "the management of things" (presumably the reason for severely controlled allocations of labor and material inputs), he also stressed the need for reducing costs, particularly the labor-time cost component. The system of extremely elaborate plan controls, centrally allocating all important inputs, is a leading technique in the Soviet economy which is completely lacking in the US except in wartime. The Kremlin leaders apparently have decided that a socialized economy, striving to maximize the rate of growth along predetermined lines, cannot achieve this objective without centralized allocation of resources.

Rational planning in support of agreed upon objectives is difficult in the USSR because there is no way in Soviet economic theory to measure total cost. Estimates of cost of production (sebestoimost') include physical production costs plus an inadequate allowance for depreciation but not the alternative cost of investment capital. For example, a decision is made to increase steel capacity by 5,000,000 tons. Should this be done in one plant or ten, should a relatively capital-intensive production method be used, or a simpler but more labor-intensive method? Marx having rejected the concept of a "payment for capital," interest computations on capital investment are not permitted, and there is really no fully objective way a Soviet planner can make such decisions. There is no Soviet substitute tool analogous to the Western rate of interest (cost of capital) to compare with projected profit (return on investment) to aid in a decision between alternative methods of implementing plans. That capital investment decisions in the USSR are made in primitive ways, by American standards, is clearly shown in Pervukhin's 1954 admonition to the planners to include the cost of the necessary expansion of coal mines in computing total costs of generating thermal electric power as compared with total costs of hydroelectric power.



The lack of a method of measuring total costs leads Soviet planners to employ a subterfuge, introducing capital charges by the back door through a technique called, "the coefficient of relative effectiveness." However, this technique was uncovered and denounced by 1950 and no substitute has been found.

On the technological level, project engineers probably still make use of the "coefficient of effectiveness" concept in deciding on size and process techniques. Such coefficients however are not standardized, nor are they quite "pure" ideologically, and seldom if ever have the decisive influence which capital costs have in a free enterprise economy. The most recent Soviet literature complains that planners lean toward automation as a key yardstick in the decision-making process, which often results in no production savings per unit of output compared with far simpler (less capital intensive) methods of production. Indeed, there are cases where costs have actually increased after elaborate automatic production lines have been set up.

In a free enterprise economy, a choice between alternative methods of achieving an industrial goal is relatively simple. The answer is found by comparing the various returns on investment implicit in the alternative programs of plan implementation. The measure of return on investment (abbreviated as r.o.i.) is also the major management tool for gauging the success of decentralized operating divisions of a company. Indeed, sound advice to US industrial princes who aspire to be kings is, "keep your eye on the roi."

In a free market, return on investment, or profit rate, is ultimately determined by the interplay of supply and demand forces. In the Soviet Union, prices and profit rates are fixed by the state; in no industry are above-cost returns tied to the total investment or fixed assets of the industry, nor is there any close connection between profit and the relative scarcity (or demand) for goods. Soviet policy keeps profits for the most efficient sector of industry (producer goods), relatively low, while those for the least efficient sector (consumer goods), are relatively high. The combination of high profit rates on consumer products, plus the policy of loading these items with

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the bulk of the turnover tax (another profit to the state), means that consumer prices are intended to perform a rationing or allocation function.

Moving from investment planning comparisons to a comparison of plans for organizational structure, one finds considerable similarity between large US corporations and the structuring of Soviet industrial ministries. One commentator on American industry has stated:

"It would not be very much of an exaggeration to say that the very large divisions of General Motors are run much like units of a planned economy. They resemble remarkably, in their interior organization, the Russian "trusts" . . . Equally striking is the parallel between the approach of the management . . . to the problems of industrial organization." 4

More recently the USSR has put into effect a plan for the massive decentralization of industrial control, following a principle which has been generally acknowledged to be sound by US industry for twenty years. The motives involved in operational decentralization — the development of local initiative, flexibility, bringing authority to make decisions as close to the point of action as possible, and so on. The reasons given in Khrushchev's "Theses" for his program of organizational change are almost identical with those set forth by Ralph Cordiner, President of General Electric, in a 1956 speech entitled, "Decentralization: A Managerial Philosophy." 5 Decentralization in American industry is almost universally a functional division, rather than a geographic division, as in the USSR. Based on American experience, decentralization will work only if (1) real authority for operational decisions is delegated, (2) confidence exists that associates in decentralized operations will have the ability to make correct decisions most of the time, and (3) responsibility commensurate with authority is accepted and acted upon at all levels. Our experience with So-

<sup>&#</sup>x27;Peter F. Drucker, Concept of the Corporation, New York, 1946, p. 123.

Ralph J. Cordiner, New Frontiers for Professional Managers, New York, 1956, pp. 40-79.

viet decentralization is too meager to estimate whether or not a workable division of labor has been made — whether the bulk of operational (as opposed to broad policy) authority has in fact been passed to the 105 regional Councils of National Economy. Indeed, we presently do not possess enough detail to know how much of the plan is based on "Marxist-Leninist principles" and how much bears an unacknowledged "made in America" label.

It is true that local Councils of National Economy emerged in Russia during the period of War Communism, 1917–1921. It is also true, however, that they quickly developed into antiregime centers, opposed to the centralized direction of the state, and that it took many years to bring them under control. They finally disappeared in 1932. As reconstituted in 1957, it seems only logical to believe that the Councils' functions are something different than an exact Leninist blueprint resurrected from the past, and that they have, in part, a foreign origin.

However, rigid adherence to traditional Marxist economic theory is not essential in a socialist state. Yugoslavia has shown this to be true. In that country, capital funds (from state investment allocations) are now bid for competitively by individual enterprises and groups. Material resources are not allocated centrally, and market relationships exist for both producer and consumer goods. Demand determines prices as well as do costs of production. The implementation of centrally planned goals in Yugoslavia is brought about mainly by relying on credit and fiscal policies and by channeling investment toward the desired sectors through the guidance of investment flows of the state bank.

Recent articles in Soviet economic journals have carried discussions suggesting substantial modifications of traditional theory on prices. Advocates of change have come almost, but not quite, to the point of suggesting the use of the Western mechanism of the market in setting prices. In the present atmosphere of intellectual ferment, changes in the Soviet economy and organization are rapid and sweeping. Will the next major shift be toward the Yugoslav model?