PLANNING POLICY

Soviet economic revolution?

by Clifford Gaddy

In a recent feature article in the Communist Party newspaper *Pravda,* a Soviet economist has presented views which could revolutionize Soviet economic theory.

The problem posed in the Aug. 8 *Pravda* article by Professor V. Lebedev is a common one in Soviet economics texts of the last decade and a half; how to fully exploit the potential of the scientific and technological revolution in the national economy. But Professor Lebedev's suggested solutions are far from conventional, and if debated and pursued by others, they could have the most far-reaching practical and theoretical consequences for the U.S.S.R. since the famous planning debates of the 1920s.

There is every reason to believe that this will take place. The principles of economic planning and management which Lebedev elaborates are closely related to the views of a faction of Soviet economists and scientists from the Siberian city of Novosibirsk and elsewhere, who are charting how to make frontier scientific breakthroughs work for the Soviet economy. With Lebedev's article, this tendency is making a new bid for the upper hand in drafting the U.S.S.R.'s 11th Five Year Plan, which will be announced late this year or early in 1981.

The publication of Lebedev's article came four days after a "conference on stepping up scientific and technological progress in the national economy," held in the Communist Party Central Committee. Presiding was Central Committee Secretary A.P. Kirilenko, a Politburo member. Academician G.A. Marchuk, the former director of the Academy of Sciences branch in Novosibirsk, now head of the State Committee on Science and Technology, delivered the report.

Fundamental science

Emphasis on the role of science and technology in the economy has become a stock feature in Soviet writings during recent years. Lebedev, however, specifies that to be meaningful, any such discussion must focus on what he terms "the fundamental achievements of science."

By stressing the word "fundamental," Lebedev wants to avoid confusion between mere innovations within an existing structure and those developments which create a new dimension for the economy. Examples of the latter which he cites include nuclear technology, magnetohydrodynamics (MHD), plasma technologies and genetic engineering. All these technologies, he writes, are characterized by "enormous speeds, continuous processes and qualitative transformations of the substances being processed."

If universal application of existing technologies could increase productivity in industry by a factor of four to five, argues Lebedev, these frontier technologies can raise it anywhere from five to 10, up to 20 times or more. Lebedev makes the crucial point that it is virtually impossible to predict the real potential of productivity increases.

"The struggle for raising the rates of the scientific and technological improvement of our social production, for the most rapid introduction of advanced technology, inevitably assumes a social and political character and becomes one more field of competition between the two opposing social and economic systems."

With this line of argument, Lebedev has addressed one of the most persistent disputes in Soviet economic literature: the relationship of "fundamental" and "applied" scientific research. His endorsement of basic scientific research as the way to unleash untold potentialities for the economy signals that there is likely to be no skimping on the basic theoretical and experimental work that for the Soviet Union has borne very practical fruit in thermonuclear fusion breakthroughs, weapons technology and the tools for developing the Siberian frontier.

Lebedev clearly believes that the planning process itself must be adapted to this awareness of the fundamental importance of science. He emphasizes that much more can be done to draw up a long-term scientific development program than has so far been the case in

Note: The quotations highlighted in the course of this article are translated from Professor V. Lebedev's Aug. 8 *Pravda* article "The Economic Potential of the Scientific-Technological Revolution and Its Utilization."

"We are only in the initial stages of mastering the achievements of human genius. Civilization for the first time is approaching the frontier, beyond which open up the scientific and technological preconditions for a significant increase of free time and the production of an abundance of material goods."

the Soviet Union. He calls for "a strategic outline of the course of the scientific and technological revolution," a program which would become—as mandated in a summer 1979 Central Committee resolution—the most important guideline for the development of the entire economy.

Lebedev also suggests that new institutions may be needed to put these ideas into practice in the Soviet economy. As in many criticisms of parochialism in the management of industry which the Novosibirsk economists have published, Lebedev recommends the creation of nationwide organizations to carry out certain tasks for the whole economy. He calls for a new type of production association—the Soviet version of a corporate group—which would combine applied science centers with enterprises for the production of the necessary technology.

Such a new association, e.g. in the field of laser technology, could concentrate resources and management functions on a scale that no narrow industry could handle. Other areas ripe for this approach, according to Lebedev, are an "Atomic Center" and a "Biosynthesis Center," for testing and applying scientific breakthroughs in those two fields.

Even more significant than Professor Lebedev's practical recommendations are the implications of some of his arguments for Soviet economics. On several basic points, Lebedev breaks with all previous doctrine.

Until now, virtually the whole story of the Soviet economic debate—including both the traditional central planning advocates and the market-oriented reformers—has been a quest for some absolutely reliable, stable "fundamental metric" of economic planning. The underlying assumption was that once the ideal unit—be it gross volume of production, natural units, market price, or a slightly more sophisticated, administratively determined "norm" of output—was discovered, the system would essentially run itself. Development would be balanced, proportional and without crises. Having "out-Adam Smithed Adam Smith," the Marxists could finally sit back and let the "invisible hand" do for them what it couldn't do for the capitalists.

Lebedev clearly rejects the premises of such a debate. His arguments in *Pravda* are in the dirigist tradition of Soviet economics, a tradition that predates the Soviet system altogether. Rooted in the work of the modernizers of ancient Russia, Czars Ivan Grozny and Peter the Great, and in the continuation of that work by Count Sergei Witte at the end of the 19th century, this tradition was the actual basis of Lenin's economic policy even when it was not always theoretically articulated.

"It is becoming realistic to create technological systems which will raise productivity dozens of times over."

For that dirigist tradition, the guiding principle is not the search for a fundamental metric to guarantee balance or equilibrium—not even the "dynamic equilibrium" some Soviet economists refer to in order to justify a growth economy in practice while sidestepping the crucial epistemological issue. Rather, for the dirigist, as opposed to the mere advocate of state control of the economy, the role of economic leadership at any level from plant manager to top politician is to intervene constantly, to make active, subjective decisions about the best possible course of development and to use all available economic and political means to implement that course.

"Each ministry is called upon to function as a national economic leadership staff for scientific and technological progress."

It is on the basis of such an understanding of economics that Lebedev makes a daring criticism of one of the most basic concepts in current Soviet planning theory: the *normativ* ("norm" or "standard output").

Current practice, says Lebedev, is to define the *normativ* as an average of what can be expected in terms of development. This, he writes, is insufficient. Instead, what must be done is to take a different type of *normativ*: one which could serve as "the index of correspondence between our actions and the *maximum* utili-

zation" of the potential of the economy. In the new approach, there would be a "comparison of a large number of variants of development and the selection of the best of them."

Those are nearly the same words used by Marchuk's successor at the helm of the Novosibirsk scientific center, Academician V. Koptyug, in a winter 1980 description of Novosibirsk's computerized "Sibir" model for planning Siberian development.

The implication of Lebedev's remarks is that true economics should assume that doing the *best* thing should be considered the normal, "natural tendency" of an economy. *Not* following the optimal course is abnormal.

As a practical corollary of this theory, Lebedev suggests finding ways to penalize those who fail to move along the optimal course. He also proposes a "beacon" principle—the creation of plants such as a five to six times more efficient steel processing center, which would light the way for an entire industry.

Lebedev concludes with pointed remarks on the issue of economic responsibility for the use of scientific achievements. The bulk of all scientific and technological breakthroughs, he writes, is made available without cost to any enterprise in the Soviet Union that chooses to apply them. Yet these breakthroughs are "the most important part of the intellectual wealth of the entire society and the fruits of great labor."

"It would be advisable in the future to provide plans for the creation of a special type of association, designated for the experimental industrial testing of the most important, fundamental results of the scientific-technological revolution...."

Lebedev calls these achievements "intellectual credit" extended to the nation's enterprises and argues that there should be demands placed on those to whom it is granted. "It would even be appropriate to apply economic sanctions for failure to use the achievements of the scientific and technological revolution within a specified time period," he concludes.

The U.S.S.R. is forging a national scientific policy that will maintain its economic and military weight as a superpower despite tight spots in the Soviet economy. In case anybody was inclined to miss the point, Lebedev has spelled it out as a matter of international strategy: the reach for progress in science and technology is "one more field of competition" between East and West.

Soviet doctrine is 'total war'

by Susan Welsh

The Carter administration's official endorsement of "limited nuclear war," in the new Presidential Directive No. 59, blithely ignores what every one of Carter's defense advisers knows to be the case: that Soviet military doctrine absolutely rejects the policy and insists that war between the United States and the Soviet Union could only be total war.

The documents we excerpt here to prove this were all translated by the U.S. Air Force over the last several years. They are taken from Soviet officers' training manuals, and were written by top-ranking leaders of the Soviet armed forces—including late Defense Minister Marshal A.A. Grechko—between 1970 and 1975.

More topical statements from the daily Soviet press on "limited nuclear war" and PD 59 are covered regularly by this and other news services.

Yet now both President Carter and Governor Reagan have declared their intention to replace the U.S. doctrine of nuclear "deterrence" with a limited "war-fighting strategy" that would target Soviet military facilities rather than cities ("counterforce" targeting). PD 59 orients U.S. strategic planning to a "limited but prolonged nuclear war," hitting Soviet missiles in their silos as well as "politically sensitive" targets like the bunkers protecting Soviet leaders. These measures, it is claimed, will shatter the Soviet political power structure, leading to victory for the NATO side short of full-scale nuclear war.

In fact, due to the Soviets' well-publicized commitment to engage the full depth and breadth of its nuclear arsenal in the opening salvo of a nuclear war, NATO missiles seeking selected military targets would find empty silos when they arrived.

It is sheer bluff, and the policy makers of the Carter and Reagan camps know it, to posit the strategy of limited nuclear war against an enemy whose adopted strategy rejects the very concept of a limited war.

Clausewitzian tradition

Today's Soviet military doctrine forms an unbroken continuity with the Clausewitzian tradition of the 19th