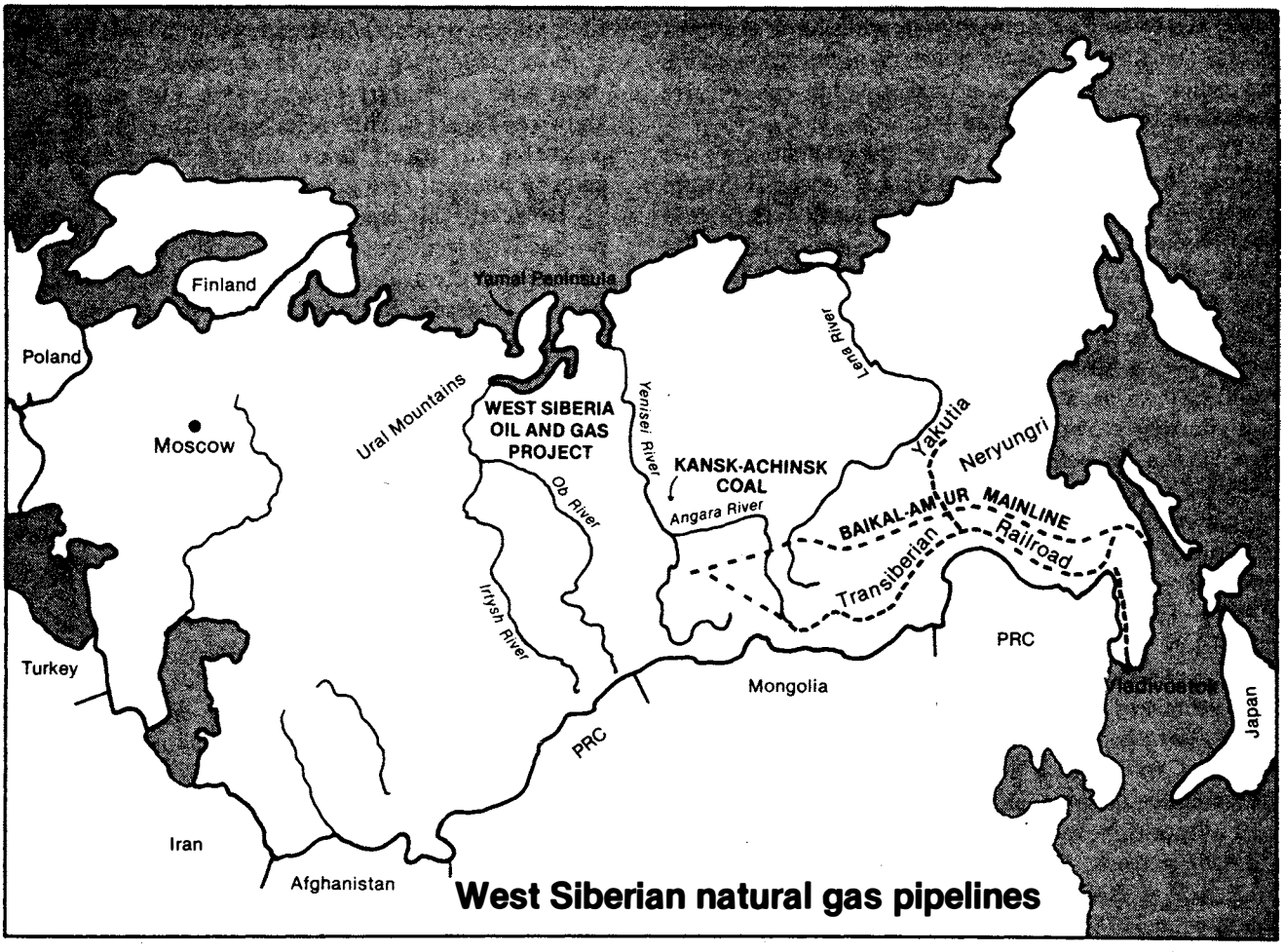
Siberian development: the fulcrum of U.S.S.R. economic growth

by Rachel Douglas, Soviet Sector Editor



The acceleration of Soviet military investment correlates with the international situation and NATO strategies. Of course, the commitment of resources to defense has consistently risen since the Cuban missile crisis of October 1962. But the inflection points observed in the mid-1970s and in 1977-78, for instance, followed closely upon international events which must have convinced the Soviet leaders that a constant rate of military expansion was not sufficient for them.

In 1973-74 there came, in rapid succession: the Watergate scandal, just months after Nixon had been Brezhnev's host in the United States; the October 1973 Mideast war; government collapses and social upheaval in Europe in early 1974; the U.S. Jackson-Vanik amendment linking Soviet-American trade to Jewish emigration from the U.S.S.R.; and the proclamation of a "limited nuclear war" strategy for NATO in the initial guise of the Schlesinger Doctrine. The second inflection point, in 1977-78, had to do with the Soviets' realization of what four years with Jimmy Carter as President of the United States were going to look like. Secretary of State Cyrus Vance's March 1977 trip to Moscow with a proposal for "deep cuts" in strategic arsenals, a proposal guaranteed in advance to be rejected, was read in the Kremlin as fair warning that the opposite course, an arms buildup, would probably ensue on both sides.

Since then have come the "China Card" of American geopolitics; the December 1979 "two-track" decision on medium-range missiles in Europe, which the Soviets regularly call a "first strike" decision, and which preceeded the invasion of Afghanistan by a fortnight; the Polish crisis; and the ouster of Brezhnev's détente interlocutor Valéry Giscard d'Estaing of France last year.

We may be now at the gravest moment yet, as the Soviets read the international crisis, and the consequences become visible not in defense spending alone, but in the political prominence of the Soviet military. The contingent of generals and admirals on diplomatic missions to every corner of the globe is larger from year to year, and during 1981 their contributions to Soviet party and government publications became more assertive. In a July 1981 article for the Communist Party periodical *Kommunist,* Soviet Chief of Staff Marshal Nikolai Ogarkov defined the military and the economy as a whole as coextensive:

> The question of prompt transfer of the Armed Forces and the entire national economy to martial status—of their mobilization in a short period of time—is posed more acutely. . . . Now, as never before, it is necessary to achieve coordination of the mobilization of the Armed Forces and that of the economy as a whole, particularly respecting human resources, transport, communications, the power industry, and means to ensure the resistance and longevity of the country's economic mechanism. . . . There must be further improvement of the system of the mobilization readiness of the national economy, because a close interconnection among the mobilization readiness of the Armed Forces, the national economy and civil defense is a very important requisite for maintaining the defenses of the entire country at an adequate level.

Brezhnev and the chiefs of industry

Through an ever more perilous decade, when attention to defense was so dramatically redoubled, the core of Soviet foreign policy has nevertheless been *war avoidance.* The central figure is General Secretary Leonid Brezhnev and the central idea is his détente, or "relaxation of tensions" with the West. To understand Brezhnev, as well as the possibilities of the post-Brezhnev years, it is best to set aside the aspect of his foreign policy that is foremost both in Soviet propaganda and in Western ruminations about East-West relations, namely, arms limitation.

Looking instead at Brezhnev's career-long allegiance to the Soviet steel industry and later the national economy, something more fundamental is discernible: this is someone concerned with building a nation state. The staying power of Brezhnev, and of his close Politburo allies Kirilenko and Tikhonov, derived not only from their practiced skills at bureaucratic infighting, but from their more essential identity as chiefs of industry.

For the rest of the world, this quality came out in Brezhev's negotiations on East-West trade. Because of what Chancellor Helmut Schmidt had to contribute, it was during Brezhnev's 1978 visit to Bonn that it was most fully exploited, when a 25-year cooperation protocol set joint economic development projects as a bedrock for a stable political relationship. Brezhnev's West German television speech had a profound effect on the population—not the greenies and the future peacenik movement, but the ordinary citizenry—because he spoke with fervor about building industry and developing Siberia.

In Brezhnev there is a vestige, however weakly articulated, of what scared the daylights out of H. G. Wells and Bertrand Russell when they encountered the national electrification plan of G. M. Krzhizhanovskii in the 1920s. It caused progress-hater Russell to curse the Bolsheviks for wanting to make the sensitive Russian soul "industrial and as Yankee as possible."

The outlook is more strongly pronounced in other Soviet circles than that of Brezhnev's party comrades. We see it in a Soviet scientist who speaks proudly about "our Count Witte," the tsarist finance Minister who led Russia's late 19th-century industrialization with American dirigist methods adopted from Germany's Friedrich

List. Academy of Sciences President A. P. Aleksandrov expressed it not long after the Three Mile Island accident, when he was quoted as saying he wished America had a vigorous nuclear energy program because that would make us energy-secure, more stable, and less likely to go to war.

The Soviet military, to the extent it houses military professionals who think more in terms of the global power of the state than of party ideology, is another collecting point for such views.

There are, of course, other tendencies in Soviet policy-making which are devoid of the builder's quality. These were embodied by the late Mikhail Suslov, the Marxist-Leninist encyclopedia who yielded to Brezhnev the top party job he helped Khrushchev vacate in 1964, and the old Communist International apparat carried forward by the Central Committee International Department and
foreign policy think-tank personnel, who have so corrupted their powers of judgment by studying Western methods of sociological analysis that few of them could begin to grasp the significance of maintaining the Witte tradition.

The economy and the succession

Currently circulated Western scenarios for the Soviet leadership succession open the door to dangerous strategic miscalculation. According to one prognosis, even a neo-Stalinist interlude after Brezhnev would inevitably give way to the ascendancy of liberal decentralizers—young technocrats schooled in systems analysis—when the Soviet economy could no longer support its military burden. German Sovietologist Wolfgang Leonhard has made this case in print. Abram Bergson in the International Communications Agency's *Problems of Communism* (May-June, 1981) and William Hyland in the Council on Foreign Relations' *Foreign Affairs* (the latter written after martial law began in Poland) alluded to it, posing the possibility that "a degree of austerity" (Bergson) will face the Soviet defense sector soon.

In the London *Times* of Feb. 18, 1982, Arrigo Levi, unchastened by the results of British attempts to further a liberal decentralizers' takeover in Poland two years ago, proposed that the West start working on means to strengthen the hand of "economic bureaucrats" against "party bureaucrats" and "military bureaucrats" in the U.S.S.R.

Other British scholars accept the probability of internal tightening up, before and after Brezhnev, but look for a new Russian national-chauvinist leadership to hold the fort against ethnic minorities in turmoil.

Both the "decentralizers" and the "Russian" schemas rely on the crumbling of the Soviet empire, a premise which has proven a less than sure guide in the case of Poland. The flaw in such paradigms, which are usually dictated by the prognosticator's own expectations or even preferences about crumbling *in the West,* is that they exclude a range of possible new ideas, policies, and institutional arrangements on the other side. The only reliable way to assess Soviet policy is to gauge what the Soviets are doing against what they would do if they were smart—bearing in mind that a combined strategic and economic crisis invites intervention from the military and scientists, who may be able to raise collective intelligence in the Kremlin by no mean margin.

The two futures of Siberia

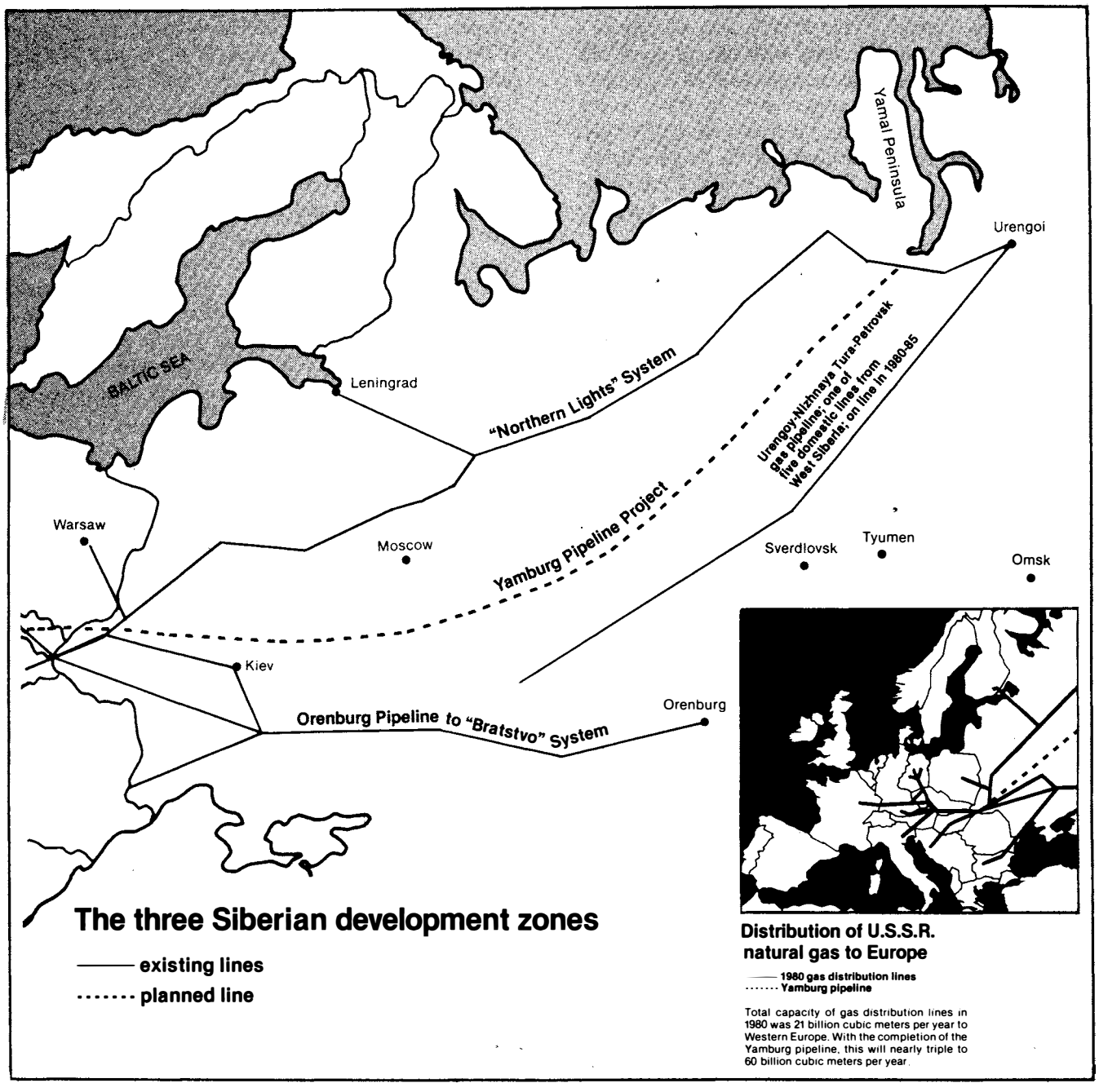
The huge construction projects of Siberia—the region's share of national investments climbed towards 20 percent in the late 1970s—will be of worldwide significance, with or without Western participation. Without the West, in circumstances of aggravated East-West hostility, Siberia will be a main girder of "fortress Russia," and a reinforcement of the U.S.S.R.'s long eastern frontier. Last year a top Siberian scientist told the German business daily *Handelsblatt* that Soviet scientists were projecting development to work without Western technology.

But if the West abandons neo-Malthusianism and gets serious about world economic recovery, then the Siberian frontier will become a boon for trade and development-anchored security, in which the natural-gas pipeline from Siberia to Western Europe will have been the first of many projects.

Most Soviet construction "from the ground up" is now in Siberia. The principle of growth "through better use of already-created production potential and reconstruction and technical re-equipping of existing enterprises" for the rest of the country, is enshrined in the 1981-85 Five-Year Plan, which forbids "location of new and extension of existing power- and water-intensive plants . . . in the European regions."
refurbishing old plants, has been the target of criticism from Soviet economists studying the brake that current investment practice puts on the spread of more productive, new technology. But for now, it is law.

There are three main Siberian development zones, each comprising one or more so-called Territorial Production Complexes (TPC). They are the West Siberian oil and natural gas fields, just east of the Ural Mountains; the Angara-Yenisei river basin in central Siberia; and the land along the north of the Baikal Amur Mainline (BAM), a second trans-Siberian railroad under construction from Lake Baikal to the Pacific Ocean.

West Siberia: The exploitation of West Siberian fossil fuel deposits on a large scale dates only from the 1970s. In 1976-80, oil from the expanse of forest, lakes, and swamps above 58° N latitude accounted for 90 percent of the increase in Soviet petroleum extraction.



This was achieved with the investment of 1 billion rubles a year, or 2.2 percent of total Soviet investment in industry.

Natural-gas exploitation is now proceeding at a faster pace than oil. The Urengoi-Uzhgorod Export Pipeline, commonly known as the Yamburg pipeline after one of the gas fields it will eventually tap, is one of six new gas lines leading from Urengoi, in West Siberia near the Arctic Ocean, being commissioned between 1980 and 1985. The Yamburg pipeline will be 4,465 kilometers long from its source to the Czechoslovak border and will be built in two years time, according to the Soviets. Earth cuts and road-building for the up to $15 billion project began soon after the first contract for the gas deal was signed with Ruhrgas in West Germany on Nov. 20, 1981. Wide-diameter pipe and compressors are coming from companies in West Germany, France, Italy, and Britain. Upon completion, the line will triple Soviet gas exports to Western Europe, bringing in 26 percent of West Germany's natural gas (5.5 percent of primary energy consumption) and earn the Soviets as much as $10-15 billion per year in foreign exchange.

Angara-Yenisei Basin: The Yenisei River, which with

its tributaries comprises the middle one of Siberia's three great river systems, starts with the waters of the Himalayas. On its upper reaches, the 6400 MW Sayano-Shushensk hydroelectric power dam, biggest in the world, is under construction; it is one of 12 dams in place or planned on the Yenisei and the Angara River. Around it is the Sayano TPC, which is to contain the Sayan Aluminum Plant and four clusters of machine-building and light industry development.

In the same region is the Kansk-Achinsk TPC, based on strip-mining the largest prospected Soviet coal deposit, 72.6 billion metric tons of lignite. Soviet specialists are debating heatedly about the best technologies for exploiting this volatile, low-grade coal, but the plan is to raise Kansk-Achinsk's 5 percent share of Soviet coal production substantially. Soviet officials told West German economic officials last year that Kansk-Achinsk could become "a new Ruhr," a center of heavy industry that would invite foreign investment.

Baikal-Amur Mainline: The BAM development project best illustrates the impact of Western investment, or its lack, on Siberian development plans. The original scheme when BAM construction began in 1974, was for 70 percent of its eventual cargoes to be tanked crude oil bound from West Siberia to Japan via a complicated pipeline/freight car transport system. Negotiations for this part of the project broke down, while the Soviets decided to use the West Siberian oil in the western part of the country and for export. Three-way talks among the Soviets, the Japanese, and El Paso Natural Gas Company of the United States also petered out in the late 1970s, leaving exploitation of the trillion-cubic-meter natural gas fields around Yakutsk, north of BAM, an open question; the Soviets had contemplated this as an export venture only.

Construction of the 3,145-kilometer main span of the BAM has gone ahead, and the 1981-85 plan refers to "preparations" for exploitation of iron ore in the BAM zone, which also has deposits of copper, tungsten, manganese, graphite, diamonds, gold, tin, lead, and other minerals. Near one of the iron ore deposits around Neryungri, there is also high-grade coal. This town is reached by the "little BAM" spur of the railroad, already built, by which the coal may be transported to the coast via the first trans-Siberian railroad. By 1979, the Japanese had invested $540 million in the exploitation of Neryungri coal (13.5 percent of Japanese U.S.S.R. investments up to that time), under an agreement for the supply of 5 million tons per year of Neryungri coking coal to Japan over forty years; the scale-up of deliveries to that level is behind schedule.

Siberian economic specialist Abel Aganbegyan, according to Allen Whiting's new book *East Asian Siberia,* looks north of the BAM area and Yakutsk to prospects for exploiting Siberian natural gas adjacent to the Bering Strait and piping it out to the Western Hemisphere. This scheme, on the scale of the projects drafted in the Global Infrastructure Fund of Japan's Masaki Nakajima (*EIR,* Feb. 23, 1982), is only at the proposal stage.

Aganbegyan also boosts an even larger infrastructure project, for diversion of waters from the West Siberian Ob-Irtysh river system to the Central Asian rivers that empty into the Aral Sea. A 2,230-kilometer canal, built over 30 to 40 years, removing one hundred times the earth moved to build the Panama Canal, would bring at first 6 percent and later 15 percent of the Ob's flow south to irrigate 15-20 million hectares of arid land. Study and preparatory work for the canal are ordered in the current Five-Year Plan.

Debates on investment, organization

Siberia suffers from the same afflictions as the rest of the Soviet economy: labor shortage, blockage of new technologies, and organization snarls. In one 1981 article, Aganbegyan claimed that 1 million people in Siberia could be taken out of maintenance and repair jobs alone, if cold-weather technologies were gotten off the drawing boards.

Work with the basic unit of Siberian development, the TPC, has yielded potentially fruitful approaches to the problems of organization. The point of interest is not the systems analysts' efforts at optimally juggling the resources allotted to a given TPC, of which analysis there is a surfeit, including at Aganbegyan's Novosibirsk Institute for the Economy and Organization of Industrial Production, but that several Soviet planners trace the TPC to its antecedents in the electrification and industrialization campaigns of the 1920s and 1930s.

Aganbegyan wrote in the Central Committee industry daily last year that the appropriate model for management of a TPC was the 1930s Ural-Kuznetsk project under Stalinist industrializer V. Kiubyshev, who as a government commissar was empowered to reallocate monies and order departments "to do what the state needed done at a given moment." According to Aganbegyan, the West Siberian Petroleum and Gas Complex, for instance, should be overseen by a person of ministerial rank with this degree of say-so. He should be able to cut through on-site parochialism that wastes millions of rubles; another Soviet report on TPC integration recently cited the case of a major rail line built in West Siberia, for which the Ministry of Transport Construction ommitted any track to connect the railroad to the towns and plants it was supposed to service.

The exigencies of economic mobilization in the face of international crisis, such as Ogarkov wrote about, can work in favor of application of 1930s-vintage command methods. It may also bring to the fore a

lobby of economists for radical reform of Soviet investment policy as it affects technological advance.

At the 26th Party Congress one year ago, Brezhnev demanded that "industries having a particularly strong scientific base, including defense" make a special contribution to "the regroupment of scientific forces" for the economy. Almost universally treated in the West as a criticism hinting at impending sacrifice of defense requirements for consumer or other sectors, Brezhnev's remark has quite another implication if placed in the context of Ogarkov's thesis on integration of the military and civilian economy: it calls for military-style management, efficiency, and R&D in the whole economy.

The Soviets' problem with industrial technology is that innovation remain bottled up, unavailable to industry at large. N. P. Fedorenko and D. S. Lvov, two top analysts from the Central Economic Mathematics Institute, wrote in November 1981: "Some 70 percent of capital investments go to reconstruction and technical re-equipping of production. At the same time, the percentage of output which meets demands of the highest category of quality remains disproportionately low. It is necessary that the basis and starting point of the capital construction plan be a plan for the development of science and technology." They proposed that the bulk of all new investments be designed to serve as "vehicles for new scientific and technological innovations."

The Fedorenko-Lvov article harks back to a proposal made in August 1980 for how to accomplish such a transition to higher productivity through technology. Although meagerly followed up since then, it was launched by economist V. Lebedev on the authoritative pages of *Pravda*. Writing in terms of a "struggle" for raising the technological level of the economy, Lebedev proposed that "centralized leadership of scientific and technical progress and the whole economy" be effected through the establishment of large projects to pioneer advanced industrial technologies and serve as beacons to guide their proliferation through the economy. On investment, Lebedev lined up with Fedorenko and Lvov's later argument: "Plans for the steel plant of the future," he wrote, "show the possibility of raising the productivity of labor by a factor of five or six. . . . A new factory will cost nearly 40 percent less than the best of those now under construction. And every branch of industry should prepare well in advance to build and assimilate such facilities; they should be the chief guide for development." In this light, Lebedev recast the industrial branch ministries as "state staffs for the leadership of scientific and technological progress."

Most important, Lebedev placed a premium on "that technology which is created on the basis of fundamental achievements of science," which opens the door to virtually unlimited gains in productivity. He defined such progress as "intellectual credit" to the economy, and recommended sanctions for failure to exploit them.

These are some of the methods available to the Soviet party/military command for improving economic performance in the months and years ahead.