

# Gorbachev's Economic Agenda: Promises, Potentials, and Pitfalls

An Intelligence Assessment

Approved for Release by CIA: 12/1/1993



Gorbachev's Economic Agenda: Promises, Potentials, and Pitfalls

Key Judgments
Information available
as of 6 September 1985
was used in this report.

Since coming to power, Mikhail Gorbachev has set in motion the most aggressive economic agenda since the Khrushchev era. The key elements are:

- A reallocation of investment resources aimed at accelerating S&T and modernizing the country's stock of plant and equipment.
- A revitalization of management and planning to rid the Soviet bureaucracy of incompetence and petty tutelage and put more operational control of enterprises in the hands of managers on the scene.
- A renewal of Andropov's anticorruption and discipline campaigns, coupled with a new temperance campaign, to increase and perhaps improve worker effort.

All of Gorbachev's initiatives are aimed at raising productivity and efficiency throughout the economy by matching more and better equipment with a motivated work force and an enlightened managerial cadre. He has put his finger on the very tasks that the economy has never done well and has become progressively less able to do as it has grown in size and complexity.

Although Soviet economic performance has improved in recent years from the low levels of 1979-82, Gorbachev still faces an economy that cannot simultaneously maintain rapid growth in defense spending, satisfy demand for greater quantity and variety of consumer goods and services, invest the amounts required for economic modernization and expansion, and continue to support client-state economies. Gorbachev, in our view, has a clear understanding of these limitations; he is obviously extremely impatient that they be addressed now.

Soviet officialdom probably was caught offguard by Gorbachev's sweeping condemnation of past economic policies, particularly considering the recent economic rebound, and was surprised that he apparently was ready to take action so early in his tenure. Despite the urgency of his rhetoric, he seems aware that implementing his programs too rapidly carries substantial economic and political risks:

- He has prepared the party and bureaucracy for substantial cliange by bluntly laying out the need for management reorganization and renewal, but has yet to provide specific details on controversial issues that would provide a basis for organized resistance.
- He has moved aggressively to replace old-line economic managers but has yet to replace Council of Ministers Chairman Tikhonov, regarded by most Soviets as a major political obstacle to economic change.



 He has talked about the potential need for "profound" changes in the area of economic reform, while strongly supporting the need to maintain central control.

Program specifics will be announced by next February along, we judge, with Tikhonov's replacement. It is unlikely that they will contain any radical departures from what Gorbachev has already announced. At present his game plan seems to be a realistic assessment of what can be done in the short run while planning and developing a consensus for more radical change over the long haul if he deems that it is needed.

Success with the initial stages of Gorbachev's program could provide a relatively immediate growth dividend that could be used to bolster worker morale and underwrite future growth. How much economic improvement will occur and how long it can be sustained, however, is very much an open question. Modernization is slow by nature in any economic system and in the Soviet case will run into the perennial conflict between meeting output goals and reequipping enterprises with new equipment and technology. Streamlining the bureaucracy will be resisted by countless officials whose jobs and perquisites are threatened, and a new set of incentives must be instituted to motivate a new type of Soviet manager. Discipline campaigns can go only so far in energizing a cynical work force.

Gorbachev will be hard pressed to find the resources necessary to underwrite his modernization goals. The economic dividend from management reforms and the discipline campaign will not substantially relieve the basic scarcity of resources nor obviate the need for fundamental systemic change:

- Improving worker morale and management effectiveness will require an
  effective incentive system and a greater availability of high-quality
  consumer goods at a time when the investment sector will be oriented toward producer goods and new defense programs will be coming on line.
  In fact, Gorbachev's investment program implies a potential decline of
  some 60 percent in the investment increment going to consumer-oriented
  sectors.
- The regime's plan to hold energy's share of investment constant comes at a time when demand for energy will grow and the cost of offsetting declining oil production will be rapidly rising. If the requisite investment is not forthcoming, the current decline in oil production could become precipitous.

• The increased managerial independence necessary to spur effective technological development and utilization is inconsistent with a centrally planned pricing and allocation system, leading to the likelihood of management disillusionment and subsequent reversion to the very methods that have led to waste, fraud, and mismanagement for years.

Gorbachev could employ various options to address these issues, but all contain serious pitfalls. East European countries could be ordered to shoulder a larger part of the economic burden, including increased exports of equipment to the USSR, but their own deep economic problems increase the likelihood of confrontation between Moscow and its allies. A drive to increase imports of Western technology would come at a time when the prospects for expanding hard currency exports, particularly oil, look dim. A shift of resources from defense to civilian uses could have considerable positive impact over the long run, but even the suggestion of such a shift might damage Gorbachev's relations with the military and risk deep divisions within the Politburo. Finally, major economic reforms to promote managerial effectiveness would encounter strong resistance on political and ideological grounds, particularly since they threaten the institutional prerogatives and thus the privileged position of the Soviet elite.

Indications that Gorbachev has decided on and gained consensus for more radical changes could include:

- New, dramatic initiatives to reach an accord at Geneva and concrete proposals for reduced tensions at the November meeting between the US President and the General Secretary, which might signal a willingness and desire to reduce the Soviet resource commitment to defense and create an atmosphere for expanded commerce with the West.
- Select legalization of private-sector activity, particularly in regard to consumer services, which would indicate a willingness to confront past economic orthodoxy in order to improve consumer welfare and thereby economic performance.
- Breaking the monopoly of the foreign trade apparatus, which would signal an increased reliance on managerial independence at some cost to centralized control.

Continued reliance on marginal tinkering despite clear indications that the plan for economic revitalization is faltering would indicate that Gorbachev, like Brezhnev before him, has succumbed to a politically expedient but economically ineffective approach.

# Contents

	Page
Key Judgments	iii
Garbachev's Economic Heritage	, 1
The Gorbachev Agenda	2
Accelerating S&T Progress	5
Restructuring Investment	5
Reorganizing Management and Planning	6
Tightening Economic Discipline	6
An Integrated Approach	6
Favorable Short-Term Outlook	9
Long-Term Uncertainty	10
Problems Facing Industrial Modernization	11
Revitalizing Management	13
Dealing With Finite Resources	14
A Rocky Road Ahead	15

Gorbachev's Economic Agenda: Promises, Potentials, and Pitfalls

#### Gorbachev's Economic Heritage

In March 1985 Mikhail Gorbachev inherited a technologically backward economy that had experienced a decade of slowing growth punctuated by harvest failures, industrial bottlenecks, labor and energy shortages, low productivity, and declining efficiency of investment (see figure 1). The simple growth formula that had propelled the USSR to a major world power in the postwar era—ever-increasing inputs of labor and capital resources—by the mid-1970s was no longer effective.

During the 1950s, this growth formula resulted in rapid gains in output because of the very low level of GNP in the early postwar period and the relatively high efficiency of new fixed investment in reconstruction and repair of war damage. As the USSR moved out of the reconstruction phase in the 1960s, however, highly effective investment projects became more difficult to identify, and centralized planning and management of a burgeoning economy became more cumbersome and inefficient. Unable to improve their ability to deal with an increasingly complex economy, Soviet leaders had little choice but to sustain the large commitment of resources to investment if economic growth was to continue apace. In addition to maintaining larger annual flows of investment, Soviet planners have swelled the expansion of plant and equipment by:

- Holding retirement of equipment to a minimum.
- Prolonging the service lives of technologically obsolete capital through repeated extensive repairs.
- Continually expanding new construction projects, thus channeling the bulk of investment into buildings and structures rather than into new equipment, the principal carrier of new technology.

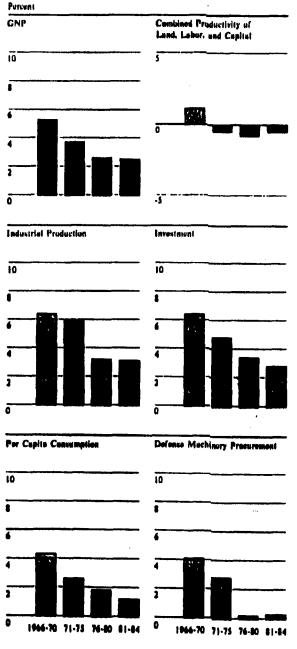
Sustaining a high level of increase in total capital assets by these methods enabled the Soviets to achieve high rates of growth and to support an enormous defense establishment, but also impeded technological progress and productivity gains. Efforts to increase the quality and quantity of output and make better

use of available resources in the economy continued to be frustrated by a backward technological base, inflexible production processes, and, perhaps most important, a cumbersome and inefficient system of planning and management.

These problems were well understood by Gorbachev's predecessors. Rhetorically at least, Brezhnev recognized that in the future the economic system would have to operate differently if it was to meet the needs of the Soviet polity and society. Various Central Committee and Council of Ministers' decrees were promulgated to address these problems, but Brezhnev in his waning years lacked the energy and political will to follow through on his diagnosis. As a result of this administrative lethargy and the endemic nature of many of the problems facing the Soviet economy, Brezhnev's successors were saddled with:

- A technologically antiquated industrial base and a burdensome defense sector that has systematically siphoned off high-quality resources needed for economic revitalization.
- An energy sector beset by stagnation and decline in production of its major fuel—oil—and a 30-year pattern of energy use that inhibits the rapid transition from oil to other fuels.
- A level of technology that generally lags that of the West. Even in military applications, the Soviets have encountered technological problems in recent years that are sharply driving up costs and delaying new sophisticated weapon systems, thus creating a further drain on available resources.
- An inefficient farm sector that despite large investments still employs one-fifth of the Soviet labor force, is bereft of an adequate storage and transportation system, and is unable to produce grain and meat in sufficient quantities to meet rising domestic demand.

Figure 1 USSR: Key Economic Indicators, Average Annual Growth Rates



A hidebound bureaucracy whose rigidities contribute to irrational investment decisions, retard scientific-technical innovation, and encourage high costs and massive waste of resources.

Moreover, by the end of the Brezhnev era, a growing malaise had spread through much of the work force. not only because gains in living standards had slowed, but also because workers believed that the system was incapable of bringing any meaningful improvement. This attitude—reflected in the rise of alcoholism and related health problems—exacerbated the corruption and inefficiency that had permeated the Soviet economic bureaucracy from farmhand to factory worker to the ministerial superstructure. Workers and managers alike spent increasing amounts of time and effort trying to insulate themselves-often through illegal means—from the effects of shortages in both the home and factory. This reduced productivity on the job and promoted greater shortages of goods and services throughout the economy, especially for individuals and enterprises with little or no "special access."

While Andropov's ascension to power gave a glimmer of hope for change, his tenure was too short and he had too little personal energy to reverse the decades of abuse and mismanagement tolerated by his predecessors. Anticorruption and discipline campaigns stimulated some improvement in economic growth but made only minor ripples across the surface of the deeply entrenched system of planning and management. Chernenko, for his part, paid little more than lipservice to these initiatives.

#### The Gorbachev Agenda

When Gorbachev came to power, many Soviet officials—except those of the old guard, who felt threatened—had high expectations for a vigorous revival of Andropov's anticorruption and discipline programs, as well as a stepped-up pace of personnel change. But, with economic growth having recently accelerated from the unusually slow rates of 1979-82, many probably felt that he would avoid sharp changes in resource allocations.

#### Gorbachev's Hit List

Gorbachev has made it clear he intends to overcome entrenched resistance to his domestic programs by cleaning house:

- He has named eight new economic ministers since coming to power, including those in charge of oil and steel production.
- He has replaced three Central Committee department chiefs who oversee the machine-building construction, and trade and services sectors.

In addition, he has supervised an extensive turnover among regional party first secretaries—who play a critical role in implementing economic policies, are spokesmen for local economic interests, and act as facilitators in overcoming economic bottlenecks. Already over 20 such afficials have been appointed, nearly one a week since Gorbachev came to power, and more changes are likely during the party elections that will precede next February's party congress.

Gorbachev probably also has other high-level changes in mind:

 Reports persist that he intends to retire Premier Tikhonov at the congress or perhaps even sooner. Some Soviet officials claim that Gorbachev might take the job himself, while others indicate that he will give it to a close ally like RSFSR Premier Vorotnikov or party secretary Ryzhkov.

- Several Soviets have strongly implied that State
  Planning Committee Chairman Baybakov is on the
  hit list, and Gorbachev indirectly criticized him in
  June for undermining an economic experiment being implemented in major industrial sectors.
- Gorbachev may also want to go after the remaining dozen or so top economic officials who have been
   around since the beginning of the Brezhnev era.

He has already shown his intention to reassert party control over the vast economic bureaucracy, which had grown accustomed to Brezhnev's benign neglect. The firings so far have probably sent an unmistakable message to economic officials that they must toe the mark or face disgrace and forced retirement.

Gorbachev, however, has taken little solace in recent economic improvement; by all indications he realizes that long-term gains will require solving endemic problems that for the last decade have prevented the economy from simultaneously sustaining:

- Continued rapid growth in defense spending that had proceeded unabated since the mid-1960s.
- Greater quantity and variety of consumer goods and services demanded by an increasingly discriminating population.
- Rapid growth in investment goods for economic modernization and expansion.
- Increased support for client states whose own economies are coming under increasing strain.

In little more than five months, Gorbachev has demonstrated that he is the most aggressive and activist Soviet leader since Khrushchev. He is taking power by

virtue of his strong, assertive personality and by aggressively inserting his own cadre into key positions. Moving forcefully to place his personal stamp on economic policy, Gorbachev has repeatedly told managers that they must change the way they do business or "get out of the way":

• He has assailed managers by name for lack of innovation, laziness, and poor management and has strongly implied that they will be removed. He has attacked the complacent attitude toward corruption within the party bureaucracy and called for promotion of younger and more competent officials at all levels. While such rhetoric is not new in itself, he has already underscored his intention to back up his tough rhetoric with dismissals (see inset "Gorbachev's Hit List").  He has returned for revision the centerpiece of the planning system's raison d'etre, the draft five-year plan, demanding specific changes—so far unspecified—in the planned pattern of resource allocations for 1986-90.

Gorbachev is determined to deal with the economy's underlying problems. He has thrown down the gauntlet on issues as controversial as the allocation of investment, broad-gauge management reform, and a complete purging of incompetent and corrupt officials from the system. While the details of his economic game plan probably will await the new draft of the 12th Five-Year Plan (1986-90) to be announced at the 27th Party Congress in February 1986, the broad features of his program are already emerging. All are aimed at raising productivity and efficiency throughout the economy-something the system has never done very well and has become progressively less able to do as it has grown in size and complexity. He has called for annual growth in national income of at least 4 percent. If this plan were achieved, growth in real GNP as measured in the West would also amount to an increase of about 4 percent per year—a healthy increase above the good performance of 1983-84 (see inset "Measuring Soviet Economic Growth"). He plans to achieve this goal by pursuing an ambitious strategy for modernizing the economy's stock of plant and equipment and by raising the level of effort and sense of personal responsibility of managers and workers alike.

Gorbachev personally has provided a pointed example of how critical a substantial improvement in productivity and efficiency is to his entire program. In his June speech to a special science and technology (S&T) conference, the General Secretary indicated that an additional 8-10 million people in the labor force and an average annual growth in investment of 5.5 to 7 percent during every five-year period would be required to achieve his goal of 4-percent annual growth in national income in the absence of a substantial increase in the combined productivity of land, labor, and capital. Both he and his audience probably were aware that less than 4 million people will be added to the labor force in 1986-90 and a 5.5- to 7-percent increase in the rate of growth of investment would put

# Measuring Soviet Economic Growth

The principal conceptual difference between GNP and Soviet reported national income is the latter's exclusion of (1) most personal services as well as services provided by the government (for example, health, education, housing, personal transportation and communications, recreation and personal care, government administration, credit and insurance, research and development, and military personnel costs) and (2) depreciation on fixed capital. However, official Soviet statistics on growth of national income overstate real growth, because they do not allow properly for inflation. The CIA index of GNP, which attempts to correct for these differences, has shown real growth to be about I percentage point lower than reported statistics on national income. Moreover, Soviet plan data, such as Gorbachev's 4-percent-growth target. unlike officially reported achieved rates, are not distorted by inflation.

severe strains on the other resource claimants—defense and consumption. They also probably recognized that productivity increases will not be easy—growth in combined productivity of land, labor, and capital has been consistently negative for the last decade.

To help address these issues, Gorbachev has appointed several economic advisers who have long advocated a major overhaul of the economic system: substantial increases in investment in machine building, changes in the incentive structure, a greater role for private activity, and more devolution of authority and personal responsibility to enterprise managers (see inset "Reform-Minded Economist Advising Gorbachev"). The ascent of such reform-minded economic advisers to policy-level positions is a signal of Gorbachev's commitment to finding ways to make the system work better. At present these include accelerating S&T progress, restructuring investment, implementing management reforms, and tightening discipline. (C NF)

## Resorm-Minded Economist Advising Gorbachev

The prominent and controversial economist Abel Aganbegyan has become an influential informal adviser to General Secretary Gorbachev. The longtime director of an economic institute in Novosibirsk, he recently moved to Moscow to head a committee of the Academy of Sciences. Aganbegyan has a history of involvement in controversy with conservatives over his criticism of the workings of the economic system. Several changes he has proposed, which include accelerating the modernization of industry through retooling and a streamlining of the Moscow-based bureaucracy, have become major themes in Gorbachev's recent speeches on the economy.

Aganbegyan's new status is another indication of Gorbachev's intention to shake up the economic establishment. At 52, Aganbegyan's ties with Gorbachev date back to Moscow University days in the 1950s. As an adviser to Gorbachev, he is likely to reinforce the party chief's determination to look for new approaches to economic planning and management.

There have also been indications that Tatyana Zaslavskaya, a well-known sociologist and close colleague of Aganbegyan, may now have a stronger voice in the academic community, if not an advisory role in the government. In a recent interview in Izvestiya, she reiterated arguments originally made about the inappropriateness and ineffectiveness of the centralized economic system in a confidential document that was leaked to the Western press in April 1983.

#### Accelerating S&T Progress

Gorbachev views a modern, efficient industrial base as crucial to the success of his economic program. A special conference was held in June to develop a comprehensive strategy for accelerating technological progress. In addressing the conference, Gorbachev focused on the need for the rapid introduction of new production technology, insisting that the Soviet Union must launch a revolutionary program to reequip its factories and farms with the most up-to-date machinery. He recognizes that acceleration of S&T progress

depends critically on the success of other elements of his strategy. As he pointed out at the conference:

- In carrying out the S&T revolution, the commanding key role belongs to machine building... First and foremost, machine building itself must be reconstructed... In the years 1986-90, capital investment for the civilian machine-building ministries should be increased by 80 to 100 percent.
- The acceleration of S&T progress insistently demands a profound reorganization of the system of planning and management. . . . Without this, everything we are talking about today may remain but a fond hope.

#### Restructuring Investment

Gorbachev recognizes that his call for accelerated technological progress is only possible with a major alteration in investment priorities. Currently, 30 to 40 percent of all Soviet equipment has been in operation for more than 15 to 20 years. By 1990, Gorbachev declared, one-third of the fixed capital stock—including one-half of all machinery—must be "new." He urged that special priority be given to the "development and introduction of fundamentally new systems of machines and technologies" and called for a 50-percent increase in expenditures for retooling existing enterprises financed, in part, by a cutback in new construction.

In his June address, Gorbachev accused the State Planning Committee (Gosplan) of paying "verbal tribute" to the role of civilian machine building while continuing to starve it of resources and suggested that his call for nearly doubling investments for this sector in the 1986-90 period could be achieved by the partial redistribution of capital investments from the industries that use the machines. This "suggestion" was presaged in a particularly forceful statement in a speech to an ideological conference last December, where Gorbachev insisted that the longstanding practice of allocating economic branches the same proportions of new investment from one plan to another must be "changed decisively."

In this context, Gorbachev hinted that the need to supply additional resources to machine building might affect the priority status of two of the biggest claimants on investment resources, energy and the agroindustrial complex:

- He suggested that the share of investment in energy could be "stabilized" by giving greater attention to conservation.
- He indicated that the present level of investment in the agro-industrial complex is adequate and that it is the return on this investment that continues to be unsatisfactory.

He has not addressed how other major claimants on investment—such as defense—will fare.

# Reorganizing Management and Planning

Gorbachev has been particularly critical of intermediate management bodies that choke off initiative and has hinted that they should be streamlined or eliminated. His aim is to rid the system of some of the massive bureaucratic apparatus whose petty tutelage in implementing Central Committee decisions defeats the purpose of the decisions.

The level of specificity in his June speech in Dnepropetrovsk suggested that plans for such a reorganization have now reached an advanced stage and will include the creation of superministerial bodies, starting with agro-industrial and machine-building sectors. His speeches also suggest that these superministries will be restricted to "strategic" planning and leave operational control of enterprises in the hands of the managers on the scene.

Gorbachev's first move to give greater operational independence to enterprise managers was to expand the economic experiment, begun in January 1984, giving enterprises greater control over investment and wage funds and making fulfillment of contractual sales obligations the prime indicator for evaluating enterprise performance (see inset "Managerial Initiatives"). He has also implemented a far-reaching experiment at the Tol'yatti Automotive Plant that increases the plant's authority for its own management and for making purchase and sales agreements with foreign firms, without the direct participation of the ministries or foreign trade associations.

Gorbachev has also endorsed Brezhnev's 1982 Food Program, which, as party secretary responsible for agriculture, he helped formulate. In this connection, he has supported increasing the authority of the regional agricultural production associations (RAPOs)—an innovative form of administration that cuts across ministerial lines and concentrates authority at the local level for coordinating the activities of farms, agricultural service agencies, and processing enterprises in a given district.

# Tightening Economic Discipline

Gorbachev is banking on improved worker effort to immediately bolster economic growth. Because he needs the support of both managers and workers, he has appealed directly to them to buy into his program. He has pledged to increase both the material rewards for good performance and the penalties for violations of economic discipline.

Much of Gorbachev's campaign for improved worker effort, however, will rest on the more vigorous implementation of programs initiated before his tenure. These include:

- Improving labor productivity by reviving the discipline campaign, which Andropov initiated but which flagged somewhat under Chernenko. Gorbachev has already initiated a vigorous antialcoholism campaign that is serving as a daily reminder of the new leadership's seriousness and intensity in attacking problems of both a social and economic nature.
- Tying workers' carnings more closely to their output, through greater differentiation of wages and expanded use of contract brigades—small groups of workers whose earnings depend on fulfillment of contractual obligations to management.

# An Integrated Approach

On balance, Gorbachev's game plan reflects an appreciation of what we and many Soviets believe to be many of the economy's fundamental problems. Moreover, he recognizes that all elements of his program

#### Managerial Initiatives

The Soviets have announced a major expansion of the experiment in industrial management that began on I January 1984 in five all-union and republic-level ministries and was extended this year to 20 additional ministries. The experiment will extend to all machine-building ministries and many consumer-related industries in 1986 and to all of industry in 1987.

The experiment's aim is to improve the central planning and management system by reducing the number of success indicators used to evaluate enterprise performance and by slightly increasing the enterprise's limited control over wage and investment funds. The decree to expand the experiment presents measures to improve product quality and further increase enterprise control over plant operations:

• Enterprises of the machine-building sector producing products judged to be of highest quality will be able to increase their earnings by raising prices up to 30 percent. Enterprises producing lower quality goods will have to cut prices by up to 30 percent and then reimburse the state for lost revenue with money taken from their worker and manager bonus funds.

- Enterprises will have increased authority to spend limited amounts of investment funds at their own discretion for industrial renovation and for construction of housing or other consumer-related undertakings. The state planning and supply organs have been instructed to give such projects priority.
- Penalties for delays, nondelivery, or delivery of inferior goods will be increased, and rewards for timely provision of satisfactory products will be implemented.

Moscow has also announced a managerial reorganization program—described as a model for the rest of the economy—for the Ministry of Instrument Manufacturing (Minpribor). The program includes:

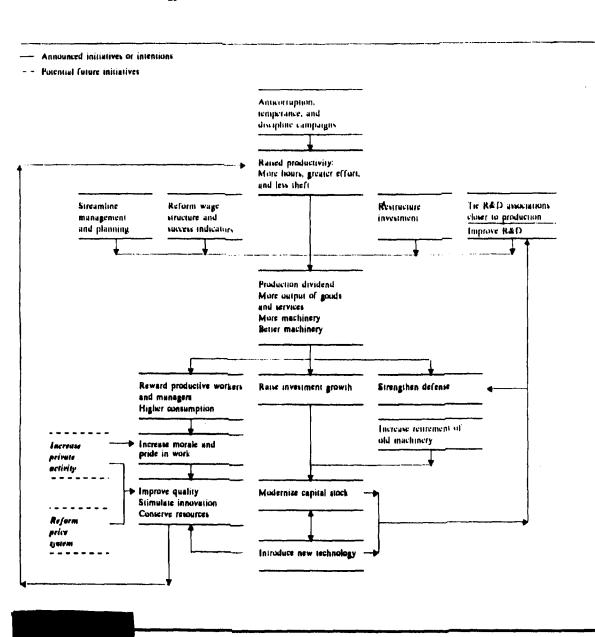
- Eliminating the management level that lies between the enterprise and the ministry.
- Creating additional scientific production associations to spur R&D and prototype production.

cannot be implemented immediately and simultaneously across the economy. The centerpiece of his modernization strategy, replacing the economy's stock of machinery and equipment and improving management techniques, will require years of effort. Nevertheless, Gorbachev probably feels that, unless he starts now in earnest and maintains constant pressure on his economic managers, the future will continue to be hostage to indecision and inaction.

Gorbachev, in essence, is proposing an integrated approach for the resurgence of economic growth (see figure 2). Anticorruption and discipline campaigns are

aimed at reducing worker apathy, which, together with the attendant massive waste and theft of resources, have held down growth in productivity throughout the economy. Some success here, along with some redirection of investment resources, fewer layers of bureaucratic tutelage, and a more equitable system of rewarding productive workers and managers, is geared to provide a growth dividend that can be used both to bolster worker morale (via more and better consumer goods and services) and to underwrite

Figure 2 Gorbachev's Growth Strategy



further growth. Gorbachev appears to be counting heavily on a synergistic effect among the several parts of his program to provide even greater dividends in the years ahead, returning the economy to an upward growth path and, perhaps, providing him with justification for future fundamental changes in the centralized control of the economy, if needed.

Gorbachev's strategy is not without substantial economic and political risk, particularly as he is seeking to change an economy that has recently been on the upswing. In public statements, Gorbachev has so far focused on the general themes of his economic program rather than on specific measures that could galvanize opposition. He may well have decided to refrain from translating vague expressions of support for controversial measures into specific proposals until he has more fully formulated his plans—in part by encouraging public dialogue and selectively testing some options—and consolidated his political strength. He has not openly challenged the legitimacy of centralized economic control, including such fundamental obstacles to the success of his program as the arbitrary nature of Soviet prices that prevents planners from making economically rational decisions, or the lack of sufficient consumer input into production decisions.

Gorbachev's current approach one of first adopting noncontroversial economic measures while simultaneously working on a long-range and more far-reaching program. Gorbachev may be refraining from more radical measures because he hopes that the steps he has already proposed will be sufficient to remedy the economy's ills.

Whether he will be able to achieve his economic goals in the absence of additional, bolder changes—moves toward market socialism, for example—is problematical. There have been hints in Gorbachev's past and recent speeches and in the statements of some knowledgeable Soviet officials that he may eventually be willing to make such changes. In his Lenin Day address in April 1983, for example, Gorbachev stressed the importance of greater reliance on prices as an economic lever. He returned to this theme in his June 1985 address to the S&T conference, calling for a more decisive shift from administrative to economic methods of regulating the economy. In the same address, he also called for an end to "the domination of the consumer by the producer."

There is also growing evidence that Gorbachev favors an expanded role for private initiative as a way of alleviating consumer problems without much additional investment or change in the way the socialized sector is organized and managed. In the past, Gorbachev has been a staunch supporter of expanding production on private agricultural plots, and, in his speech to the Central Committee plenum in April, he twice referred to the contribution that the private farming sector can make to improving the quality of life. In May he returned to this subject in a speech in Leningrad and expressed disagreement with the Politburo's recent handling of the issue. He contrasted the Politburo decision to earmark land for an additional I million private market gardens with Soviet citizens' "requests for some 15 million new plots. "Mathematically," he noted with evident sarcasm, "our approach to this problem is fundamentally weak."

Gorbachev's remarks in Leningrad also lend credibility to earlier reports that he favors the more controversial policy of allowing a greater role for private initiative in the service sector. He called for a "more realistic evaluation" of the major role "moonlighters" currently play in providing such services as home repairs and seemed to suggest that the state should not just tolerate such activity but should actively support it. Materials used, he said, are generally stolen and "come from the state anyway." In this context, Izvestiya acknowledged in August that illegal private services are too widespread to stamp out and called for their legalization under contract to state enterprises.

#### Favorable Short-Term Outlook

Gorbachev needs some near-term success to sustain his early momentum for change, particularly since he is seeking major changes in an economy whose performance has improved in recent years. To this end, he made it clear at a recent Central Committee meeting that the 1986-90 Five-Year Plan must get off to a fast start. He should be able to capitalize on the aura of change and rejuvenation he has created in the early months of his regime to elicit some genuine increase in effort by at least part of the work force. Moreover,

#### Potential Gains From Increased Discipline

According to Abel Aganbegyan, writing in the Soviet labor newspaper Trud in 1981, one-half of the decline in growth of labor productivity that occurred in 1976-80 compared with 1971-75 was due to "people's attitudes toward their work." Andropov recovered some of the earlier momentum with the initiation of a tough discipline campaign in 1982; labor productivity rose by 3,2 percent in industry in 1983 as stackers were forced to actually be on the job during the time they were counted as being there. Gorbachev may be able to recoup even more of the momentum with his revival of the discipline campaign and his strong stand on temperance. Indeed, the reduction in absenteeism due to drunkenness may have a potential for achieving a greater increase in actual hours worked than was achieved under Andropov. Moreover, Gorbachev's direct appeal to workers, together with his other initiatives, may elicit a more responsible effori-at least in the short run-from many who might otherwise merely put in their time.

the discipline campaign, which was evidently an important factor in the economic upswing during Andropov's tenure, could again have a favorable impact on economic performance (see inset "Potential Gains From Increased Discipline"). This, together with a new set of Gorbachev appointees—who probably have the energy and determination to use the carrots and sticks available to them with greater consistency than their predecessors—could promote at least some short-run gains in economic performance. Although Gorbachev is gambling heavily on the impact of his early initiatives—a risky approach given that previous attempts to implement similar changes have been frustrated by entrenched bureaucratic interests—his prospects for near-term success should not be underestimated.

Gorbachev's program also may get a short-run boost from the upsurge in machinery production that occurred in 1983-84 and a particularly favorable harvest this year. Growth in production of machinery picked up sharply in 1983-84, registering annual increases better than 5 percent, after averaging about 3.5 percent per year in 1981-82. The added machinery

could help raise growth in investment enough to get Gorbachev's modernization program moving. Moreover, the outlook is for a substantial increase in crop production and livestock products this year after a dismal performance by the farm sector in 1984 (see figure 3). A better harvest this year would help hold down queues for food, provide workers fewer excuses to be away from their jobs during working hours, improve consumer morale, and reduce hard currency outlays for grain.

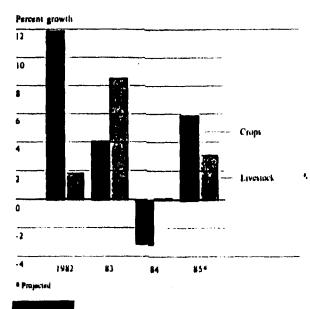
#### Long-Term Uncertainty

How much economic improvement will occur and how long it can be sustained, however, is very much an open question. Short-run gains alone will not ensure success. For longer term aspects of the program to succeed, many things must go right for Gorbachev—some he can control, others he cannot. Moreover, the synergism he appears to count on may not develop, especially in the short run. For example, he hopes to pair improved worker initiative with a modernized industrial base. But this will require redirecting investment resources, which, in turn, could lead to bottlenecks in industries whose investment allocations are squeezed. Any campaign-style modernization program could create imbalances in new capacity and encounter lengthy delays in achieving results.

Moreover, if plants are forced to shut down production lines to permit renovation, short-run performance indicators will be adversely affected. This, in turn, might provide ammunition for Gorbachev's opponents, who could contrast 1983-84 industrial production gains with a poor output record of newly renovated enterprises as evidence of harebrained or misguided programs. In the long run, each of Gorbachev's initiatives faces particularly challenging problems that will take more than strong rhetoric and willing hands to overcome.

'Moscow also should enjoy the benefits of a buyers' market this year in the international grain trade. World supplies are expected to continue to be abundant, largely because of a bumper crop in the United States and reduced Soviet demand for grain.

Figure 3
USSR: Agricultural Performance



Problems Facing Industrial Modernization Renovation. Renovating existing enterprises rather than building new ones is a key element of Gorbachev's modernization strategy. He is likely to find, however, that this approach is fraught with difficulty. Plans to concentrate investment on renovation have been touted by Soviet leaders for more than 15 years but have never been effectively implemented. The strategy has been resisted by enterprise managers because the downtime required to replace old machinery, as well as the uncertainty inherent in new production processes, threatens their ability to achieve short-term performance goals. Maintenance and support for new processes—particularly highly automated processes—are essential, but problematical in the Soviet economy. It has always been safer from a manager's perspective to build a new production plant or add to an existing plant than to renovate an operating facility.

Moreover, the renovation approach is not effective for large areas of the country. According to Soviet literature, many of the existing industrial facilities are so

decrepit that renovation—if possible at all—will be extremely costly and time consuming. Modern equipment requires facilities that have a broad assortment of heating and ventilation features. Most old buildings in the USSR cannot be easily converted to accommodate such equipment. This is especially relevant to the thickly populated regions of the European USSR, the Urals, and the Donets and Dnepr Basins—the old industrial core of the Russian Empire, which accounts for about 75 percent of total Soviet industrial production.

In addition, the emphasis on renovation could exacerbate the ever-present tension in resource supply throughout the economy. For example, as production lines are shut down for renovation, the lost production will have to be made up by other plants if supply bottlenecks are to be avoided. Too much simultaneous renovation could lead to shortages of key industrial materials. Indeed, many of these materials are already stretched so thinly that even small shortfalls are magnified as their impact ripples throughout the system.

Machinery Production. Gorbachev plans to underwrite industrial renovation by a rapid expansion in output of high-quality equipment. To achieve his announced goal of 50 percent "new machinery" by 1990, he must manage an acceleration in the annual autput of producer durables to rates unmatched since the early 1970s. Additionally, the machines must be tailored to meet the unique needs of the wide variety of plants being remodeled—a difficult task for an industry accustomed to manufacturing large lots of a small variety of equipment for use in plants being constructed under highly standardized designs. Indeed, the increased pressure on Soviet machine builders to boost output probably will reinforce the tendency to reproduce the same pattern of output that has prevailed for years, only faster and—unless major gains are made in quality control—perhaps in a more alipshod manner.

Advanced Technology. In addition to rapidly expanding machine-building capacity, Gorbachev must turn around a system characterized by its relative failure to create and use technically advanced equipment.

recent

assess-

ment

clude that the quality of Soviet machinery is well below world standards.<sup>2</sup> The geographic and bureaucratic separation of research organizations from production enterprises impedes introduction of new technology into the production process. Insufficient funding of research—most noticeably in the machine tool industries and in the ministries responsible for producing agricultural machinery—contributes to poor performance. Finally, the Soviet system of bonuses—with its inherent bias toward volume of production and apparent rather than real quality change—is a de facto barrier to the production of better capital equipment. According to one high-ranking Soviet official, only 15 percent of wage and performance bonuses are keyed to the jntroduction of

Many Soviet officials probably view Gorbachev's modernization strategy with pessimism. A "Business Club" roundtable discussion that *Pravda* held recently, for instance, pointed to major difficulties in implementing the ongoing renovation program in the Ukrainian Republic (home for about 20 percent of Soviet industry). The program—developed along the same lines as Gorbachev's strategy—is failing, it was concluded, because of:

- Perverse incentives that discourage construction ministries from undertaking reconstruction.
- · Inadequate funding for installing equipment.
- Lack of qualified workers.

new technology and equipment.

 The inability of the machinery industry to keep pace with the increased demand for more efficient, specialized equipment needed for renovation.

While Gorbachev may ultimately be able to overcome some managerial biases by changing success criteria (which he has not yet done) and appointing new managers, he cannot overcome the economic realities of outdated plants and limited investment resources. In the final analysis, no matter how hard Gorbachev pushes, modernization will occur only slowly and must

# Reforms To Spur Innovation Backfire

Central authorities are attempting to stimulate highquality production by assigning higher prices. Enterprises producing a new product or one judged of the "highest quality" are able to increase earnings by raising the price by up to 30 percent. This is leading to actions that planners did not anticipate, and innovation is the loser.

For example, the Noril'sk Metallurgical Combine responded to the leadership's call to innovate by manufacturing an improved copper cathode. Once produced, it had to be inspected by central authorities to be certified as being of the highest quality. The State Price Committee then had to review a formal petition for a price adjustment. When the higher price was approved, central planners readjusted the combine's sales targets to take into account the increased revenues the superior product should generate. Production plans were formulated and sales targets finalized before industry's demand for an improved copper cathode was tested.

When finally put on sale, the high-quality cathode was rejected by most domestic customers in favor of the cheaper, less advanced version that has been used for years. If the price were reduced by having the copper cathode recertified at a lower quality level, the combine would not be able to achieve its sales output target, which was set on the basis of the higher price. Thus, for all its trouble to produce a technologically advanced product, the combine now finds itself in a no-win situation—unable to sell the more expensive higher quality copper cathode but also unable to cut its price and still achieve persormance targets. Thus, the inflexible and formalistic procedures characteristic of centrally controlled prices and output targets continue to undermine even seemingly sensible measures to encourage innovation.

Evidence also suggests that average leadtimes for using new technology are much longer in the USSR than in the West. Data show that about 30 percent of US and West German inventions are implemented in about one year compared with three years for Soviet inventions. At the end of two years, the US implements about 66 percent; West Germany, 64 percent; and the USSR, 23 percent.

Figure 4. USSR: bureaucracy run amok (U)



come from new construction as well as renovation. Substantial results cannot be expected for several years. Even now, signs are emerging that some aspects of Gorbachev's early initiatives are backfiring and inhibiting rather than stimulating high-quality production (see inset "Reforms To Spur Innovation Backfire"). Part of the problem is the intricate layering of the managerial bureaucracy, which Gorbachev is still a long way from purging. Decades of bureaucratic development have created a labyrinth of buck-passing and indifference that will probably take years and thousands of key personnel changes to rectify.

## Revitalizing Management

Streamlining the bureaucracy, refurbishing its ranks with his allies, and developing better management skills are critical to the success of Gorbachev's plan to stimulate higher productivity. The General Secretary has already managed to firm up his base of support in the Politburo, and members of the Central Committee with his own aides between now and the party congress next February. Nevertheless, his plans to streamline the

industrial ministries, remove unnecessary bureaucratic linkages between enterprises and ministries, and increase the autonomy of enterprises will not be welcomed by many officials whose jobs, and perquisites, will be threatened. In the meantime, Gorbachev runs the risk of having his directives ignored, misinterpreted, or even reversed (see figure 4).

In addition to cleansing the bureaucracy of redundancy, indifference, and gross incompetence, Gorbachev must also come to grips with an incentive system that stifles initiative and fosters corruption. Reducing the myriad of success indicators and tying wages closer to productivity, as Gorbachev has called for, will help. But the real trick will be to develop a set of success indicators that are beneficial both to the individual and to the economy. This, however, can only happen as a result of a major change in the Soviet economic system that will induce producers to respond to consumers and allow prices and wages to reflect

consumer preferences. As long as a set of detailed national preferences (reflected in five-year and annual plans) is imposed on producers, and prices and wages are set and changed at the discretion of central planners, the managerial initiative Gorbachev seeks to develop—despite some likely early success—will eventually succumb to the waste and inefficiency engendered by conflicting interests of enterprise managers and central planners.

Tying workers' wages more closely to productivity will have some beneficial effect in the short run. Wage incentives, however, will only be effective in the long term if there is a substantial increase in high-quality consumer goods available for purchase. Indeed, Gorbachev has personally identified himself with an expanded commitment to consumer-goods production. A 7-billion-ruble program to modernize and increase shoe production has already been announced. According to one Soviet official, action to bolster output of household durables and materials for housing construction soon will follow. But much more investment is necessary to substantially improve the provision of consumer goods, and, given the strain already being put on investment resources, it seems unlikely that consumer-goods sectors will benefit from much additional investment during the next few years. In fact, a high-ranking Soviet official recently acknowledged that problems will continue in the consumer sector. and few additional resources will be made available to overcome them.

#### Dealing With Finite Resources

Gorbachev will be hard pressed to find the resources necessary to underwrite his goal of developing a modernized industrial base. The economic dividend from management reforms and the discipline campaign, while potentially substantial, will not come

<sup>3</sup> Consumer means any purchaser of goods or services—individual or enterprise. (u)

close to meeting these resource needs. Increased discipline, less corruption, greater temperance, and new management will help to raise labor productivity but will do little to offset the declining trend in capital productivity. Given enough time and investment resources, the modernization program could eventually pay off. While five years may be enough time to make a substantial dent in the stock of plant and equipment that needs to be modernized, there is simply not enough investment to go around.

Although the Soviets have not formally revealed their investment plans for the 12th Five-Year Plan period.

about 4 percent annually. At the same time, Gorbachev has indicated that investment in civilian machine building will nearly double, while agriculture and related industrial support will maintain a large share. This will leave little room for increases in other sectors. The consumer may be especially hard hit in the nonfood areas. Gorbachev also will have to deal with pressures to expand investment in other areas as:

- Oil and natural gas exploitation moves farther northward into the offshore areas of the Arctic and deeper into the Pricaspian Depression.
- Demand for roads, railways, and other infrastructure development—projects with heavy up-front costs and long leadtimes—increases in more costly and inhospitable regions.

Enterprise managers with increased autonomy, for example, will place new and perhaps excessive demands on local suppliers for raw materials and semifinished goods. Suppliers, on the other hand, will still be functioning under the direct control of central authorities and may be unable to reconcile the demands of their customers with the directives and resource allocations of their masters. As a result, both producers and suppliers may become disillusioned and may once again resort to the very methods that have led to waste, fraud, and mismanagement for years.

Analysis performed with the aid of our macroeconomic model of the Soviet economy (SOVSIM) indicates that, to meet an investment growth rate of 4 percent per year in 1986-90, Soviet industry will have to increase the output of metals at the rate of about 5 percent per year and machinery at about 6 percent per year if defense procurement is allowed to grow at roughly 2 percent per year and per capita consumption is to increase moderately. Even allowing for a boost in productivity, our model forecasts a 2- to 2.5-percentage-point shortfall in the growth of metals production under these conditions of investment, procurement, and per capita consumption growth. Unless this shortfall is made up by increased imports of metals and/or equipment or by gains in efficiency of metals use, the implied target of about 4-percent growth in GNP will probably not be achievable.

 Expensive new conventional and strategic weapons that have completed or are about to complete testing enter series production on a large scale.

Gorbachev's announcement that energy's share of investment should be stabilized during 1986-90 carries special risks. Oil production has already begun to fall, and, without substantial increases in investment, the production decline could become precipitous (see inset "Implications of Stabilizing Energy's Share of Investment"). Electric power, too, will need large increases in investment resources to meet the increased power requirements that will accompany the modernization effort. Coal production—the USSR's best long-term source of energy-has been slighted in investment allocations for years and will need a major increase to adequately exploit the large Siberian and Kazakh basins. Thus, if the energy sector has to make do with the same share of investment it received in 1981-85, likely production shortfalls could knock Gorbachev's modernization program into a cocked hat.

The leadership seems to be counting heavily on its ability to increase energy efficiency enough to offset any production shortages that might arise. Retooling and installing more energy-efficient equipment promises substantial savings, but only in the long run and after considerable expense. The share of energy consumed by Soviet residential, commercial, and transportation sectors, which present relatively greater opportunities for immediate cutbacks, is comparatively small. Apartments and stores consume over onehalf of the fuel used residentially, and most of them burn low-grade coal or firewood. Trains rather than trucks provide the dominant mode of Soviet commercial transport and are already the most energy efficient in the industrial world. Private automobile use will remain far below levels in the developed West through 1990.

Industry and electric power generation are the principal energy consumers in the USSR. The Soviets are world leaders in cogeneration—the production of steam for space heat at thermal electric power

# Implications of Stabilizing Energy's Share of Investment

We estimate that, to keep oil production from falling below about 11 million barrels per day (b/d) by 1990, investment in the oil sector alone during 1986-90 would have to increase by about 45 billion rubles from the 1981-85 level. We estimate that this is more than twice the investment increment that would be allocated to the entire energy sector in 1986-90 if Gorbachev stabilizes energy's share of total investment. If the needed investment in oil is not forthcoming, production could fall to less than 10 million b/d by 1990. Such a drop in production would be greater than total hard currency exports of oil in 1984.

plants—which has raised considerably the total efficiency of those power facilities in comparison with power plants in the West. Some Soviet basic steel-making processes are also relatively energy efficient. Additional major energy savings in industry therefore must come through massive capital investment for the production and/or importation of more energy-efficient equipment.

However, the production of more efficient equipment is a difficult and time-consuming task. Machine builders—having had little incentive to produce energy-efficient machinery in the past, will have to start virtually from scratch. Payback is uncertain, and delayed until new equipment can be designed, produced, and put into operation—often a process of at least six to eight years. As a consequence, given Gorbachev's announced growth goals, the mix of Soviet output over the next five years is likely to become more, rather than less, energy intensive.

#### A Rocky Road Ahead

Gorbachev probably believes that, if he can kick-start the ponderous economic machinery hard enough and sustain the momentum long enough, the early gains he achieves are likely to stimulate lasting improvement. Indeed, because of the strong interdependence among his plans for energy savings, industrial modernization, managerial renewal, higher productivity, and an improved work ethic, a large dose of early success in some areas could promote success in others. The longer he can sustain the early gains, the better the chances for long-term progress. This same interdependence, however, increases the risk of failure; because so many things that have gone wrong for so long must now go right, the likelihood is high that some will continue to go wrong and thereby impede progress.

Reducing waste, fraud, and mismanagement and directing available resources to their most productive uses will contribute substantially to the modernization program. But the economic dividend from management reforms and the discipline campaign will not come close to meeting the economy's resource needs. The key to success will be Gorbachev's ability to cope with some fundamental paradoxes, and he will have to do so sooner rather than later:

- Improving management efficiency and worker
  morale will require an effective incentive system
  and increased availability of high-quality consumer
  goods at a time when the investment sector will be
  oriented toward producer goods and new defense
  programs will be coming on line. On the basis of
  Gorbachev's program for redirecting investment, we
  project that the increment in consumer-oriented
  investment during 1986-90 could be some 60 percent less than that for 1981-85.
- Energy's share of investment is to be held constant at a time when demand for energy will grow and the cost of offsetting declining oil production will be rapidly rising. The implications of a redirection of investment away from other sectors, particularly consumer-oriented sectors, may be equally ominous.
- The increased managerial independence necessary
  to spur effective technological development and
  utilization is inconsistent with a centrally planned
  pricing and allocation system, leading to the likelihood of management disillusionment and subsequent reversion to the very methods that have led to
  waste, fraud, and mismanagement for years.

Gorbachev's approach in resolving these issues could have strong political and strategic implications; failure to resolve them will stymic his modernization effort.

He could, and probably will, seek some relief from the economic dilemma by demanding that East European countries, which have benefited from Soviet economic largess in the past, shoulder a greater part of the burden. Imports of equipment from Eastern Europe accounted for one-fourth of total Soviet machinery and equipment investment in 1983, and Gorbachev will probably push for an even higher flow in the future while reducing Soviet deliveries of costly raw materials. East European leaders, beset with their own deep economic problems and popular expectations, are likely to strongly resist such suggestions, paving the way for growing confrontation between Moscow and its allied states.

Gorbachev may also increase imports of Western technology to secure state-of-the-art equipment in key areas. A marked rise in imports, however, would require a substantial increase in hard currency expenditures at a time when the USSR is facing a decline in the production of oil, its major hard currency earner. While Moscow has the capability to expand imports by markedly increasing its hard currency borrowing, such an expansion would create a potential vulnerability to Western exporters, lenders, and their parent governments that past Soviet regimes have sought to avoid.

Gorbachev could attempt to reallocate resources away from defense to provide some relief to the civilian economy, but he probably would encounter stiff opposition if he attempted major adjustments in defense allocations. Currently, about 30 percent of all machinery output probably goes to support defense production. Moreover, this share generally represents the highest quality products and newest technological processes in Soviet machine building. The military sector also receives the most capable managers. Some labor, materials, and components could be readily shifted to civilian uses, but most defense industrial

## The Khrushchev Analogy

Nikita Khrushchev, during his 11 years at the top (1953-64), launched his own "revolution" in Soviet politics. Crude, boisterous, and aggressive by nature, he bullied and cajoled his colleagues and the bureaucracy to adopt his vision of the Communist Suture. He made catching up with the United States a major goal and enshrined it in the utopian party program of 1961. He eliminated terror as an instrument of everyday politics, brought Stalin's police apparatus under effective political control, and publicized some of the crimes and abuses of power of his former mentor. (These revelations were a tremendous shock to the Soviet people and to Communist sympathizers around the world.) He made dramatic changes in economic policy and management—abolishing the same central ministries that now so trouble Gorbachev, reorganizing the party apparatus that oversees them, and changing economic priorities almost by fiat. He dramatically increased Soviet involvement in the Third World and vigorously stepped up Soviet competition with the United States for power and influence around the world. His risky political course both at home and abroad—along with his nonconsensus style—ultimately led to his ouster by the very people he brought into power.

The most striking similarity between Gorbachev and Khrushchev is their informal, populist style of leader-ship. Like Khrushchev, Gorbachev has made an effort to show that he is accessible and interested in the views of normal citizens. He has made forays into the streets and visits to factories to engage in unrehearsed, well-publicized exchanges with the assembled crowds. The informal style of both leaders is also evident in their willingness to make extempora-

neous remarks during their prepared speeches as well as in the public role for their wives and families. The similarities between both leaders are particularly pronounced when compared to the cautious, stiff, and highly formalized style of Brezhnev that was the norm for the past 20 years.

At the same time, Gorbachev—more polished and educated than Khrushchev—appears to have learned from Khrushchev's mistakes and is using very different tactics in pressing his agenda for change. When Khrushchev was removed, his successors accused him among other things of "harebrained scheming, immature conclusions, and hasty decisions and actions divorced from reality, bragging, and phrasemongering." These accusations stemmed from his efforts to hastily push through major reforms that were not well thought out and his highly personalized style of leadership that was based more on confrontation than consensus.

While Gorbachev appears equally determined to overhaul the system, he has gone about the task much more deliberately and cautiously than Khrushchev. His signals to the bureaucracy are clearer and make it easier for lower level officials to calculate what is expected from them and to respond accordingly. Instead of presenting specific proposals for reform, as did Khrushchev, Gorbachev has defined the general directions of the changes he would like to accomplish and encouraged further discussion of the optimal ways to achieve them. At the same time, he is systematically building political support for his agenda by installing loyal officials in key positions and removing those who might thwart his plans.

plants would require extensive, time-consuming retooling before they could productively turn out much civilian production. Nevertheless, in the long run many defense resources could be applied productively in the civilian economy.

Although military leaders recognize that the longterm strength of the Soviet military depends largely on the country's economic health, the Soviets are committed to programs for modernizing their offensive and defensive strategic forces, as well as their conventional weapon programs. In addition, the US defense modernization and the long-term implications of the Strategic Defense Initiative (SDI) probably are being cited by Soviet military leaders as justification

for higher growth rates for defense spending. The rate of growth of defense spending since the mid-1970s has been a relatively modest 2 percent, and military leaders probably already feel that defense has accepted slow growth in resources for as long as it can, given the extensive requirements for upgrading weapon systems.

The institution of major economic reforms such as private enterprise and market-determined prices and allocations could, over time, markedly improve economic efficiency, consumer welfare, and technological adaptation. They would encounter strong resistance on political and ideological grounds, but Gorbachev has already shown that he will aggressively tackle the problems he has inherited and, like Khrushchev more than two decades ago, use his considerable power to force the pace of change (see inset "The Krushchev Analogy").

Premier Tikhonov almost certainly will be replaced at or before the congress in February by Gorbachev himself or an ally. The leadtime to the congress will also give Gorbachev the opportunity to more thoroughly clean out the deadwood from the party and governmental bureaucracies and bring in a management team more sympathetic to his policies and better equipped to carry them out. Over the next year, indications that he is moving ahead with his economic agenda could include:

- A clear delineation of winners and losers in the 1986-90 plan for investment allocations. Besides machine building, sectors such as ferrous metals and chemicals must receive a greater share of the investment pie for the modernization program to have any chance for success.
- The creation of superministries (for example, by combining ministries in the agricultural area) with a concomitant reduction in ministerial control of enterprise operations.
- Specific changes in managerial incentives (for example, tying bonuses to the share of new equipment installed) to promote modernization of plant and equipment.

- The replacement of Gosplan Chairman Baybakov with an outsider (possibly even Nikolay Ryzhkov) who would enhance the political stature of Gosplan and signal increased emphasis on long-term strategic planning rather than detailed annual planning.
- A reduction in reported resistance to the ongoing industrial management experiment coupled with measured gains in productivity.

Moreover, with his own people in place, Gorbachev should be able to build a consensus behind the more far-reaching proposals that he has only hinted at to date. Indications that he has decided on and gained consensus for more radical changes could include:

- New dramatic initiatives to reach accord at Geneva and concrete proposals for reduced tensions at the November meeting between the US President and the General Secretary, which might signal a willingness and desire to reduce the Soviet resource commitment to defense and create an atmosphere for expanded commerce with the West.
- Select legalization of private-sector activity, particularly in regard to consumer services, which would indicate willingness to confront past economic orthodoxy in order to improve consumer welfare and thereby economic performance.
- Breaking the monopoly of the Foreign Trade apparatus, which would signal an increased reliance on managerial independence at some cost to centralized control.

Continued reliance on marginal tinkering, despite clear indications that the plan for economic revitalization is faltering, would indicate that Gorbachev, like Brezhnev before him, has succumbed to a politically expedient but economically ineffective approach.