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Policy Implications of the Slowdown in Soviet Economic Growth

An Intelligence Assessment

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Policy Implications of the Slowdown in Soviet Economic Growth

An Intelligence Assessment

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Policy Implications of the Slowdown in Soviet Economic Growth

Key Judgments

Information available as of 1 May 1984 was used in this report.

Average annual growth in Soviet GNP (as measured by the CIA) and in per capita consumption is likely to remain at low levels throughout this decade.

Moscow's hopes for reversing a long-term declining growth trend depend critically upon improvement in productivity and acceleration of investment. But at least over the midterm, competing demands of consumption and defense, together with political opposition to major reform, will constrain Soviet room for maneuver. The Soviet leadership is concerned about possible political instability arising from consumer discontent. The Politburo will probably seek through the 1980s to combine at least some growth in living standards and increasing allocations for new plant and equipment with some increase in the growth of military procurement

Although individual large-scale localized disturbances could well occur, the chances are low that, by 1990, the growth slowdown will precipitate sustained and widespread popular unrest in the USSR or compel the leadership to shift to a decentralized socialist market economy like that of Yugoslavia or even Hungary. The slowdown is not likely to lead Moscow to forgo major weapons programs, forsake any of its force modernization goals, or introduce major changes in military force dispositions. Nor is it likely to substantially increase economically based Western political leverage, drive the leadership to accept arms control agreements it would otherwise reject, substantially moderate Soviet behavior in the Third World, or push the Kremlin into high-risk adventures abroad.

Analysis of the results of a variety of alternative economic scenarios—which place greater emphasis respectively on consumption, military spending, or investment—suggests that less "balanced" resource allocation strategies based on realistically conceivable adjustments in these parameters would probably still not significantly affect our conclusions

Soviet responses to the economic slowdown are likely to accentuate certain already existing challenges to US interests. The need:

- To rationalize stagnating living standards and justify sacrifice by the population will probably lead Moscow to continue to saturate its media with mendacious propaganda about the US threat to Soviet security—with serious effects on Soviet public opinion.

- For trade with the West will probably lead Moscow to redouble efforts, rooted in political and military objectives, to exploit and widen existing differences between the United States and its allies over East-West trade policies.

- To increase hard currency earnings is likely to intensify Soviet efforts to expand commercially profitable relations with the Middle East, and it might tempt Moscow to encourage a squeeze by others on deliveries of Middle East oil to the world market to raise the price of its own oil and gas exports.

- To increase hard currency earnings will provide an additional impetus to Soviet efforts to sell arms not only in the Middle East, but elsewhere in the Third World as well

But, the Soviet slowdown in growth may also broaden various potential opportunities for US action:

- The Soviet population's support for the regime should be vulnerable to information that reinforces the perception that living standards are not what the public believes they ought to be.

- Moscow will have to tighten the economic screws on Eastern Europe, which will almost certainly make East European regimes and publics the point of greatest potential vulnerability to US economic and political initiatives in the 1980s.

- The Soviet Union's already low capability to compete with the United States in providing economic and technological aid to more than a narrow group of Third World countries will decline further, and Soviet unresponsiveness to requests for aid will increase pressures even in Marxist-ruled LDCs to turn to the West for help

Soviet arms decisions probably will continue to be driven by calculations of political-strategic advantage and the dynamism of weapons technology. The direct savings in hardware and manpower that could be gained through the terms of any START, INF, or MBFR agreements the Soviets would now be prepared to consider are probably not large enough to influence significantly Moscow's policy. If it thought it had to, Moscow could substantially accelerate military spending; this is a choice that faces the leadership in 1984-85 as it sets priorities for the 1986-90 five-year plan. But a steep increase would have painful consequences for economic growth over the longer term and for consumer well-being even in the shorter term. Thus, the slowdown should increase Moscow's interest in slowing the pace of high-technology arms competition with the United States through eventual renewal of arms negotiations

The slowdown will give the Soviets a continuing incenti to obtain US grain and state-of-the-art technology in such key areas as energy and agricultural production, even as Moscow strains to avoid dependency and to buy from US suppliers only as a last resort. But potential US prospects for exerting trade-based political leverage on Moscow are, at best, highly limited

Executive Summary

The Economic Slowdown

The USSR is facing a continuing slowdown in economic growth. Average annual growth in GNP (as measured by the CIA) dropped from 5.3 percent in the period 1966-70 to 3.7 percent during 1971-75 to 2.7 percent in 1976-80. We believe that growth in the current five-year plan (1981-85) will at best remain at roughly the rate achieved in 1976-80

Contrary to the pattern of most industrially developed countries—in which increased productivity has been a key element in economic growth—Soviet gains during the 1960s and the first half of the 1970s continued to be based fundamentally on massive injections of labor and capital. Several important external factors—good weather, easily accessible fuels and other raw materials, and huge windfall increases during the early-to-middle 1970s in hard currency earnings from sales of oil, gold, and raw materials—also contributed to high growth.

The mid-1970s marked a turning point in the Soviet economy. Average annual growth of GNP has been sharply lower since 1975 and, in fact, was only about one-half the planned rate during the 10th Five-Year Plan (1976-80). Industrial growth began to slow along a new, declining trend line. The slower growth during this period was partly attributable to unfavorable weather, which played a major role in agriculture's poor performance and exacted its toll on the light and food industries. The severity and wide-ranging nature of the growth slowdown, however, reflected more fundamental problems related to the USSR's inability to generate the necessary resource inputs and stem falling productivity.

A new strategy to increase efficiency, inaugurated in 1976 and pursued with some emendations—for the remainder of the Brezhnev period, not only failed to raise the return on investment but also made the situation worse by further delaying actions long overdue. It ignored the rising price that had to be paid—in costly plan miscalculations, technological backwardness, and distorted managerial decisionmaking—for failing to change the traditional system of command planning and management of the economy. It also put off the need to modernize the stock of plant and equipment, which manifested itself in a sudden drop in utilization rates and productivity during the second half of the 1970s. Most important, it failed to address key areas of underinvestment and thus failed to anticipate three critical industrial bottlenecks that were to seriously retard the economy's growth after 1975 (especially in the 1979-80 period). These were a growing shortage of energy; shortages of several key industrial materials, especially steel, nonferrous metals, and lumber; and inadequate rail transportation.

The economic results of Andropov's only full year in office were improved. GNP rose about 3 percent in 1983—over half a percentage point above the average rate of growth in 1981 and 1982. We are not fully certain how the Soviets achieved this moderate improvement, and, as a result, the single value projections presented in this paper should be viewed as having a greater-than-usual range of uncertainty. However, we attribute 1983's progress basically to better weather, Andropov's campaign to enforce labor discipline, and an alleviation of railway bottlenecks. There has been no improvement in the underlying determinants of decelerating growth—including no significant movement on economic reform, which Chernenko is likely to approach more conservatively than Andropov.

Moreover, powerful inertial tendencies guarantee that sustained progress will come neither easily nor rapidly:

- Past neglect of investment or unbalanced investment in strategic and heavily capital-intensive sectors such as transportation and ferrous metallurgy cannot be quickly overcome.

- Many raw materials have become increasingly less accessible, and the cost of exploiting and transporting them will continue to rise sharply through the 1980s.

- The average annual rate of growth of the working-age population during 1981-90 will be only 0.4 percent—one-fourth of what it was in the previous decade.

- Among workers there are long-established habits of casual discipline, slack effort, and shoddy workmanship, as well as wage-leveling proclivities and a strong sense of the irrevocability of job tenure. Among managers there is a deeply ingrained drive to meet quantitative output goals—regardless of cost, quality, and efficiency criteria—and unwillingness to innovate or take risks in the face of incentive systems that discriminate against change.

Policy Options

Moscow's hopes for ending the trend of declining growth depend critically upon an improvement in the efficiency with which capital and labor are used in production processes. The instruments available to achieve this goal include economic structural reform and shifts in resource allocation among major claimants—consumption, defense, and investment

Because of the enormous inefficiency with which the Soviet economy presently operates, major reform would stimulate economic growth more than any feasible shift in resource allocation. We estimate, for example, that, if Soviet industry were operating in the 1980s at the level of productivity attained before 1975, growth of industrial output would be almost twice its actual rate

However, the chances of a radical reform being implemented in the 1980s are small. In particular, we think the chances are slight that the Soviet leadership will replace the command economy with significant steps toward a socialist market economy, given the challenge to political control and vast uncertainties that would inevitably flow from such a revolutionary move. The political elite strongly opposes full-scale marketization; most policy advisers do not believe it would be the right solution even if it were politically feasible; economic managers would resist its implementation; and the working class would bridle at many of its consequences—especially the loss of job security

The "reform" Moscow is likely to pursue will probably combine attempts to improve central planning and the performance of centralized mechanisms for accelerating technological innovation with limited decentralization of operational authority, a modest strengthening of financial levers, and further experimentation with plan indicators intended to reward risk taking, high-quality output, cost reduction, and efficiency. There will be powerful bureaucratic resistance to such changes, and we doubt that regime efforts along these lines will succeed in altering the downward trend in productivity, despite a very slight upturn in 1983

Thus, in practical terms Moscow's capacity to improve productivity will hinge upon providing *incentives to spur labor productivity* and *investment to raise the efficiency of capital stock*. The Kremlin's need to meet these requirements, at a time of increasing pressure on resources, is the reason that we believe—along with many Western analysts—that the Soviets' room for maneuver in resource allocation in the 1980s among military and civilian claimants is severely constrained

Having examined the outcome of simulations of a range of resource allocation scenarios that tilt toward *consumption*, or *military spending*, or *investment*, we believe that the Soviet leadership will probably attempt to pursue a carefully balanced policy of at least some growth in living standards and increasing allocations for new plant and equipment combined with some increase in the growth of military procurement

Internal Affairs

Concern over possible political instability clearly exists within the party elite. Both Andropov and Chernenko have warned in speeches that public dissatisfaction, if unattended or mishandled, could assume "crisis" proportions. Apprehension about the popular mood has probably significantly influenced regime policy over the past several years. It accounts at least in part for:

- The high priority assigned to the Food Program.
- Massive grain imports.
- Attempts to strengthen worker discipline.
- The higher profile assumed by the KGB.
- Attempts to curtail contacts between Soviet citizens and Westerners and reduce the flow of information from the West.
- Attacks on more blatant forms of corruption and official abuse of power.

There will almost certainly be instances of unrest in the future whatever economic strategy the leadership pursues. We by no means rule out the possibility that spontaneous large-scale localized disturbances may occur.

Nevertheless, assuming that average annual growth of GNP during 1986-90 runs at our projected rate of about 2 percent (or even a percentage point

[1] Under this scenario, for the balance of the decade growth in GNP and industry will decline, averaging 2 percent a year; average annual growth in per capita consumption will fall to less than 1 percent; average annual growth in new fixed investment will drop to a new postwar low of around 2.5 percent—down from average annual growth of new fixed investment during 1981-83 of 4 percent; and the defense burden will remain at about 14 percent of GNP through 1990.

This scenario assumes that, first, Soviet defense spending in the 1980s will increase at an average rate of about 2 percent a year, with military hardware procurement showing no growth through 1985 and then growth at 2 percent a year during 1986-90. Military research, development, testing, and evaluation (RDT&E) growth falls slightly after 1985. Second, the allocation of investment and labor among producing sectors through the decade will mirror targets set in the 1981-85 five-year plan. Third, the shares going to the energy sectors will increase (at the expense of some consumer sectors). The shares accorded to heavy industry will remain relatively constant through 1990. Fourth, oil production will fall short of the plan target of 12.6 million barrels a day in 1985, and decline to between 11 and 12 million b/d in 1990 (the current production level is 12.4 million b/d). Fifth, with continued growth in domestic energy requirements, Moscow will have to choose between maintaining oil exports and meeting domestic needs. Under this scenario, there will be a substantial reduction in oil exports, but most of the energy shortfall will be absorbed through slower growth in the domestic economy. And, sixth, average weather conditions observed during the 1961-80 period will continue.

less than this), we believe that the chances are low that, by 1990, the economic slowdown will:

- Precipitate sustained and widespread popular unrest in the USSR.
- Pave the way for either significant liberalization or a Polish-style militarization of the regime.
- Bring to power a leadership group with significantly different foreign policy aims.

New Soviet leaders will probably be less ideological and more pragmatic than their predecessors, and some will probably be more willing to accept change, but the sparse data available provide no persuasive evidence that they show any unique generational policy orientation

Military Power

Even if growth remains at about 2 percent, we project impressive force gains in the 1980s. Important programs in development that could be deployed through the early 1990s include several military space systems, strategic cruise missiles, another generation of strategic ballistic missiles, a strategic bomber, a large transport aircraft, and a large carrier for conventional aircraft. If it chose to pay the heavy price, the leadership could even increase—for a while at least—the growth of military spending to a rate somewhat higher than the 4- to 5-percent annual average during 1965-75—the peak years of the Soviet military buildup. The leadership faces this choice during 1984-85 as it sets priorities for the 1986-90 five-year plan.

Nevertheless, with a projected boost in military procurement from an estimated zero growth at present to 2-percent annual growth over 1986-90, we would expect that the flow of at least some weapons into the stock of Soviet military equipment would not be as rapid as in previous decades. The Soviets might:

- Curtail some weapon programs that are near the end of their production run.
- Cut back or eliminate some support programs.
- Stretch out selected weapon procurement programs and slip the time schedule for force modernization slightly.
- Extend the service life of some older weapon systems.

Yet, if they were to make these adjustments, we estimate that the Soviets would not have to forgo any major weapon program or forsake any of their force modernization goals

Foreign Policy
Overall, we believe that the economic slowdown will not result in major changes in Soviet foreign policy. We do not see economic problems at home motivating the leadership to undertake high-risk adventures abroad that are designed to distract an unhappy public or produce economically beneficial geostrategic breakthroughs. Nor is the economic slowdown likely to significantly constrain continuing Soviet political and military activity in the Third World.

Eastern Europe. The economic slowdown will have its most serious external impact on relations between the USSR and its client regimes in Eastern Europe, which currently receive most of Soviet economic and military aid. To achieve the levels of GNP growth and per capita consumption we have projected by 1990, Moscow would have to impose further cuts in oil deliveries to Eastern Europe beyond those already levied. Additional reductions, if accompanied by price hikes and reductions in other raw materials deliveries, and even if partially compensated for with exports of additional gas, would create new political and economic strains in Eastern Europe.

We believe, nevertheless, that the Soviets will risk aggravating popular unrest in Eastern Europe by tightening the economic screws because they:
- Resent the East Europeans' higher standard of living.
- May believe there is enough waste in the East European economies to impose additional costs without cutting consumption sharply.
- Appreciate the purely coercive power of the police in maintaining social order.
- Count on the East Europeans' ability to help themselves somewhat through selective economic links with Western Europe

Bilateral US-USSR Relations. The economic growth slowdown will give the Soviets a continuing incentive to obtain US grain and state-of-the-art technology in such key areas as energy and agricultural production, even as they strain to avoid dependency and to buy from US suppliers only as a last resort

The robust outlook for global grain production over the next few years suggests that the Soviets will have only a limited need for purchases from the United States above the Long-Term Grain Agreement minimum commitment of 8 to 9 million tons. Therefore, US grain-based political leverage is likely to be quite limited. Nonetheless, Moscow still finds the United States attractive as a supplier because of its unique year-round capacity to deliver large volumes of grain quickly at short notice.

Large-scale US assistance would be helpful to Moscow in maintaining oil output and developing Arctic offshore resources. The United States remains the sole supplier of certain oil and gas equipment, the need for which should increase as Soviet oil production problems intensify—namely, high-capacity submersible pumps, deep-well drilling rigs, well- and mud-logging equipment, and various items for offshore oil production. The Soviets urgently need high-capacity submersible pumps, which can lift increased volumes of fluid and thereby stabilize output in already producing fields where the ratio of water to oil being lifted is rising steeply. Over the next 12 to 18 months, installation of $40 million worth of submersible pumps now on order from a US supplier could play a substantial role in holding up production. Soviet trade officials are also currently pushing for a $10-11 billion Soviet venture with the United States and Canada to manufacture drilling equipment and rig assemblies for oil development in the Barents Sea and possibly elsewhere in the USSR. Only the United States has the technical and financial resources needed for a project of this magnitude.

Whether this degree of technological dependence on a narrow range of US equipment—particularly high-capacity submersible pumps and offshore equipment—translates into much political leverage for the United States is problematic. Any Soviet willingness to accommodate US political interests in return for assistance in oil production would be highly limited in any event and would depend greatly upon Moscow's assessment of the overall state of US-USSR relations

Soviet decisions on arms control are likely to continue to be driven by calculations of political-strategic advantage and the dynamism of weapons technology. The direct savings in hardware and manpower that could be gained through the terms of any START, INF, or MBFR agreement which the Soviets would now be prepared to consider are probably not large enough to significantly influence Moscow's policy. But the Soviets probably do believe that arms agreements can:
- Set quantitative and qualitative boundaries on procurement.
- Increase the calculability of future military outlays and channel competition into predictable areas.
- Help create a political environment that would contribute to a slowing of the overall US defense effort, thereby easing military spending demands on the USSR

There is evidence that, in individual instances in recent years, demands of the civilian economy have been given precedence over military requirements. Statements of Soviet leaders have suggested that the drain of military spending on the civilian economy has probably become a matter of increased concern--if only because the economic slowdown threatens to weaken the industrial base on which the growth of military power itself ultimately depends. A substantial increase in military spending—while possible—would have painful consequences for Soviet economic growth over the longer term and for consumer well-being even in the shorter term. Thus we believe that the overall growth slowdown increases Moscow's interest in slowing the pace of high-technology arms competition with the United States—particularly in space-based strategic defense forces—through eventual renewal of arms negotiations

The Third World

The slowdown in growth is a factor affecting Soviet policy toward the Third World, although it is less important than military and geopolitical considerations. At the June 1983 Plenum of the Central Committee, Andropov—replying bluntly to frequent LDC complaints of Soviet tightfistedness in nonmilitary economic assistance—put the Third World on notice not to expect much in the way of such aid from the USSR. In line with this policy, Moscow has attempted to:

- Cut back on new economic assistance to non-Communist LDCs and focus aid on allies in the Third World.
- Force Communist clients to be more frugal in their use of Soviet-supplied resources.
- Insist on timely payment of debts.
- Counsel some regimes of a "socialist orientation"—for example—the Nicaraguan—not to provoke a withdrawal of Western assistance by engaging in economic radicalism

Simultaneously, Moscow has sought to increase its involvement in the Third World by expanding hard-currency-earning arms sales as much as possible. Arms exports—mainly for hard currency—have been accelerating: in 1982, Soviet arms agreements climbed to $9 billion, 40 percent higher than in 1981 and well above the average for the previous five years.

However, the exceptions are as important as the prescription of a hardline Soviet economic posture toward the Third World. Toward Cuba, Vietnam, and Afghanistan, where the USSR incurs its main Third World economic costs, political and military-strategic factors have far outweighed economic considerations in forming policy and will probably continue to do so. Moscow has complained to both Cuba and Vietnam about inefficient use of Soviet-supplied resources, taken a firm position on trade-related issues, and pushed hard on debt repayment. Nevertheless, we believe that the Soviet military and political interest in sustaining a Communist regime in Cuba assures Havana of continued large-scale support (it is currently $4.5 billion a year). Likewise, Vietnam's strategic importance in Asia makes any major reduction in Soviet aid to that nation equally unlikely. Nor do we estimate that the USSR's behavior in Afghanistan is likely to be significantly constrained by economic considerations.

Regimes of a "socialist orientation" have been unhappy about not receiving aid they requested, and some have explored the possibility of more help from the West. Nevertheless, the Kremlin has been supplying some increased assistance. In 1982, for example, Moscow provided new aid to Angola, Ethiopia, and Mozambique, and major increases for Nicaragua.

Moscow has also responded to increased Western competition and the worsened world trade climate by offering better military supply deals and more sophisticated equipment to key non-Marxist client states, including Iraq, Syria, and India. These deals have featured softer repayment terms and—with India—Moscow's first genuine agreement to transfer some of its current advanced military production technology outside the Warsaw Pact. Moscow also agreed to increase Soviet soft currency oil deliveries to India in 1983 by 40 percent and maintain them at this level in 1984.

With or without the economic growth slowdown, the United States would continue to be confronted by a strong Soviet challenge in the Middle East in the 1980s. But economic needs will intensify Soviet efforts to expand commercially profitable relations there and might tempt Moscow to encourage a squeeze by others on deliveries of Middle East oil to the world market to raise the price of its own oil and gas exports. Pursuit of such a strategy would depend on Moscow's assessment of its probable impact on the terms of East-West trade, on the Middle East arms market, and on the likelihood of an expanded US military presence in the Persian Gulf

China

In promoting trade relations with China in 1983, Moscow's main objective was to improve its position in the US-USSR-China triangular relationship. There is no evidence that a desire to relieve internal economic pressures motivated the Soviet leadership. Nor is it likely that Sino-Soviet trade will significantly help to ease Soviet economic stringencies in the foreseeable future

Because one-fourth of all Soviet Ground Forces personnel—nearly 500,000 troops in 52 active divisions—are stationed opposite China, there would in principle seem to be both opportunity and incentive for significant savings from a cutback. But:

- Even if 250,000 of these troops were released to the civilian manpower pool by 1990, the impact on GNP growth and growth in per capita income would be slight.

- A slowing of equipment modernization of the forces already in place would have only marginal effects on the economy, although it would lessen allocational strains within the Soviet military.
- Soviet security against China in the event of war appears to entail not a holding action but a major invasion and occupation of at least northern Manchuria, which mandates a continued strengthening of the USSR's military power vis-a-vis China.

Western Europe and Japan
To counter the economic slowdown, the Soviets will need to increase imports of machinery and industrial materials from Western Europe and Japan above present levels. But our projections suggest that, even allowing for realistically possible increases in nonfuel exports and arms and gold sales, the USSR will not have sufficient hard currency to pay for an increase in imports from the West later in the 1980s—barring a sharp increase in borrowing. Thus Moscow's capacity to expand hard currency imports will depend significantly on its willingness to shift oil exports from Eastern Europe to hard currency purchasers, sell more natural gas to Western Europe, or overcome its reluctance—based on fear of being subjected to political leverage—to increase substantially its long-term indebtedness to the West.

The USSR has vast natural gas reserves and the ability to increase deliveries rapidly beyond already-contracted-for volumes. Some surplus transmission capacity exists even now. Beyond 1988 the Soviets will easily be able on short notice to expand deliveries to meet foreseeable incremental West European demand—and at extremely competitive prices. The main constraints on expansion will be the level of West European demand and the willingness (or lack thereof) of West Europeans to pay a "security premium" for higher priced North Sea gas

Impact of Alternative Economic Scenarios
Analysis of the results of alternative economic scenarios—which place greater emphasis respectively on consumption, military spending, or investment—suggests that less "balanced" resource allocation strategies based on realistically conceivable adjustments in these parameters would probably not significantly affect our basic conclusions. Nevertheless, there would still be some effects.

If the Soviets decided to continue to hold military procurement levels flat throughout the 1980s to increase growth of consumption, they probably would spread the shortfalls among the military services, although making them somewhat deeper in general purpose forces, especially ground forces. Even with flat military procurement, the level of expenditures is so high that Soviet military forces would continue to grow throughout the 1980s.

Of all the scenarios, one oriented toward consumption would probably most polarize the Soviet political elite—advocates of internal accommodation and external relaxation ranged against advocates of a hard line both internally and in foreign policy. Adoption of such a strategy might be impossible without a major shakeup in the Politburo and formal proclamation of a new general party line (

The defense-oriented strategy we examined involved an average annual growth of total military spending of 5 percent, which in turn generated a small absolute decline in average annual per capita consumption. We believe that during the plan period 1986-90 the regime could handle the projected average annual decline of 0.3 percent in per capita consumption without seriously risking mass unrest among the population, although growth in labor productivity would probably suffer further erosion. Such a decline in consumption could not continue indefinitely, however, without provoking a crisis in relations between the regime and Soviet society. Externally, Eastern Europe would bear the brunt of the High Defense strategy. Not only would pressures for higher defense spending and deliveries of goods from Eastern Europe be stepped up, but Soviet oil deliveries also would be severely cut back. This move would depress living standards in the region and increase the likelihood of unrest and political instability. Paradoxically, in view of its ultimate aim, the High Defense strategy—which would necessarily require an internal intensification of anti-Western propaganda—would also require an expansion of trade ties with the West to acquire high technology. A higher share of Soviet oil exports would have to go to the West to pay for larger imports of machinery and equipment

A high investment strategy would have roughly the same internal and external effects as a high military spending strategy. However, it might be somewhat less likely to undercut the morale of the labor force. Because this strategy would be publicized not by playing up the immediate Western military/political threat but by stressing the strategic importance of promoting general economic might, it would be compatible with a less hostile propaganda posture toward the United States

Challenges to the United States

Soviet responses to the economic slowdown are likely to accentuate already existing challenges to US interests in several areas. The need:

- To rationalize stagnating living standards and justify sacrifice by the population will probably lead Moscow to continue to saturate its media with mendacious propaganda about the US threat to Soviet security—with serious effects on Soviet public opinion.

- For trade with Western Europe will probably lead Moscow to redouble efforts rooted in political and military objectives to exploit and widen existing differences between the United States and its allies over East-West trade policies—which could involve renewal of the credit and energy dependency issues.

- To increase hard currency earnings will provide an additional impetus to Soviet efforts to sell arms and military assistance both in the Middle East and elsewhere in the Third World.

Opportunities for the United States
But, the Soviet slowdown in growth should also broaden various potential opportunities for US action:

- The Soviet population's support for the system should be vulnerable to information that reinforces the perception that living standards are not what they ought to be, thanks to the regime's bungling and its waste of resources abroad.

- There are limits to the extent to which Moscow can simultaneously cut its costs in Eastern Europe *and* compel the East Europeans to reduce trade with the West, without precipitating new crises in the Bloc. The Soviet leadership may miscalculate these limits. Even if it does not, the East European regimes do not see greater CEMA "integration" as the solution to their critical economic problems, and they will intensify their efforts to expand trade with the West to the extent that their economies permit. As living standards stagnate or decline, anti-Soviet sentiment is likely to increase among East Europeans, who will continue to look to the West for information and support for their own national aspirations.

- The slowdown will further reduce the USSR's already low capability to compete with the United States in providing economic and technological aid to more than a narrow group of Third World countries. Soviet unresponsiveness to requests for aid will increase pressures even in Marxist-ruled LDCs to turn to the West for help—although there will undoubtedly be far less readiness in these regimes to take corresponding steps toward political liberalization.

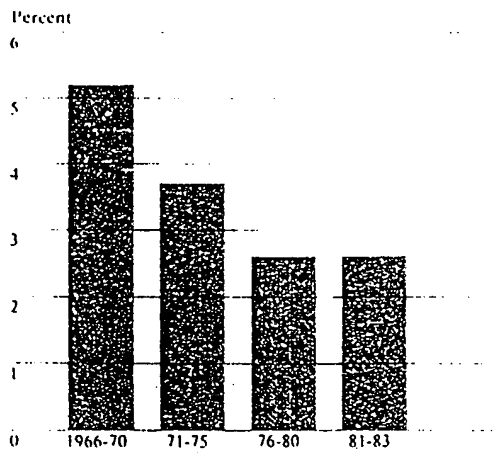
Contents

Policy Implications of the Slowdown in Soviet Economic Growth

Introduction

Average annual growth of Soviet GNP as measured by the CIA has dropped from more than 5.3 percent in 1966-70 to 3.7 percent in 1971-75 to 2.7 percent in 1976-83 (see figure 1). We believe that, despite somewhat improved economic performance in 1983, annual growth during the balance of the 1980s is likely to be about 2 percent.

Figure 1
USSR: GNP—Average Annual Rates of Growth, 1966-83



The difficulties of the Soviet economy have suggested to many observers that economic factors might influence Soviet policies in the 1980s in ways that could significantly affect Western interests. Observers have hypothesized that economic shortfalls might generate serious internal tensions, constrain military spending, and motivate Moscow to adopt more restrained—or more adventurous—foreign policies. The purpose of this paper is to address these important propositions, proceeding from present CIA assessments of trends in Soviet military procurement and spending, forecasts of net energy balances in the 1980s, and econometric projections of likely growth trends in the USSR's economy during the 1980s.[1]

The Economy During the Brezhnev Years

Growth Trends: 1966-75

During the first two five-year plans of Brezhnev's incumbency (1966-75), the Soviet economy grew faster than that of the United States—and the USSR solidified its position as the world's second-largest economic power

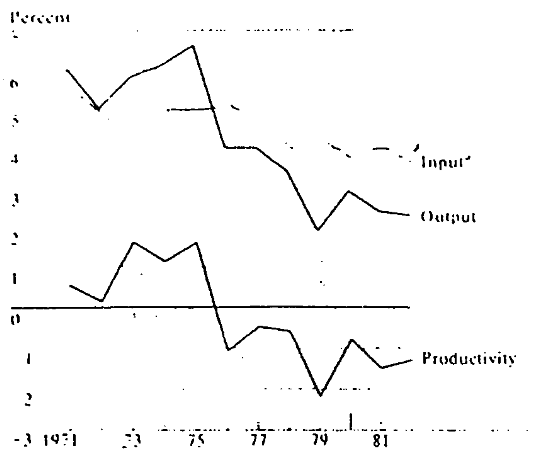
Contrary to the pattern of most industrially developed countries, in which increased productivity has been a key element in economic growth, Soviet gains during this period continued to be based fundamentally on massive injections of labor and capital. Several important external factors—good weather, easily accessible fuels and other raw materials, and huge windfall increases during the early-to-middle 1970s in hard currency earnings from sales of oil, gold, and raw materials—also contributed to the boom. The country's economic successes enabled Soviet leaders at that time to achieve military, foreign policy, and welfare goals simultaneously

The Economy's Performance During the 10th Five-Year Plan

The mid-1970s marked a turning point in the Soviet economy. Growth of GNP has been sharply lower since 1975 and, in fact, was only about one-half the

[1] See

Figure 2
USSR: Growth in Output, Inputs, and Productivity in Industry, 1971-82



[a] Inputs of manhours and capital are combined using weights of 52.4 percent and 47.6 percent, respectively, in a Cobb-Douglas (linear homogeneous) product function. These weights represent the distribution of labor costs (wages and social insurance deductions) and capital costs (depreciation and a capital charge) in 1970, the base year for all indexes underlying the growth-rate calculations.

planned rate during the 10th Five-Year Plan (1976-80). Industrial performance began to deteriorate along a new, steeply declining trend line (see figure 2). While Soviet leaders might well have consoled themselves with the thought that Western economies were suffering equal or more severe difficulties in this period, the comparison did not alter the fact that the problems confronting Moscow were becoming increasingly seriou:

Reasons for the Turnaround

The reasons for the Soviet slowdown were largely different from those which retarded Western economic growth in the 1970s. The turnaround in the Soviet economy during the 10th Five-Year Plan was partly attributable to poor weather, which played a major role in agriculture's decline and exacted its toll on the light and food industries. The severity and wide-ranging nature of the economic slowdown, however, reflected more fundamental problems related to the USSR's inability to generate the necessary resource inputs and efficiently employ them.

By 1975, the Soviet leadership had evidently become sufficiently worried by an accelerating decline in the productivity of new investment in industry (meaning that more and more investment was being required to achieve a given increase in the level of output) and by an awareness of the labor crunch coming early in the 1980s to approve a new economic strategy. The new efficiency-oriented strategy—heralded as a shift from extensive to intensive growth—was predicated upon the achievement of large productivity gains. These were to be attained by temporarily lowering growth in industrial output, sharply cutting investment outside of industry and agriculture, and changing the pattern of industrial investment—thus, it was hoped, reducing tautness in the economy, eliminating bottlenecks. and raising the immediate payoffs from investment

This strategy not only badly failed to raise the return on investment but also made the situation worse by further delaying actions long overdue. It ignored the rising price that had to be paid in costly plan miscalculations, technological backwardness, and distorted managerial decisionmaking for failing to change the traditional system of command planning and management of the economy. It also put off the need to regenerate the stock of plant and equipment, which manifested itself in a sudden drop in utilization rates and capital productivity during the second half of the 1970s. Most important, it failed to address key areas of underinvestment and thus failed to anticipate three critical industrial bottlenecks that were to seriously retard the economy's growth after 1975 (especially in the 1979-80 period). These were a growing shortage of energy; shortages of several key industrial materials, especially steel, nonferrous metals. and lumber; and inadequate rail transportation

The Leadership's Response

Responding to what was happening, the Brezhnev leadership introduced new shifts in investment policy, further expanded trade with the West, possibly made adjustments in military spending, and took hesitant steps toward altering planning and management procedures. [ ]

Investment Policy. Annual investment growth was trimmed to an average of less than 5 percent during 1976-78, and increases were reduced further to an average annual rate of growth of less than 1.5 percent during the final two years of the 10th Five-Year Plan. The latter decline—which was partially due to bottlenecks in industries producing inputs for capital investment—represented a marked deviation from the original plan which called for both output and investment growth to rebound

Soviet leaders also reacted to their economic problems by reallocating funds to key problem areas, especially the energy sector. From 1978 to 1980, average annual investment in primary energy was 22 percent above the level of that in 1976 and 1977.

Expanded Trade. Benefiting from rising energy and gold prices, as well as burgeoning arms sales, Soviet hard currency earnings increased dramatically after 1975, reaching $30 billion by 1980. As a result, Moscow was able to increase its purchases—particularly of food and steel—from the West

Defense Spending Trends. After increasing at an annual average rate of roughly 4 to 5 percent during the 1966-75 period, defense spending has increased at only about 2 percent a year since 1976, largely as a result of almost no growth in military procurement.[2] We cannot judge the extent to which the leadership intended from the outset to cut the growth of defense spending, acquiesced in slower growth, or failed in an attempt to overcome constraints

Unforeseen economic and technical problems appear to have been at least partly responsible for the slowdown in the growth of defense spending. Decisions to comply with SALT I and the unratified SALT II treaty also may have slowed the pace of procurement. The cancellation of new US weapon systems (for example, the B-1 bomber) and the prospect from the mid-1970s of limited growth in US defense spending might have led the Soviets to conclude that they could safely reduce their own rate of growth in military spending. Whether or not a formal policy decision was made to stretch out procurement and to slow overall defense spending, the leadership may have recognized in midstream that technical problems and industrial bottlenecks were hampering procurement. If this was the case, the leadership apparently chose not to reallocate the additional resources required to offset the procurement slowdown. Whatever the cause, the slowing of defense-spending growth facilitated efforts to meet competing demands in the rest of the economy.

Changes in Economic Management. Having avoided the issue of reform for some years, the Brezhnev leadership was finally induced to approve a decree in July 1979 requiring a broad range of changes in planning and management of the economy, and this was followed over the next several years by more than 80 implementing resolutions. The decrees combined measures aimed at achieving more effective centralized planning with some decentralization of operational authority to large industrial associations and broader employment of certain market-associated mechanisms. They were implemented only haltingly, and they did not significantly affect economic performance during the rest of the 10th Five-Year Plan.

The 11th Five-Year Plan

The 1981-85 Plan reasserted the demonstrably flawed strategy of setting a national income growth target that could not be reached with projected inputs of capital and labor unless unrealistic gains in productivity were achieved. This improvement in productivity was to be obtained by reducing the backlog of uncompleted construction, devoting most investment in industry to the renovation of existing enterprises, and raising capacity utilization rates—the same tactic pursued unsuccessfully in 1976-80

2 [ ]

The results in 1981 and 1982 revealed the lack of realism of the five-year plan. Growth in GNP averaged about 2.5 percent, somewhat above that attained during 1979 and 1980 (1 percent) but far below the 4-percent annual rate of growth planned for 1981-85. Average annual growth in industry was also roughly 2.5 percent, only half the rate called for in the plan. The slowdown was evident in practically every industrial branch, while productivity of labor and capital employed in industry continued to fall dramatically. Moreover, poor weather curtailed farm output in 1981 and 1982, putting most of the 11th Five-Year Plan's agricultural goals beyond reach. Transportation bottlenecks increased in severity; in 1982, total freight turnover declined. According to our estimates, per capita consumption showed almost no growth at all during 1981 and 1982

Initial Responses of the Andropov Regime

The economic results of Andropov's only full year in office were pretty good. GNP rose about 3 percent in 1983—over half a percentage point above the average rate of growth in 1981 and 1982. The main improvement occurred in industry, where growth accelerated by over a percentage point to about 3.5 percent

We are not fully certain how the Soviets achieved this moderate improvement, and, as a result, the single value projections presented in this paper should be viewed as having a greater-than-usual range of uncertainty. However, we attribute 1983's progress basically to:

- Better weather, which not only helped boost farm production but benefited nonagricultural sectors as well.[3]
- Andropov's discipline campaign (see page 6, "Labor Policy"), which appears to have extracted greater effort from both labor and management.
- A high-priority effort to alleviate railway bottlenecks.

If this pattern of weather, higher labor discipline, and improved railway performance remained constant, however, it would have little or no additional impact on the rate of growth. To maintain the rate reached in 1983, in each succeeding year there would have to be still better weather, still greater labor intensity, and still greater railway capacity. Thus, we do not believe that Moscow will be able to maintain for long the rate of growth seen in 1983—especially when there has been no significant improvement in the underlying determinants of decelerating growth already noted.

Powerful inertial tendencies guarantee that sustained progress will come neither easily nor rapidly:

- Because even large increments in annual growth of investment could have only a delayed impact on total stock of plant and equipment, which actually drives economic growth, past neglect of investment or unbalanced investment in strategic and heavily capital-intensive sectors such as transportation and ferrous metallurgy cannot be quickly overcome.

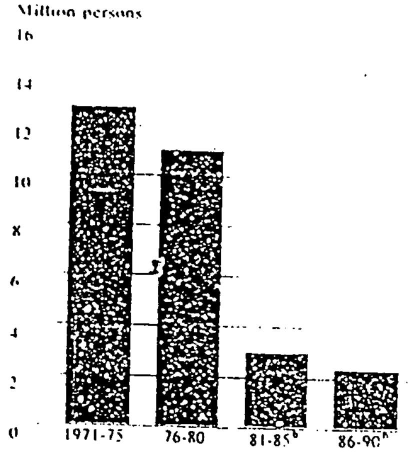
- Many raw materials have become increasingly less accessible, and the cost of exploiting and transporting them will continue to rise sharply throughout the 1980s.

- The average annual rate of growth of the working-age population during 1981-90 will be only 0.4 percent—one-quarter of what it was in the previous decade (see figure 3). About 90 percent of the increment will come from the republics of Central Asia, whose population—which has been increasing at a high rate—generally has less education, fewer skills, and less capital than other ethnic groups.

- Among workers there are long-established habits of casual discipline, slack effort, and shoddy workmanship, as well as wage-leveling proclivities and a strong sense of the irrevocability of job tenure. Among managers there is a deeply ingrained drive to meet quantitative output goals—irrespective of cost, quality, and efficiency criteria—and unwillingness to innovate or take risks in the face of incentive systems that discriminate against chang

[3] As a result of higher-than-normal temperatures in the USSR during the winter of 1982-83, needs for fuel and fuel stockpiles were reduced, in turn lowering needs for transportation of fuel. Transportation difficulties related to long-lasting freezing were also reduced. Because warmer winter weather means that less feed is required per unit of output, monthly livestock product output was well above trend. Good weather during the growing season and harvest produced a second record forage crop, helping to raise meat and egg output to new highs. Grain yields also improved over 1982.

Figure 3
USSR: Increase in Size of the Working-Age Population, 1971-90[a]



[a] Males 16-59 and females 16-54
[b] Projected

On the basis of information published on 1983 results and the 1984 plan and of actions taken to date, we think that the Kremlin—not surprisingly—is still holding mainly to the course set by Brezhnev. However, a shift of emphasis is detectable in trade and labor policy, and new management initiatives are probably being considered. Based on his past speeches, Chernenko might be slightly more prepared than Andropov was to stress consumer welfare and increased availability of consumer goods, while being less receptive to serious change in planning and management of the economy

Resource Allocation

The 1984 plan implies that consumption and investment are each slated to grow at about 4 percent. This investment target is substantially higher than the 1.6-percent average annual growth implied by the 11th Five-Year Plan, and slightly higher than the rate actually achieved in 1981 and 1982, but it is less than the 5-percent growth reported by the Soviets for 1983. Since investment growth has run well ahead of plan each year since 1980, however the actual increase in 1984 may well be greater

The 1984 plan also does not indicate any major change in the allocation of investment resources among the major sectors of the economy. The target for investment in energy is in line with rates originally targeted in the 11th Five-Year Plan. But, consumer goods production and chemicals may be receiving slightly greater attention than previously

We have no [redacted] information on Moscow's future military spending plans. Soviet officials have [redacted] asserted to Westerners that decisions on defense resource allocation have been affected by concern for consumption. Foreign trade representatives have stated—self-servingly—that certain funding intended for defense industry purposes has been reallocated for additional imports of Western agricultural equipment and technology. These officials cited the Food Program as the cause.[4] Our information on current and planned allocations of investment, however, is insufficient to tell whether this asserted reallocation represents an isolated case or an indication of a change in priorities or, for that matter, whether it is even true

The 4-percent growth targeted for consumption in 1984 can be compared with an achieved rise of roughly 2.5 percent estimated for 1983. The regime's interest in consumption is also suggested by the continued large share of investment allocated to the Food Program in the 1984 plan—about one-third of total investment. Notwithstanding these signs, Moscow appears to be taking a cautious approach on consumer issues. In his June 1983 Central Committee plenum speech, Andropov stressed that improvement in the Soviet standard of living would be slow. Increases in income, he maintained on several occasions, must depend on increases in labor productivity.

[4] At the May 1982 Central Committee plenum the Soviet leadership unveiled an agriculture-related Food Program for the 1980s that (1) reorganized the management of food production from the soil to the seller's counter, (2) redirected investment resources between the farm sector and its supporting industries, (3) revised incentives for farmworkers and managers, and (4) listed new targets for output of key agricultural commodities and for allocations of inputs. The program reflects the leadership's concern over lagging farm output and represents a renewed political commitment to improve the Soviet diet. A key goal of the program is to reduce dependence on imported farm products

This line was reaffirmed in December 1983 at the Central Committee plenum and Supreme Soviet session. While Chernenko has supported the Food Program in the past and made efforts to cultivate the image of a leader attuned to popular aspirations, both political and economic constraints would probably prevent him from attempting to sharply accelerate consumption if this were his desire

Foreign Trade Policy

Since 1983 the Soviets have publicly espoused an even more cautious line on East-West trade than they did previously and have called—in Andropov's words—for a "qualitatively new level of economic integration" among the CEMA economies. US linkage of bilateral trade with Jewish emigration from the USSR in the mid-1970s, the exposure of overindebted East European regimes to Western leverage attempts (notably Poland), and Western sanctions following the invasion of Afghanistan and imposition of martial law in Poland clearly motivated the Soviet leadership to seek to reduce the USSR's potential vulnerability to politically motivated Western economic pressure. At the same time, doubts may have increased about the capacity of the Soviet economy to effectively assimilate large amounts of imported Western technology.

A major theme of Andropov's [redacted] speech at the Warsaw Pact summit in January 1983 was the vital importance of reducing the dependence of CEMA countries on Western technology and credits. Indeed, the Soviets have urged the development of an overall coordinated CEMA foreign trade plan, which would increase Soviet control over CEMA economic ties to the West. In December 1983, Gosplan Chairman Baybakov said that trade with Socialist countries would increase 10 percent in 1984—more than double the annual rate of the past three years—and he implied that trade with capitalist countries would drop about 10 percent. This is an even more ambitious plan for reducing trade with the West than that of 1983.

Moscow also has indicated its intention of reducing the East European burden on the USSR. The Soviets have:

- Appealed for a uniform CEMA food plan and an increase in East European food and consumer goods deliveries to the USSR, some at the expense of hard currency sales to the West.
- Reduced credit to the East Germans.
- Adopted more stringent lending practices in dealing with other CEMA countries.
- Warned CEMA countries that further reductions in deliveries of oil and other raw materials may be necessary.
- Pressed the East Europeans to provide more aid for Cuba, Vietnam, and other Soviet clients in the Third World

Labor Policy

The sharpest break with practices of the Brezhnev era has been the labor discipline campaign, with which Andropov personally identified himself. Although the regime has fired some allegedly corrupt or incompetent officials, the campaign appears to have been directed primarily against blue-collar workers. In the winter of 1983 internal security forces and militia teams were used to search for workers absent from their jobs without permission

A second phase in the campaign was introduced in August 1983. A new decree introduced sanctions (loss of vacation, loss of pay, and even dismissal) against workers absent without permission or drunk on the job and offered financial rewards to more productive laborers. The sanctions are carefully limited, however, so their impact may be less than expected. Judging from leadership statements, we think additional disciplinary measures to reinforce labor's commitment to better job performance are likely to be forthcoming, although Chernenko may not adopt as tough a posture as did Andropov

What the post-Brezhnev leadership has *not* done in the field of labor policy has been to remove the safety net of virtually guaranteed employment in their present workplaces for all in the labor force whose performances meet minimal requirements. Dismissal remains fundamentally a punitive measure, not an option available to management for cutting costs and raising the productivity of an enterprise

Economic Reform

Because of the enormous inefficiency with which the Soviet economy presently operates, successful reform would stimulate economic growth even more than would an acceleration of investment. We estimate, for example, that if Soviet industry were operating in the 1980s at the level of productivity attained before 1975—a means of indirectly assessing with our econometric model the potential impact of effective reform[5]—growth of industrial output would be almost twice its actual rate.[6]

How the succession to Andropov evolves will undoubtedly affect the course of economic change in important ways. Nevertheless, there appears to be agreement within the present leadership on certain key aspects of economic reform. Substantial continuity is likely with the Brezhnev legacy of seeking to combine more market-associated practices—for example, stiffer enforcement of contracts—with better planning, more decentralization of authority with more centralization of strategic decisionmaking, and more appropriately structured material incentives with more effective employment of the state's power to command. All members of the leadership are committed to centralized planning as the organizing principle of the Soviet economy and almost certainly would not tolerate market socialism of the Yugoslav variety. At most, they would probably be prepared to accept only limited borrowing from East European experimentation with marketization—perhaps a few elements of the "Hungarian model."

The steps taken by the regime since Brezhnev's death indicate that the present agenda for change appears to include:

- The placement in key posts of officials with a strong technocratic background and exposure to management practices in the military-industrial sector.
- Improvement in the performance of centralized mechanisms for accelerating scientific and technological innovation throughout the economy.
- Organizational changes in the Central Committee apparatus and Council of Ministers intended to improve the center's capacity to undertake and implement effective strategic economic planning.
- Decentralization of some operational authority to large production associations.
- Modest strengthening of the role of self-financing, contractual relations and economic levers in industry, agriculture, and other sectors of the economy.
- Further experimentation with indicators employed to measure managerial success and intended to reward risk-taking, high-quality output, cost reduction and efficiency.
- Greater wage differentiation.

We believe that such a program of modest change, even if implemented in good faith, would probably not succeed in turning around current negative growth in productivity and restoring pre-1975 rates of productivity growth

Outlook for Economic Growth: Some Policy-Conditioned Projections

Mounting resource shortages and competition among claimants, the alarming costs of declining productivity, and the opportunity for policy shifts provided by the need to formulate the five-year plan for 1986-90 are all likely to induce the Soviet leadership to review its policy options—if it has not already begun to do so. To examine the prospects for economic growth in the USSR between 1986 and 1990 and to see what difference various policy choices might make, we have made four estimates—each tied to a particular economic policy that allocates different shares of resources to consumption, military production, and investment—the very areas where there is the greatest uncertainty concerning the future (see box, page 8). We call these the High Consumption, High Defense, High Growth, and Cost Avoidance scenarios. The last of these scenarios assumes a regime policy of "down

[5] In the projections described in this paper, our model's computations of industrial output are based on the estimated historical relationship that has existed among capital, labor, and output in the branches of industry since the mid-1970s, which appears to have been a pivotal time for factor productivity in most of industry. Industrial factor productivity had increased during the first half of the 1970s. Since then it has been declining. [ ]

[6] This growth would slow down considerably in the last half of the decade but would remain well above the growth rates we now project for industry. As a result, in 1990 machinery output would be 10 to 15 percent higher, total investment almost 10 percent greater and consumption about 7 percent more than we now projec

Uncertainties in Economic Projections

All econometric models require two types of data. Historical time series are used to estimate the nature of behavioral relations between variables, such as how capital and labor have combined to produce output. Such relationships are projected into the future through the behavioral equations in the model. All models also require information on how certain future events will play out

There are differing degrees in the certainty that can be attached to these data on the future. Our estimates of growth of the labor force are relatively firm, for example, because participation rates for the working-age population are near the ceiling, all the people who will start working during the projection period can already be identified in existing population data, and we have good information on mortality rates. At the other end of the certainty spectrum is the distribution of GNP among primary uses—consumption, investment, defense, and exports. Although there are obvious rigidities, this distribution is ultimately subject to the policy choices of Soviet leaders. Therefore, the values for the allocations to defense spending, investment, and exports that we must develop and put into the model are analytic assumptions on our part, which may be subject to substantial revision as events unfold.

For example, we assume certain growth rates for overall defense expenditures and for military hardware procurement through the 1980s on the basis of our analysis of observable current and historical trends. Similarly, although the total value of investment is calculated in the model, the estimated flows of investment goods to producing sectors depend on this total and on an assumed pattern of investment distribution. Exports, necessary for our projection of the trade balance, are also estimated outside the model. The actual growth rates of these variables in the future can be influenced by decisions of the leadership in ways that the size of the labor force in the 1980s (to a large extent already determined by demographic factors) can not.

In general, we are more certain about input values that are subject to little, if any, manipulation through policy or are clearly reflections of long-term trends that are not likely to be reversed quickly. We are less certain about the assumed values of input variables that can be strongly influenced by such factors as policy decisions and international market forces. One reason for looking at alternative GNP projections is to gauge how sensitive the values generated by the modeling process are to some of the more important uncertainties in the input variables

the middle"—an attempt to make progress in consumption, military production, and growth without discriminating markedly against any one of the principal claimants. Indeed, for reasons discussed below, we believe this to be the most likely scenario

These projections of growth were developed using SOVSIM, the large-scale econometric model of the Soviet economy that has been developed and refined by the CIA over the past five years.[3] The projections that have been calculated fall within a range of growth considered to be realistic by a broad consensus among Western academic and government specialists on the Soviet economy. Difficult trade-offs involved in resource allocation suggest that there are fairly severe limits on the options available to policymakers. Our scenarios attempt to reflect these limits. Nevertheless, in addition to the scenarios described in this paper, we have examined cases with more extreme assumptions (for example, defense growth at rates considerably above any noted in the past, or sudden improvement in factor productivity). None of these extreme cases resulted in rates of economic growth during the 1980s that were dramatically different from the growth rates in the projections described below, either by showing growth of the economy coming to a halt or by indicating a return to the growth rates of the 1960s and early 1970s

Table 1
New Fixed Investment: Distribution in 1985 and 1990, by Scenario [a]

Percent

	Cost Avoidance		High Consumption		High Defense		High Growth	
	1985	1990	1985	1990	1985	1990	1985	1990
Total	100.0	100.0	100.0	100.0	[illegible]	100.0	100.0	100.0
Of which:								
Industry	40.4	46.2	40.8	47.7	43.0	56.5	43.0	56.5
Agriculture [b]	19.0	18.5	19.4	19.9	17.2	11.5	17.2	11.5
Trade and services	12.5	11.5	12.7	12.5	11.3	6.6	11.3	6.6
Housing	12.4	10.5	12.5	11.1	11.7	7.6	11.7	7.6

[a] Note that the figures in this table represent assumed percentages of investment distributed under the various scenarios. The estimated flows of investment goods to producing sectors and housing depend on this allocation pattern and the total value of new fixed investment calculated by the model. Therefore, although percentages shown for the High Defense and High Growth scenarios are the same, actual investment will be higher in the latter.

[b] The share shown for agriculture refers only to investment on farms for production. The larger share (one-third) referred to in the text embraces a much broader array including, in addition, investment in industries providing goods and services to farms, in food processing, transportation and storage, and in on-farm housing and municipal services.

High Consumption

The rationale for a high consumption policy would be the need to provide the material incentives needed to spur productivity. Politically, this policy would have to be justified as a move to preempt likely popular unrest under international conditions benign enough to permit such a step. The scenario would involve relatively greater shares of investment than in other scenarios for housing, trade and services, and agriculture (see table 1). Total defense spending after 1985 would be held constant—at a zero growth rate through the rest of the 1980s—to increase total investment, and the volume of food and other consumer goods imports from the West would increase.

The gain to consumers of such a policy would essentially be that growth in per capita consumption—within the 1986-90 timespan—would decline only slightly and would still be well over 1 percent by 1990 (see table 2).

The principal cost of such a policy in terms of economic growth would be slightly lower growth in GNP than in the other scenarios during the last half of the decade. Resources would be shifted away from the sectors that produce investment goods—machinery and construction—and from the sectors providing industrial materials and services, which would in consequence tend to depress industrial output. However, the supply of consumer durables would be increased, as would the output of consumer services and retail trade. We do not know what the effect of these consumer benefits would be for labor effort and productivity. Given the notoriously poor quality of available consumer goods, increasing the supply of goods without improvement in variety and quality might not in fact provide incentives for greater effort in the workplace. Additional costs of this policy would be that, with lower economic growth in the 1980s, there could be less opportunity in the 1990s to accelerate technological modernization—with effect on both civilian and defense industry—and growth of consumption would continue to decline.

Table 2
GNP Uses: Average Annual Growth by Scenario, 1986-90

Percent

Scenario	GNP	Per Capita Consumption	New Fixed Investment	Defense
Cost Avoidance	1.6	0.8	2.3	2.0
High Consumption	1.4	1.4	1.4	0
High Defense	1.8	-0.3	2.6	5.0
High Growth	1.8	0.5	3.7	0

High Defense

The rationale for an increase in military spending would be a perceived Western challenge to the USSR's security interests. This scenario assumes military spending would grow at 5 percent a year—a rate slightly higher than the 4- to 5-percent rate of the 1966-76 period. To accommodate this shift, investment would be stepped up in energy, industrial materials, and the investment goods sectors (see table 1). More repressive domestic measures would be likely, and we assume a mandatory return to a longer workweek, which increases the labor input to the economy. The Soviets would increase machinery imports from the West to meet the greater need for investment goods, and to pay for these imports they would maintain oil sales to the West while reducing oil sales to Eastern Europe

The social and economic costs of supporting an accelerated arms buildup would be high but not, in our view, prohibitive. With an acceleration of investment in fuels and heavy industry, average annual growth of total industry and of GNP would be higher than under the other scenarios except for High Growth. At the same time, growth in output of consumer goods, including agriculture, would appear to be only modestly retarded

As the share of GNP devoted to military spending rose from 15 percent in 1985 to 18 percent by 1990, however, growth in per capita consumption would become negative, dropping by about three-tenths of a percentage point a year (see table 2). Furthermore, the combination of higher take-home pay (resulting from a longer workweek) and fewer consumer goods could increase repressed inflation and aggravate popular discontent. Equally important, the prospects for future growth of the economy as a whole would be diminished by the higher share of output of the machine-building and other industries being allocated to military production

High Growth

The rationale for concentrating more heavily on investment would be the need to accelerate the modernization of capital stock and infrastructure, counter the secular decline of growth of GNP, and lay the groundwork for steady progress in guns and butter in the 1990s. It would involve the same general pattern of resource allocation as the High Defense scenario, but with zero growth in 1986-90 in total defense spending and higher imports of Western machinery.

The economic cost of the High Growth strategy would be less than that of High Defense. Over the 1986-90 plan period, there would be a small growth of about 0.5 percent in average annual per capita consumption, compared with declining per capita consumption under the latter scenario. Average annual GNP growth for this period would be at the same relatively high level (about 1.8 percent). But a still higher average annual growth of new fixed investment of 3.7 percent would be achieved, which would generate a substantially higher level of new fixed investment by 1990.[a] This volume of investment, in turn, would provide the best base for a simultaneous acceleration of military output and consumption in the 1990s. Lags in bringing new capacity onstream and the effect of an energy

[a] It should be noted that new fixed capital investment has been growing at an annual rate of about 4 percent thus far in the 11th Five-Year Plan (1981-85), and it is possible that the regime will strive to maintain that rate of increase in the next five-year plan (1986-90).

constraint on capital utilization of plant and equipment prevent more rapid growth of the economy before 1990 under this scenario.*

Cost Avoidance

Each of the strategies outlined entails key costs that the leadership would probably wish to avoid: the High Consumption and High Growth strategies sacrifice enhanced military power; the High Consumption and High Defense strategies—in different ways—impair the prospects for economic growth in the 1990s; and the High Defense and High Growth strategies run the risk of further depressing labor productivity or even kindling active public discontent. Thus we believe that the most *likely* course of action that the Soviets will pursue—provided there is no pronounced worsening of the international situation, no serious internal political instability, and no sudden sharp deterioration of the economic situation—will be an attempt to make some progress along all three fronts at once (consumption, military production, and growth) while avoiding a marked swing in any one direction. The relatively good results for 1983 may provide additional impetus to choosing such a strategy. Over the decade, this strategy would provide growth sufficient to support a range of policy initiatives, especially in the areas of defense and investment, and still keep living standards from declining

Having both guns and butter, a strategy we call the Cost Avoidance approach, could be viewed as an extension of certain trends observable already in 1983.[10] It foresees quite low growth with nearly stagnating living standards, a moderate upturn in military procurement, and no productivity breakthrough as the most likely course of development through 1990 (see box, page 12).

Scenario Summary

The most striking feature of the outcomes of all the scenarios—including High Growth—is the limited degree to which the new leadership can affect GNP growth during the 1980s.[11] The policy options discussed do not alter the estimate of GNP growth by more than about half of a percentage point per year during the rest of this decade.[12]

In contrast with its limited ability to influence the rate of GNP growth for the 1980s, the regime can to a significant degree determine how GNP is distributed. Within the scenarios we have examined, our analysis indicates that by 1990:

- The lowest *level* of per capita consumption in the scenarios could be 10 to 15 percent below that of the highest.
- The share of GNP going for defense could vary from 12 to 18 percent.
- Industry's share of new fixed investment could vary by about 10 percentage points.

These differentials would have serious implications for economic growth in the 1990s

The next two sections of this paper assess the effects of the economic slowdown if we assume that the Soviet leadership pursues the Cost Avoidance strategy—although most of the assessment here holds true

* We estimate that primary energy production will grow by about 1.6 percent per year on average for the rest of the decade, down from 4.6 percent in the 1970s. Expected gains in gas production will be somewhat offset by declining oil production and continued stagnation of coal output. The planners must hold domestic energy consumption growth to a little below 2 percent a year if critical exports to Eastern Europe and exports to the West for hard currency are to be met. At the same time, our projections indicate that domestic requirements for primary energy—which are largely determined by the size, age, and composition of the capital stock—will continue to rise at an average of about 2.7 percent annually. The implication of these trends is that the economy may be operating under an energy constraint—with domestic energy requirements (defined in terms of full utilization of capital stock) greater than the energy available for consumption—especially as the end of the decade approaches. At the macroeconomic level of our analysis, the impact of an energy constraint is to prevent full use of available capital

[11] Moreover, to the extent that higher growth stems from the reallocation of resources from consumption to investment, high-growth scenarios may overstate the actual results because of the adverse impact lower consumption could have on productivity

The Cost Avoidance Scenario

The Cost Avoidance scenario assumes, in particular, that Soviet defense spending *in the 1980s will increase at an average rate of about 2 percent a year, with hardware procurement showing no growth through 1985 and growth at 2 percent a year in 1986-90. Research, development, testing, and evaluation (RDT&E) growth will fall slightly after 1985. (In the High Growth and High Consumption scenarios, defense spending is held at zero growth after 1985. In the High Defense scenario, it is assumed to grow at 5 percent per year.)*

The allocation of investment and labor *among producing sectors through the decade mirrors targets set in the 1981-85 plan. The shares going to the energy sectors will increase (at the expense of some consumer sectors). The shares accorded to heavy industry will remain relatively constant through 1990. (In the High Growth and High Defense scenarios, investment shares to industrial materials and investment goods sectors are increased and shares to consumer goods sectors are reduced compared with this scenario. In the High Consumption scenario, this incremental pattern is reversed.)*

Oil production *will nearly reach the plan target of 12.6 million barrels a day in 1985 and then begin a slow decline to 11.5 million b/d in 1990 (the current production level is 12.4 million b/d). (This assumption is the same for all scenarios except High Growth, where production declines to 12 million b/d by 1990.)*

With continued growth of domestic energy requirements, *Moscow will have to choose between maintaining oil exports and meeting domestic needs. We assume that there will be a substantial reduction in oil exports but that most of the energy shortfall will be absorbed through slower growth in the domestic economy. (In the High Investment and High Defense scenarios, oil exports to the West are higher than in this scenario, and, in the High Defense scenario, oil exports to Eastern Europe are lower.)*

Given these assumptions, our best assessment of Soviet economic growth through 1990 is that:

- *Growth will continue to decline in the 1980s. Average annual GNP growth will be about 2 percent a year—a bit higher in 1981-85 and a bit lower in 1986-90.*
- *Average annual growth of industrial output in the 1980s will fall to slightly over 2 percent.*
- *Observations of average weather conditions during the 1962-80 period suggest that average annual growth of agriculture output is likely to vary around a trend of less than 2 percent, although agriculture will remain the most volatile sector of the economy.*
- *Average annual growth in per capita consumption will fall to less than 1 percent.*
- *Average annual growth in new fixed investment will drop to a new postwar low of around 2.5 percent.*
- *The defense burden will remain at about 14 percent of GNP through 1990*

for all scenarios. The subsequent section sets forth deviations from the basic findings, assuming the leadership were to pursue other strategies

Impact of the Economic Slowdown on Internal Affairs

The Political Regime

Regardless of which policy-determined scenario is chosen, Moscow's economic problems, while serious and intractable, do not threaten the continued existence of the Communist political system. Economic growth, according to our projections, will remain positive during the 1980s. The regime is cushioned from conceivably adverse reactions among the population to the growth slowdown by an enormous parasitic stratum of political controllers and economic bureaucrats who have the strongest vested interest in maintenance of the existing system of Communist Party rule.

Change, however, may occur in the institutions of the regime, the types of people representing it, and the propaganda line employed to manipulate the populace. Many factors will influence such change, not the least of which will be probable factional struggle within the Politburo. But the requirements of coping with consequences of the growth slowdown should bring two partially incompatible functions even more to the fore than in recent decades: maintenance of political control and promotion of technological innovation and more efficient management

Institutions. Neither of these functional imperatives is likely to produce major changes in the institutional structure of the Soviet party-state regime in the 1980s. In particular, we think the chances are extremely slight that the technological imperative would lead the leadership to replace the command economy with a socialist market economy—with the challenge to political control and vast uncertainties that would inevitably flow from such a revolutionary move. The political elite is strongly opposed to full-scale marketization, most policy advisers do not believe it would be the right solution even if it were politically feasible, economic managers would resist its implementation, and the working class would bridle at many of the consequences of such a move—especially the loss of job security

What is most likely to occur institutionally are shifts in the balance of power among the bureaucratic empires that underpin the regime. For example, there has already been a rise in the KGB's overall influence, and we might see it acquire greater enforcement responsibilities in the economy going beyond the attack on corruption—although the expansion of its role under Andropov probably created anxiety in other power centers. Shortly after his accession as General Secretary, Chernenko emphasized the desirability of reducing the burden of day-to-day supervision by the party apparatus of governmental organs, to enhance the strategic leading role of the party. If there is not a vigorous reassertion of the dominance of the party apparatus—which has not occurred so far following Brezhnev's death—the role of the military could grow. But party and police controls at all levels within the military establishment will remain strong enough to prevent any military takeover, in the highly unlikely event that elements within the military dissatisfied with the party's management of the economy might seek to assume power. We might see further attempts to upgrade the central economic planning apparatus while reducing the role of middle echelons of the economic ministries. The Academy of Sciences and State Committee for Science and Technology might be elevated in the planning process. And large industrial associations might be given more power.

Leaders. The political control and technocratic functions highlighted by the slowdown in economic growth will probably also influence selection of the types of people likely to rise to high office in the regime. Top-level changes made soon after Brezhnev's death could be a harbinger of future recruitment patterns. On the one hand, there were promotions of people like Andropov and Geydar Aliyev (the former KGB professional and chief of Azerbaijan)—both long experienced in intelligence and police work, but lacking in economic training or economic managerial experience. And, on the other hand, there have been promotions of people like Nikolay Ryzhkov, a new Central Committee secretary; Nikolay Slyunkov, the new first secretary of Belorussia; and Lev Zaykov, the new first secretary of Leningrad—all clearly technocrats with modest political credentials. The losers here appear to be the generalist political cadres who have traditionally manned the top party posts in the provinces and in the Central Committee Secretariat. The new appointees are probably less ideological and more pragmatic than their predecessors, and some are probably more willing to accept change, but the sparse data available provide no persuasive evidence that they differ significantly in their policy objectives—nor indeed that they share any unique policy orientation, internal or external

Propaganda Line. The dual demands of greater political control and technological progress are likely to lead to an intensification of propaganda themes that were evident under Andropov's rule. Thus, the need to justify or obscure greater consumer deprivation will almost certainly generate a high level of scapegoating throughout the 1980s. The media will continue to place heavy stress on the purported US military and subversive threat, combined with chauvinist appeals to "Soviet patriotism." Word-of-mouth propaganda probably will highlight Soviet sacrifices to ungrateful allies and cultivate nationalist sentiments more openly. And, within the framework of an updated Marxist-Leninist doctrine (perhaps codified in a new party program), we are likely to find an emphasis on technocratic pragmatism—a theme already voiced by Andropov

Society

The growth slowdown of the 1980s could in principle confront the leadership with two quite distinct societal problems: active unrest, and poor morale/low labor productivity. Each has its own threshold of deprivation, above which people give vent to their discontent (in the former case) or cease to exert themselves on the job (in the latter). Although there are objective conditions (for example, the disappearance of meat and vodka from the stores) that, if they came to pass, might trigger either response, the populace's subjective assessment of its well-being in comparison with its current sense of what this *ought* to be will probably determine its mood

Unrest? Approximately 280 cases of civil unrest—that is, incidents involving demonstrations, strikes, or occasionally even violence—have been reported in since 1970. Most frequently these have been caused by complaints about working conditions and pay or by unhappiness over chronic shortages of meat and dairy products. There will almost certainly be more instances of such unrest in the future, whichever economic strategy the leadership pursues

Reported cases of unrest bunch heavily in the non-Russian Baltic, Ukrainian, and Caucasian republics, where economic discontent has blended with simmering resentment of the Russian presence and Moscow's repressive nationality policy. this reporting may understate the incidence of unrest in the Russian heartland itself—especially in the large industrial cities whose stability is probably of paramount concern to the Kremlin

Concern over possible political instability clearly exists within the party elite. Both Andropov and Chernenko have warned in speeches that public dissatisfaction, if unattended or mishandled, could assume "crisis" proportions. Debate in the press about the implications of failure to deal adequately with consumer demands and public discontent has intensified. This debate—cast in terms of dealing with "contradictions" in Socialist countries—may become more significant as Soviet leaders prepare the next five-year economic plan and a new comprehensive party program

Apprehension about the popular mood has probably significantly influenced regime policy over the past several years. It accounts at least in part for:

- The high priority assigned to the Food Program.
- Massive grain imports.
- Attempts to strengthen worker discipline.
- The higher profile assumed by the KGB.
- Attempts to curtail contacts between Soviet citizens and Westerners and reduce the flow of information from the West.
- Attacks on more blatant forms of corruption and official abuse of power.

We believe, nevertheless, that the regime will be able to suppress those disturbances that do occur and to prevent any chaining of them together. Concerned by what it has seen in Poland, the leadership has already moved to strengthen controls over the labor force. And, in contrast with Poland's experience, Moscow has been highly successful in containing unrest. Where food shortages have caused demonstrations, as in Tallin in 1980, it has effectively employed firefighting tactics, such as rushing food in from surrounding areas and maintaining supplies for a time, while targeting demonstration leaders for repression. Even when force has been used to quell disturbances that have occurred, the unrest has not spread

In contrast with Poland in 1980 and 1981—where there was a traditionally strong Catholic Church, a powerful newly formed national labor union created by the workers, and mutually supportive ties between workers and intelligentsia—there are no institutionalized channels for effectively transmitting appeals for mass action to the public at large across the vast territory of the USSR. Strikes over working conditions in Gor'kiy and Tol'yatti in 1980, for example, were not even mentioned in the Soviet press for over a year (and then denied), and most of the population seems to be still unaware that they occurred.

Soviet workers lack the organization, discipline, and recent historical experience to follow the Polish example—at least in the 1980s. They live in an environment saturated with police informers who work for a regime that has not lost its nerve and is intent on crushing dissent. And they cannot count on effective assistance from disaffected elements within the intelligentsia or bureaucracy. We by no means rule out the possibility of spontaneous large-scale localized disturbances of the type that occurred, for example, in Novocherkask in 1962. But we do not believe that the threshold of sustained and widespread mass unrest will be crossed in the 1980s

Morale and Labor Productivity. Much open-source commentary and various [ ] suggest that a perceptible decline in worker morale and growing social malaise have occurred in recent years. Alcoholism has probably risen, as have disorders associated with it—crime, family breakup, increased adult and infant mortality (see figure 4), absenteeism, industrial accidents, and spoilage. Savings have involuntarily increased, thanks to the absence in the marketplace of many high-quality consumer goods and services. Worktime is lost while employees spend hours shopping for food and other consumer goods and services. Corruption has probably increased, and enormous human effort is being channeled into unsanctioned or illegal Second Economy activities. None of these trends can be turned around easily

The extent to which such phenomena have affected productivity already and the extent to which their amelioration would improve it are a subject of controversy among Western specialists. According to what they themselves say, Soviet leaders believe that public dissatisfaction with the availability of consumer goods is an integral cause of low labor productivity and that progress in raising consumption levels is a necessary—if not sufficient—condition for sharply improving productivity. Although they will continue the discipline campaign and continue to appeal to patriotism by citing the "imperialist danger" as a stimulus to labor effort, they probably expect only modest productivity gains from such gambits. They must also recognize that the policy of increasing wage differentials to stimulate productivity can work only if it is progressively backed by an increased supply of quality goods that the more ambitious workers can hope to acquire

Military Power in the 1980s

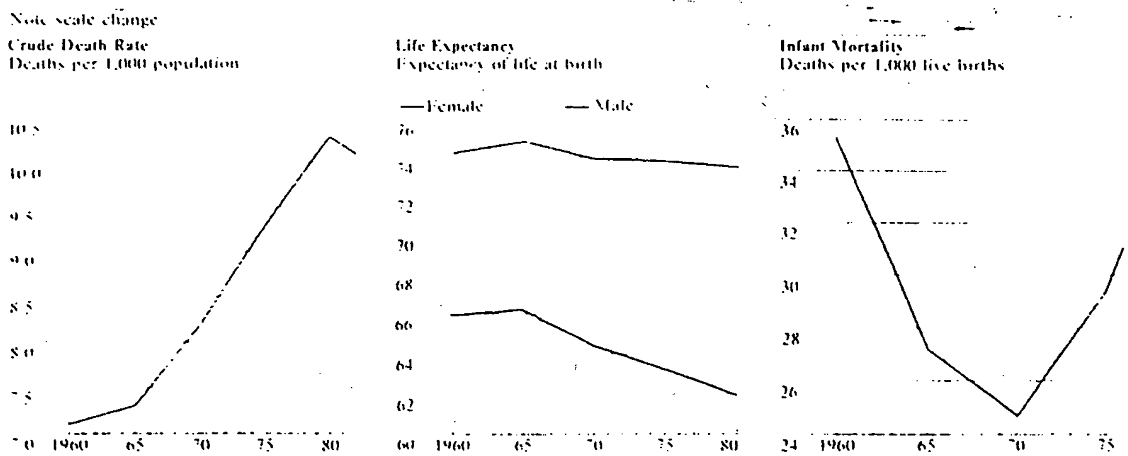
Slow Growth Likely. We believe that the Soviet leadership will seek to continue its policy of the past 20 years of balanced and large-scale force development. This assessment is based on our reading of Soviet objectives, knowledge of Soviet military needs, and physical evidence about weapon systems.

Deployment of these systems will encounter obstacles. We think that these obstacles can be overcome only if the leadership—in reaching a decision in 1984 and 1985 on resources to be allocated for weapons development and production in the 1986-90 plan—chooses to increase spending on military procurement slightly, while reducing growth somewhat in other components of military spending. Thus, our Cost Avoidance scenario postulates a rise of average annual procurement from zero growth in 1981-85 to 2 percent in 1986-90. Such a decision would be presented privately to elite audiences as a response to a growing threat posed by increased US defense spending

Implications for Force Modernization. Even with this boost, we expect that the flow of at least some new weapons into the stock of Soviet military equipment will not be as rapid as in previous decades. The Soviets might:

- Curtail some weapon programs that are near the end of their production run. This would permit the transfer of resources to civilian production or to follow-on military programs.

Figure 4
USSR: Death Rate, Life Expectancy, and Infant Mortality[a]



[a] The cutoff points in these graphs reflect the most recent Soviet publication of data.

- Cut back or eliminate some support programs, such as those for naval auxiliary ships and transport aircraft, increasing the use of merchant ships or civil aircraft to support military operations.
- Stretch out some weapon procurement programs and slip the time schedule for force modernization slightly.
- Extend the service life of some older weapon systems to reduce the requirement for new equipment in selected areas.

Yet, if they were to make these adjustments, we estimate that the Soviets would not have to forgo any major weapons program or forsake any of their force modernization goals. Indeed, we project impressive force gains for the Soviets in the 1980s. Important programs in development that could be deployed with military forces through the early 1990s include several military space systems, strategic cruise missiles, another generation of strategic ballistic missiles, a strategic bomber, a large transport aircraft, and a large carrier for conventional aircraft

Impact of the Economic Slowdown on Foreign Policy

An Overview

Overall, we believe that the slowdown in growth will not result in major changes in Soviet foreign policy. We do not see economic problems at home motivating the leadership to undertake high-risk adventures abroad that are designed to distract an unhappy public or produce economically beneficial geostrategic breakthroughs.

Moscow, however, will continue to exploit opportunities that might arise to increase economic pressures on the West and divide the United States from West European or other friends while gaining economic advantage itself. Sensitivity to economic problems will almost certainly lead Moscow to seek to avoid major new commitments of economic aid in the Third World. Moscow is also aware that pursuit of its objectives there through force and subversion could negatively affect the USSR's trade relations with the West. Nevertheless, awareness of this possible price—which the Kremlin probably discounts—is unlikely in any event to significantly constrain the Soviets' continuing political and military activity in the Third World.

Eastern Europe

The slowdown in economic growth will have its most serious external impact on relations between the USSR and its client regimes in Eastern Europe, which currently receive most of Soviet economic and military assistance. From the Soviet standpoint, the cost of subsidized oil and other raw material deliveries to Eastern Europe has been extremely high in opportunities forgone for relieving domestic energy shortages or earning hard currency. Overall, of total oil exports—Moscow's leading hard currency earner—over half goes to East European and other Communist countries. Because of slowing oil production and rising internal demand, as well as continued need for imports of foodstuffs and plant and equipment from the West, the opportunity cost to the USSR of oil deliveries to Eastern Europe is likely to remain high. Thus the question is not whether the Soviets will squeeze Eastern Europe for the rest of the decade, but how they will do so and how hard—in CEMA integration, Warsaw Pact force modernization, and trade

We believe that there is little more that the problem-plagued East European countries can provide that will help the USSR economically and that cutting back on Soviet oil deliveries to Eastern Europe would be risky. Yet to achieve the levels of GNP growth and per capita consumption stipulated in our Cost Avoidance scenario, by 1990 Moscow would have to impose further cuts in oil deliveries to Eastern Europe beyond those already levied. Additional reductions, if accompanied by price hikes and cuts in other raw materials, and even if partially compensated for with exports of additional gas, would create new political and economic strains in Eastern Europe

We believe, nevertheless, that the Soviets will risk aggravating popular unrest in Eastern Europe by tightening the economic screws because they:

- Resent the East Europeans' higher standard of living and feel that deprivations should be shared equally within the "fraternal commonwealth."
- May believe there is enough waste in the East European economies to impose additional costs without cutting consumption sharply.
- Appreciate the purely coercive power of the police in maintaining social order

There is also the safety valve of East/West European trade. Although suspicious of such relations as a threat to Soviet political hegemony and economic interests, Moscow will probably continue to tolerate selective East European economic links with Western Europe that could relieve the burden on the USSR and are unlikely to be used by trading partners for political leverage

The United States

Potentially, the growth slowdown could most affect the Soviet posture toward the United States in trade and arms control

Bilateral Trade. Moscow is committed under the recently negotiated US-USSR Long-Term Grain Agreement (LTA) to purchase a minimum of 8-9 million tons of grain in each of the next five years. The USSR, however, also has LTAs with Canada, Argentina, and several smaller suppliers, which commit Moscow to buy in the aggregate a minimum of 10 million tons annually through 1985. In addition, a protocol signed with France last year reportedly guarantees the USSR another 1-3 million tons of grain. A poor domestic grain harvest could push Soviet grain import requirements considerably higher than the 20-30 million tons a year we estimate they may need in the longer term. The robust outlook for global grain production over the next few years, however, suggests that the Soviets' need soon for purchases from the United States above the LTA commitment and potential US leverage are likely to be quite limited. Moscow still finds the United States attractive as a supplier because of its unique year-round capacity to deliver large volumes of grain quickly at short notice.

Our analysis of Soviet equipment manufacturing capabilities and the continuing problems in the oil industry indicate that requirements in the 1980s for imports will center on Western equipment and technology for deeper drilling, fluid lift, well completion, and servicing. In addition, the Soviets will need sophisticated exploration equipment, offshore drilling platforms, and secondary oil-refining technology. Because gas is critical to maintaining total Soviet energy production growth in this decade, continued imports of pipelayers, turbines and compressors, and other gas-exploitation equipment will be necessary. Western equipment and technology will be especially crucial for exploiting sour gas deposits, such as those at Astrakhan and Tenghiz. The Soviets will also need Western help if they are to intensively exploit Siberian coal resources during the 1980s.

Although the United States is the preferred supplier of most types of oil and gas equipment throughout the world, in recent years its share of the world market has decreased, even before the embargo on sales to the USSR. The Soviets have been able to purchase almost all of what they have needed from non-US suppliers, and termination of the embargo has not fundamentally affected their policy of buying from the United States only as a last resort

Nevertheless, large-scale US assistance would help Moscow in maintaining oil output and developing Arctic offshore resources. The United States remains the sole supplier of certain oil and gas equipment, the need for which should increase as Soviet oil production problems intensify—namely, high-capacity submersible pumps, deep-well-drilling rigs, well- and mud-logging equipment, and various items for offshore oil production.

The Soviets urgently need high-capacity submersible pumps, which can lift increased volumes of fluid and thereby stabilize output in already producing fields—where the ratio of water to oil being lifted is rising steeply. The Soviets recognize that this equipment is necessary and—following termination of the US embargo and approval in early 1984 of an export license—have placed an initial $40 million order for submersible pumps with a US manufacturer. A follow-on order is possible. Delivery and installation of the first order will take 12 to 18 months. We estimate that this move could play a substantial role in holding up oil production.

Soviet trade officials are currently pushing for a Soviet venture with the United States and Canada to manufacture drilling equipment and assemblies for oil development in the Barents Sea and possibly elsewhere in the USSR. Such a consortium reportedly would be incorporated in Western Europe, complex components would be produced in the United States, and simple components would be manufactured and final assembly carried out in the USSR. The USSR has to develop offshore oil deposits to maintain future oil supplies. The Soviets presumably recognize that they need US and Canadian participation. Only the United States has the technical and financial resources needed for a project of this magnitude. A figure of $10-11 billion has been mentioned for the cost of the project alone, with total Barents Sea development costs running up to $25 billion

Whether this degree of technological dependence on a narrow range of US equipment, particularly high-capacity submersible pumps and offshore equipment, translates into much political leverage for the United States is problematic. We believe that any Soviet willingness to accommodate US political interests in return for aid in oil equipment would be limited and would depend upon Moscow's assessment of the overall state of bilateral relations. The Kremlin conceivably might show some political flexibility if leverage were exercised quietly in a more favorable diplomatic environment. But if Soviet leaders felt that they really had to openly choose between significant US-dictated political concessions and lower oil production, they would probably opt for the latter to avoid what would be regarded both inside the regime and abroad as a humiliating display of weakness. At the moment they obviously prefer to buy the submersible pumps and cross the leverage bridge when and if circumstances require

Heavy official emphasis on the Food Program indicates that large investments will continue to be made through the mid-1980s in agriculture and the food industry. Ministry of Agriculture and foreign trade officials have indicated that imports will play an important role in this food-related investment. They have expressed interest in acquiring Western farm machinery, road constr[illegible] essing and packaging [illegible] ties for perishable [illegible] shown renewed interest in complet[illegible] plants that were proposed or started [illegible] Western technology and equipment.

Soviet trade officials have indicated [illegible] bilateral relations, the U[illegible] principal source [illegible] industry equipment because [illegible] world leader in the field. [illegible] pursue these overtures is [illegible]

Incentives for Arms [illegible]

[illegible] growth of military [illegible] individual instances [illegible] civilian economy [illegible] military requirements.[illegible] During [illegible] statements by Soviet leaders suggested that [illegible] spending on the civilian ec[illegible] come a matter of increas[illegible] the slowdown [illegible] taken the industrial base on which the growth of military power itself ultimately depends. [illegible] ing of growth, the potential long-term cost savings associated with arms control will probably be given greater [illegible] the decade passes.

The direct savings in hardware [illegible] could be gained through [illegible] the Soviets would [illegible] be prepared [illegible] probably not large enough to significan[illegible] policy. Strategic force requirements absorb [illegible] materials and are less labor inten[illegible] other military services, and the high-tech[illegible] duction resources devoted to strategic nuclear systems are also less easily transferable to civilian purposes. If all the difference in expenditures resulting from a strategic arms limitation agreement were transferred to civilian investment, the short-term effect on GNP would still be small even though the cumulative savings over five to 10 years might be considerable.

[illegible] were com[illegible] [illegible] required the construction of new [illegible] could bring [illegible]

[illegible]

- [illegible] the calculability of future military outlays [illegible] competition [illegible] (and thus [illegible])

[illegible] effect, through reducing military spending [illegible]

At Soviet leaders assess the [illegible] of prospective open-ended high-technology arms competition with the United States, [illegible]

Internal politics [illegible] brought [illegible] economic growth. As in other countries, conflict over marginal shifts in resource allocation may be magnified through political struggle in the USSR. The growth slowdown may have intensified a general sense among some leaders that even small steps should be taken to satisfy urgent demands for materials and equipment in other programs by lightening military outlays. These leaders might therefore be willing to adopt a more moderate posture in arms negotiations without any precise reckoning of ruble benefits that could accrue—provided they could secure their political flanks against the charge of undercutting national defense

The Third World

If the slowdown in economic growth were to become a key factor shaping Soviet policy toward the Third World during the rest of the 1980s, we would probably expect Moscow to:

- Cut back on already low levels of economic aid to non-Communist less developed countries (LDCs) and focus aid on allies in the Third World.
- Insist that Communist clients be more frugal in their use of Soviet-supplied resources.
- Insist on timely payment of debts.
- Increase hard-currency-earning arms sales as much as possible and provide less concessionary financing.
- Avoid provocative and nonremunerative military assistance to regimes like Nicaragua, which do not contribute significantly to Soviet security.

In fact, changes in the domestic economy have only a secondary impact on Soviet behavior in the Third World in comparison with the impact of military and geopolitical factors, and thus Moscow is likely to pursue these objectives only in part.

At the June 1983 Plenum of the Central Committee, Andropov—replying bluntly to frequent LDC complaints of Soviet tightfistedness in nonmilitary economic assistance—put the Third World on notice not to expect much in the way of such aid from the USSR. This posture, of course, was not intended to signal less Soviet involvement in the Third World. Arms exports—mainly for hard currency—have been accelerating: in 1982, Soviet arms agreements climbed to $9 billion, 40 percent higher than in 1981 and well above the average for the previous five years. But, economic assistance is being channeled even more than before to the USSR's Communist allies and leftist client states. In 1976-80, they received 85 percent of Soviet aid disbursements; in 1981 and 1982 they received 92 percen

Toward Cuba, Vietnam, and Afghanistan, where the USSR incurs its main Third World economic costs, political and military-strategic factors have far outweighed economic considerations and will probably continue to do so.

Cuba. Soviet aid of $4.5 billion a year keeps Cuba's economy afloat and helps to bankroll Cuban adventures in Africa and Central America. Moscow has already stepped up its complaints regarding Cuba's inefficient use of resources. [ ] [ ] Soviet officials recently have complained to Cuban Government representatives about the low productivity of Cuban workers, the island's inefficient utilization of land, and the underemployment of Soviet advisers and technicians. We expect that, although Moscow will maintain the present volume of its oil deliveries to Cuba through 1985, the oil price subsidy will fall sharply as oil prices charged to CEMA countries approach the world price. Moscow has also been pressing Havana to fulfill its soft currency sugar contracts with the USSR, even at the expense of hard currency sales. Soviet pressure is likely to become most acute during 1985 as bilateral negotiations for the 1986-90 trade protocol get under way and as January 1986—the date when Cuba must begin repaying its long postponed debt to the USSR—approaches

Nevertheless, Soviet interest in sustaining a Communist regime there assures Havana of continued large-scale support. Cuba remains Moscow's key beachhead in Latin America; it has been a highly valuable resource in achieving Soviet objectives in the Third World; and it provides an important channel for Soviet aid to leftists. There are some 60,000 Cuban military and civilian advisers in Third World countries where a large-scale Soviet presence might be viewed with alarm by the locals or by the West. Cuba also offers the Soviets important intelligence collection facilities, serves as a staging base for Soviet military reconnaissance aircraft, and provides servicing facilities for periodic Soviet naval deployments. To exercise influence over Castro without undermining him, the Kremlin must exert some economic pressure—but not too much

Vietnam. Vietnam's strategic importance in Asia makes any major reduction in Soviet aid to that nation similarly unlikely. Vietnam provides Moscow with a fulcrum for exerting leverage against China from the south, and use of Cam Ranh Bay allows it to increase its naval presence between Japan and the Indian Ocean, maintain aerial reconnaissance, and—recently—even deploy limited attack forces. As with Cuba, recent Soviet public statements suggest that requests for further increases in subsidized shipments of oil and food to Vietnam may have been turned down to persuade the Vietnamese to make better use of aid already available. The Soviets have pressed the Vietnamese hard on debt repayment. Although they almost certainly will provide the assistance they believe necessary to sustain the regime, Hanoi's perception of its needs will undoubtedly differ from Moscow's.

Afghanistan. Finally, the USSR's behavior in Afghanistan is not likely to be determined by economic considerations, because its commitment there results from security and geopolitical factors. Although the cumulative economic costs of the war—estimated at more than $12 billion for operations, maintenance, construction, equipment repair and replacement, and subsidizing the Afghan armed forces—are not too large, they nonetheless are undoubtedly higher than originally expected. A small fraction of these expenditures is offset by Soviet exploitation of Afghan natural gas. Cost calculations conceivably could be one among other factors now deterring a major expansion of the Soviet military presence in Afghanistan. We believe, however, that, if a change in policy in Afghanistan were dictated by strategic considerations, economic calculations would not constrain Moscow's actions

Other Marxist Regimes. Moscow has not given regimes of a "socialist orientation" all the assistance they have been requesting, and they have not been happy about this. Indeed, the Soviets on occasion have counseled some of these regimes—for example, the Nicaraguan—not to provoke a withdrawal of Western assistance by implementing a policy of economic radicalism. Some of these states have explored the possibility of greater help from the West. Nevertheless, the Kremlin has been supplying increased aid. The overall rise in Soviet economic assistance to LDCs in 1982 was accounted for primarily by new aid to Marxist client regimes—including Angola, Ethiopia, and Mozambique. Nicaragua scored major gains in Soviet aid in 1982, including $160 million in new agreements to finance development projects. Soviet military deliveries to Nicaragua jumped from $6 million in 1981 to $50 million in 1982, with an expansion in the number of military advisers. Moreover, departing somewhat from its earlier practice of concealing Soviet aid by largely funneling it through surrogates, Moscow has recently been increasing the direct delivery of nonlethal military equipment to Managua.

Important Non-Marxist Client States. Moscow has also responded to increased Western competition and the current world trade climate by offering better military supply deals and more sophisticated equipment to key non-Marxist client states. The military resupply accords signed with Iraq and Syria, for example, underscored Moscow's desire to recoup lost influence and prestige and, in the case of Iraq, Moscow's inability to improve ties with Tehran and its intention of preventing further erosion of its arms market to France and other Western suppliers. The inclusion of softer repayment terms, new model T-72 tanks, high-performance aircraft, and air defense missile systems in the latest Iraqi and Syrian agreements represents a significant change of course for Moscow in dealing with its major Arab clients.

Particularly alarmed by India's overtures toward Western arms suppliers, Moscow took unprecedented steps in 1982 and 1983 to revitalize the military assistance relationship. The Soviet arms proposals—described by Indian officials as "irresistible"—included advanced military production technology and licenses to produce a range of Soviet hardware and components in India, and represented Moscow's first genuine offer to transfer some of its current military technology outside the Warsaw Pact. Furthermore, the USSR and India signed a trade memorandum which increased Soviet soft currency oil deliveries to India in 1983 by 40 percent. Commerce Minister Singh's visit to Moscow in September 1983 produced an agreement to maintain 1984 Soviet oil deliveries to India at 1983 levels

Spinoff Effects of Soviet Behavior. In addition to the direct gains and losses entailed in Moscow's bilateral relations with Third World regimes, the Soviets experience indirect or spinoff gains and losses. Afghanistan, for example, has sensitized Moscow to the possibility that aggressive actions in the Third World can provoke Western responses that impede efforts to improve the USSR's economic performance. But it has almost certainly not convinced the Kremlin that the link between Soviet action and Western reaction is absolute or enduring; indeed, it has shown that negative economic consequences can be somewhat offset by political gains from splits within the Western alliance over how to react.

Soviet military assistance to Nicaragua demonstrates that—even where there are economic costs from a relationship with an LDC within the US sphere of influence and where the USSR's security is not at all at stake—the Kremlin is still prepared to take actions that risk worsening the environment for arms agreements and trade relations with the United States. Where one or more of these constraints does not obtain—for example, in Afghanistan or Angola—it is even more unlikely that concern over US or Western-inspired *economic* costs will evoke major Soviet restraint, much less retreat, in the foreseeable future. If they can also expect positive economic *gains* from assertive behavior in the Third World, the Soviets are that much more likely to discount Western trade-related responses. Given their urgent hard currency needs, for instance, they are likely to value cash in hand from arms sales and military assistance far more than the intangible benefit of Western good will attributable to any eschewing of such sales.

Another development in the Third World that might conceivably be seen by Moscow as likely to measurably improve the USSR's economic prospects would be a significant reduction in oil available on the world market. Such an occurrence might be perceived as once again dramatically inflating Moscow's hard currency earnings from its own oil exports, permitting it either to increase imports from the West that would stimulate economic growth or to retain more oil and gain in energy production. Higher world oil prices, while likely to affect the price of Soviet imports, might make additional purchases of Soviet natural gas and participation in compensation deals more attractive to Western Europe. And such prices, without ruining East European economies (which import only a small fraction of their oil from the West), would further enhance the Soviets' leverage to extract more goods from their CEMA partners by raising energy prices in intra-CEMA trade.

In contrast to obviously high-risk scenarios of forcible acquisition of oil by the USSR, Moscow might believe that it could benefit without major risk of military confrontation with the United States from reductions in oil deliveries to the world market caused by local rivalries in the Persian Gulf to which it contributed only diplomatically or as an arms supplier. Or, Moscow might assess the risks of supporting surrogate or third-party-activated attempts to reduce the flow of oil from the Gulf to be relatively low. A decision to back such attempts covertly would not preclude the simultaneous pursuit of alternative policies in the region, such as greater coordination with OPEC and expanded military sales to regimes presently in power. However, Moscow would have to weigh the likelihood that any forcible restraints on oil deliveries from the Persian Gulf would precipitate a stronger US military presence in the Gulf—a highly undesirable development for strategic and political reasons from the Soviet standpoint.

China

Economic calculations are subordinated to broad geopolitical and military-strategic concerns in Soviet relations with China, whose ambitions—Moscow believes—pose a fundamental and implacable long-term threat. The Soviets seek to build Soviet military power in Asia and isolate China diplomatically, while at the same time bringing about a limited detente between China and the USSR that would stimulate reluctance in Washington to help China modernize its economy and military.

Trade Relations. In March 1983 Moscow signed a new trade agreement with Beijing, and a month later a cross-border trade protocol was initialed. While the agreement projected a 175-percent increase in trade in 1983, this level—if achieved—would still amount to only 2 percent of China's total trade and about 0.5 percent of the USSR's. In pushing ahead with these moves, Moscow's main objective was to improve its position in the US-USSR-China triangular relationship by repairing at least part of the damage inflicted on Sino-Soviet relations during the 1950s and 1960s. There is no evidence that a desire to relieve internal economic pressures motivated the Soviet leadership. Nor is it likely that Sino-Soviet trade will help significantly to ease Soviet economic stringencies in the foreseeable future

Military Posture. Because one-fourth of all Soviet Ground Forces personnel—nearly 500,000 troops in 52 active divisions—are stationed opposite China, there would in principle seem to be both opportunity and incentive for significant savings from a cutback. The most important contribution such a reduction could make would be in manpower released for the civilian economy. But even if 250,000 troops were released to the civilian manpower pool by 1990, the impact on GNP growth and growth in per capita income would be slight. By the same token, slowing of equipment modernization of the forces already in place would have only marginal effects on the economy, although it would lessen allocational strains within the Soviet military

We believe that military considerations would override whatever savings might be derived through a reduction of forces. Changes in the disposition of Soviet forces along the border and in Mongolia over the past five years strongly suggest that Soviet security against China is based on an offensive military strategy. In the event of conflict the battle plan appears to entail not a holding action but a major invasion and occupation of at least northern Manchuria. If this is Soviet strategy, it mandates a continued strengthening of the USSR's military power vis-a-vis China, with the slowdown of general economic growth at best restraining the pace of modernization of Soviet forces.

Western Europe and Japan

Requirements for countering the growth slowdown point to a need at least to maintain and, if possible, increase hard currency imports of machinery. Purchases of Western steel and other industrial inputs will have high priority. Imports of large-diameter steel pipe will remain critical for the construction of gas pipelines until the later 1980s, and the Soviets

Table 3
USSR: Hard Currency Purchasing Power

Billion 1982 US $

	1982	1985	1990
Total	35.0	32.9	33.4
Merchandise exports [a]	26.2	22.8	22.9
Additional arms sales [b]	5.9	4.5	4.5
Gold sales [c]	1.1	3.6	3.6
Invisibles [d]	1.8	2.0	2.4

[a] Assumes that (1) the volume of hard currency oil exports is roughly halved, which would require additional cuts in deliveries to Eastern Europe and to other soft currency customers; (2) hard currency gas exports nearly double by 1990; and (3) real hard currency nonoil, nongas exports grow by 1 percent a year.
[b] Sales not included in reported exports to hard currency countries.
[c] Assumes sales of 300 tons a year during 1983-90.
[d] Includes interest receipts.

probably will continue to buy—at least for the next few years—large amounts of cold rolled sheet steel, tin plate, and specialty steels, although import volumes should decline as new pipe and cold rolled sheet steel production capacity comes on stream in the second half of the decade. Meanwhile, we expect that Moscow will emphasize equipment purchases for developing energy resources. Finally, the stepped-up investment allocations for industries supporting the Food Program—agricultural machinery production, chemicals, and food processing—are likely to give these industries a larger share in imports of Western machinery

The USSR is unlikely to be able to finance a significant increase in imports from the West without generating new sources of hard currency (see table 3). The Soviet debt position is currently easily manageable—with a ratio of debt service to hard currency earnings of under 20 percent—and probably will remain so for at least the next several years. Moscow could, if it wished, increase the debt service ratio substantially before it reached troublesome levels (see table 4)

Table 4
USSR: Hard Currency Financing Requirements Under Alternative Scenarios [a]

Billion US $

	1982	Real Imports Constant		Real Import Growth (2 percent a year)	
		1985	1990	1985	1990
Total exports	26.2	27.4	38.6	27.4	38.6
Total imports	27.4	33.1	46.4	36.3	54.1
Gold sales	1.1	2.9	4.1	4.3	6.1
Net credits drawn	−2.4	2.6	3.4	5.0	12.5
Net debt	10.1	14.2	20.8	19.4	51.8
Debt service ratio (*percent*)	16.0	18.5	21.5	21.0	38.2

[a] The overall annual inflation rate applied to all trade except oil and gas is 5 percent in 1983 and 7 percent during 1984-90. Nominal oil prices dropped from an average of $32.25 a barrel for the mix of crude oil and petroleum products exported to hard currency countries in 1982 to $29.50 in 1983-84 and then rose with the rate of inflation. Nominal gas prices fall from $145.83 per thousand cubic meters in 1982 to $137.13 in 1983, then rise at a rate slightly higher than that of inflation. Sales of gold rise from 100 tons in 1982 to 200 tons a year during 1983-90 where real imports are held constant and to 300 tons where real imports grow at 2 percent a year.

Yet—barring future extraordinary difficulties in the Soviet economy—we believe it is unlikely that the leadership would accept a large increase in the debt service ratio, even if Western lenders were willing to permit this. Moscow seeks a lessening of economic dependence on the West over the longer term; it is painfully aware of the troubles that could arise from overextended borrowing (Poland looms large in the Soviet mind); and it probably is mindful of the example it must set for other CEMA regimes that might be less concerned than it is over financial entanglement with the capitalist West. Moscow, therefore, will probably seek to finance those purchases as much as possible by increasing its hard currency earnings.

Through the 1980s, the Soviets' ability to accelerate hard currency earnings depends significantly on cutting oil supplies to Eastern Europe while extracting greater export commitments from hard-pressed Bloc regimes. But the possibilities for expanding Soviet hard currency exports late in the decade and into the 1990s are greater. Apart from the chance that oil prices will again rise, the main question concerns West European imports of Soviet natural gas

The USSR has vast natural gas reserves and the capability to increase deliveries rapidly beyond already contracted-for volumes. Some surplus transmission capacity exists even now. Beyond 1988 the Soviets will easily be able on very short notice to expand deliveries to meet foreseeable incremental West European demand—and at extremely competitive prices. The main constraints on expansion will be the level of the West Europeans' demand and their willingness (or lack thereof) to pay a "security premium" for high-priced North Sea gas.

We believe it is unlikely that the Soviets would need—or be willing—to take a significantly more conciliatory position on military-political issues in the hope of landing large new orders for gas later in the 1980s. If such purchases made commercial sense to the West Europeans, it is highly doubtful that they would attempt to impose such preconditions. In dealing with Western Europe, the Soviets would be loath to give the impression of being willing to make political concessions out of economic need

Moscow has long sought expanded Japanese participation in Siberian energy and resource development. The Soviets clearly could also use more Japanese technology (for example, robotics), steel products, and heavy equipment. For various political and economic reasons, including unwillingness to agree to further compensation deals, the Japanese have shown diminishing interest in recent years in a large-scale expansion of trade with the USSR. We believe that if Moscow were to offer major concessions on the Northern Territories issue, Tokyo would reassess its economic relations with the Soviet Union. However, there is no evidence whatever to suggest that growing economic pressures might lead Moscow to set aside the military and political calculations that have long inspired its intransigence on this key issue

Impact of Alternative Economic Scenarios

We have assumed so far that the Soviet leadership would pursue a balanced Cost Avoidance strategy. However, if it chose to follow one of the other scenarios, what might the effects be?

High Consumption

If the Soviets decided to continue to hold military procurement levels flat throughout the 1980s, they probably would spread the shortfalls among the military services, although making them somewhat deeper in general purpose forces, especially ground forces. Outlays for general purpose forces are currently larger than those for strategic forces, and they take up more of the defense budget and more of the energy, manpower, and key material resources needed by the civilian economy. Unlike strategic weapons production, production of general purpose weapon systems competes much more directly with production of equipment for sectors scheduled for further boosts in investment—transportation, agriculture, and manufacturing. Even with flat military procurement, the level of expenditures is so high that Soviet military forces would continue to grow throughout the 1980s.

It is not clear that under present conditions increased production of consumer goods would lead to higher labor productivity. Therefore, we cannot tell whether the High Consumption scenario would achieve its hypothesized economic objective—namely, to bring about an upturn in productivity by 1990. A policy that did not produce results perceived by Soviet consumers as true improvements could simply exacerbate present dilemmas of resource allocation and growth.

Internationally, High Consumption could imply a relatively more moderate policy. There might not need to be quite as much pressure applied to Eastern Europe to allocate resources for military purposes or to trade on disadvantageous terms with the USSR. Thus the prospects for noncoercive stabilization in this critical region might be enhanced. The attempt to increase imports of foodstuffs and consumer goods from the West might be accompanied by somewhat less assertive behavior in the Third World. (C)

Of all the scenarios, High Consumption would probably most polarize the Soviet political elite—advocates of internal accommodation and external relaxation ranged against advocates of a hard line both internally and in foreign policy. Adoption of a High Consumption strategy might be impossible without a major shakeup in the Politburo and formal proclamation of a new general party line

High Defense

A High Defense strategy, on the contrary, would entail more coercive pressure on the Soviet population but probably less tension within the political elite. We believe that during the plan period 1986-90, the regime could handle the projected average annual decline of 0.3 percent in per capita consumption without seriously risking mass unrest among the population, although growth in labor productivity would probably suffer further erosion. Such a decline in consumption could not continue indefinitely, however, without provoking a crisis in relations between the regime and Soviet society

Externally, Eastern Europe would bear the brunt of the High Defense strategy. Not only would pressures for higher defense spending and deliveries of goods from Eastern Europe be stepped up, but Soviet oil deliveries would be severely cut back. This move would depress living standards in the region and increase the likelihood of unrest and political instability

Paradoxically, in view of its ultimate aim, the High Defense strategy—which would necessarily require an internal intensification of anti-Western propaganda—would also require an expansion of trade ties with the West to acquire high technology. A higher share of Soviet oil exports would have to go to the West to pay for larger imports of machinery and equipment. In keeping with the rationale for High Defense, however, this drive to expand trade would probably be accompanied by still more active efforts to split the Atlantic Alliance. Whether Western Europe and Japan would accommodate such an expansion of trade in the face of a sudden acceleration in Soviet military spending would probably depend greatly on circumstances—including Western awareness that this acceleration was occurring. The search for hard currency would also give Moscow an even greater interest in exploiting conflicts in the Third World so that it could promote arms sales.

The High Defense strategy would not involve any radically new alignment of forces within the Soviet political elite and could be justified persuasively in terms of "State interests." Of these three alternative scenarios, it would therefore probably be least likely to provoke deep splits within the leadership

High Growth

The High Growth strategy would have roughly the same internal and external effects as the High Defense strategy. However, it might be somewhat less likely to undercut the morale of the labor force. Because this strategy would be publicized not by playing up the immediate Western military/political threat but by stressing the strategic importance of promoting general economic might, it would be compatible with a less hostile propaganda posture toward the United States

From a political standpoint, the High Growth strategy would combine the political deficiencies of both of the other two alternative scenarios—zero growth in allocation for the military and heavy pressure on the consumer—without appealing fundamentally to any major alternate constituency. Its main attraction for the military—the prospect of an economic-technological base for force expansion in the 1990s—would, perhaps, be sufficiently compelling to preclude the profound divisions within the leadership that we would expect under the High Consumption scenario.

Implications

Highly Unlikely Effects

Under any of the scenarios that we have described, we believe that the chances are extremely slight that, by 1990, the economic slowdown will:

- Precipitate widespread popular unrest in the USSR.
- Pave the way for either significant liberalization or a Polish-style militarization of the regime.
- Bring to power a leadership stratum with significantly different foreign policy aims.
- Compel the Soviet leadership to introduce major elements of a decentralized socialist market economy like that of Yugoslavia or even Hungary—with all the possibilities for political unraveling or reallocation of power this might entail.
- Force an absolute reduction in military spending or a major change in the disposition of military forces (for example, reversal of the buildup against China).
- Render the USSR substantially more vulnerable to Western economically based political leverage than it is today.
- Drive the leadership to accept arms control agreements it would find basically unacceptable on military or political grounds.
- Motivate the Kremlin to undertake high-risk adventures abroad that are designed to distract an unhappy public or produce economically beneficial geostrategic breakthroughs.
- Lead Moscow to seriously reduce assistance to Communist states (Cuba, Vietnam, Afghanistan) or other Marxist clients (Angola, Mozambique, Ethiopia, Nicaragua) in the Third World.
- Constrain Moscow to reject all requests for economic assistance from strategically situated old or new LDC clients.

But if the growth slowdown is unlikely to induce such profound changes in Soviet behavior, it will nevertheless shape Soviet affairs in ways that do bear significantly upon US concerns

Challenges to the United States

Soviet responses to the slowdown of economic growth are likely to accentuate already existing challenges to US interests in three areas: maintenance of the Western alliance, stabilization of the Middle East, and arms competition among LDCs

The need to significantly increase trade with the West under all scenarios except High Consumption will lead Moscow to redouble efforts rooted in political and military objectives to split Western Europe and Japan from the United States. Its first aim will be to undercut any united Western trade policy that restricts Western exports or credit to the USSR. The Soviets will work hard to exploit and widen existing differences between the United States and its allies over East-West trade policy

If world energy supplies were to worsen appreciably or Western economic growth accelerate, Western Europe might become more interested than it presently is in expanded Soviet natural gas deliveries. This situation would create a new dilemma for the United States in the second half of the 1980s. A second dilemma might result from a possible gradual expansion of Western lending to the USSR, following a Kremlin decision to allow at least a moderate rise in the USSR's debt-service ratio.

With or without the slowdown in economic growth, the United States would continue to be confronted by a strong Soviet challenge in the Middle East in the 1980s. But economic needs will intensify Soviet efforts to expand commercially profitable relations there. Moscow will seek to extend trade relations with the region's more conservative states and may attempt to use talks with OPEC as a means for broadening its contacts. While doing so, Moscow might be tempted by economic motives to covertly encourage a reduction in deliveries of Middle East oil to the world market to raise the price of oil and increase Soviet hard currency earnings—provided this did not seriously affect the USSR's capacity to earn hard currency from arms sales to customers dependent on Middle East oil money, nor obviously threaten to drive Western supply prices of Soviet imports above acceptable levels. Moscow might attempt to reduce deliveries by fanning interstate conflicts within the region, backing subversion, or supporting expanded terrorist activities. Although we believe that the chances are greater that military and political calculations would lead the Kremlin to eschew such a strategy, its risk nevertheless would be far less than that of an attempted forcible acquisition of oil

The Soviets' main lever for maintaining or increasing its influence in the Third World is its role as an arms supplier. The need to increase hard currency earnings provides an additional impetus to Moscow's efforts to exploit tensions and to sell arms and other military assistance to LDCs—not only in the Middle East, but in Africa and Latin America, too

Opportunities for the United States

The Soviet slowdown in economic growth, however, should also broaden various potential opportunities for US action—in information policy, trade, arms negotiations, Eastern Europe, and the Third World

More so than in the past three decades, Soviet economic progress in the 1980s—depending as it does on improved labor productivity—will be peculiarly sensitive to the state of public morale. At the same time, Moscow will be less able to satisfy aspirations for a rise in living standards and more driven to justify the need for sacrifice with mendacious propaganda about the US military threat. Thus, the regime will be vulnerable to information that:

- Reinforces the perception that growth in living standards has slipped in comparison with what it "ought" to be, as measured not by Western criteria but by the yardsticks Soviet citizens themselves privately employ.
- Strengthens awareness of liberalizing solutions to Soviet economic problems that are rejected by the regime for narrow political reasons.
- Counters the regime's efforts to blame the West for high Soviet military spending.
- Provides a detailed appreciation of the cost of Soviet involvement in the Third World.

In bilateral trade relations, the growth slowdown will not offer the United States fundamental opportunities to exercise political leverage against Moscow during the rest of the 1980s. Neither the carrots nor the sticks available to Washington are likely to be that potent. But the slowdown will lead the Soviets to seek to continue to obtain US state-of-the-art technology in such key areas as food production and energy. Under conditions of improved relations between the United States and the USSR, Soviet dependence on a narrow range of oil production equipment—especially high-capacity submersible pumps—conceivably could be translated into a limited degree of political leverage

In military spending, what the Soviets have reason to most fear is an accelerated high-technology arms race with the United States. If the Soviets had to substantially increase military spending, the consequences for economic growth over the longer term and for consumer well-being even in the shorter term would be painful. Soviet leaders assert at every opportunity that, if they have no alternative, they will compete with the United States whatever the cost. But arms agreements that appeared at least tolerable militarily would give Moscow such an alternative. We believe that the slowdown in economic growth increases Moscow's interest—in principle—in stabilizing and capping open-ended high-technology arms competition with the United States, particularly in space-based strategic defensive forces

Moscow's response to the growth slowdown will almost certainly make Eastern Europe the locus of greatest potential vulnerability to US economic and political initiatives in the 1980s. There are limits to the extent to which Moscow can simultaneously cut its costs in Eastern Europe *and* compel the East Europeans to reduce trade with the West, without precipitating violent new crises in the Bloc. The Soviet leadership may miscalculate these limits. Even if it does not, the East European regimes do not see greater CEMA "integration" as the solution to their critical economic problems and will intensify their efforts to expand trade with the West as much as their economies permit. As living standards stagnate or decline, anti-Russian sentiment is likely to increase among the peoples of the region, who will continue to look to the West for information and support for their own national aspirations

Finally, the impact of the growth slowdown on resources available for foreign economic assistance will also strengthen certain opportunities for US action in the Third World. Moscow will be even less able than it already is to compete with the United States in rendering economic and technological aid to many Third World countries, although it will continue to play the game with a limited number of clients like India. From the Soviet standpoint, the most worrisome targets are probably Marxist states in which Communism has not yet been irreversibly institutionalized, which are under internal pressure, and which have flirted with the idea of Western economic aid—such as Angola, Mozambique, Ethiopia, and South Yemen. As these countries' needs for assistance mount, their leaders will probably grow still more dissatisfied with the Soviet failure to provide meaningful aid and more tempted to turn to the West for help—even at the risk of having to make political concessions, which they will stoutly resist. To a lesser extent, and over a longer term, the same kinds of pressures are likely to intensify in the Communist regimes of Cuba and Vietnam.