

[COMMITTEE PRINT]

SCIENCE, TECHNOLOGY, AND AMERICAN
DIPLOMACY

**U.S.-SOVIET COMMERCIAL RELATIONS: THE
INTERPLAY OF ECONOMICS, TECHNOLOGY
TRANSFER, AND DIPLOMACY**

PREPARED FOR THE
SUBCOMMITTEE ON NATIONAL SECURITY POLICY
AND SCIENTIFIC DEVELOPMENTS

OF THE
COMMITTEE ON FOREIGN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

BY
JOHN P. HARDT
SENIOR SPECIALIST IN SOVIET ECONOMICS
GEORGE D. HOLLIDAY
RESEARCH ANALYST IN ECONOMICS
ECONOMICS DIVISION
CONGRESSIONAL RESEARCH SERVICE
LIBRARY OF CONGRESS

(As part of an extended study of the interactions of science and
technology with United States foreign policy)



JUNE 10, 1973

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1973

96-260 O

OTHER DOCUMENTS IN THE SERIES

A Selected, Annotated Bibliography of Articles, Books, Documents, Periodicals, and Reference Guides. Compiled by Genevieve Knezo. (69 pages.) Issued March 1970.¹

Toward a New Diplomacy in a Scientific Age. An introduction to the entire study by Franklin P. Huddle. (28 pages.) Issued April 1970.¹

The Evolution of International Technology. A review of the emergence of technology as a factor of change in international relations by Dr. Huddle. (70 pages.) Issued December 1970.¹

The Politics of Global Health. A study of worldwide efforts to prevent epidemic disease by Freeman H. Quimby. (79 pages.) Issued May 1971.²

Exploiting the Resources of the Seabed. A survey of technical, economic, legal, and political considerations involved in using the natural wealth of land below the seas by George A. Doumani. (86 pages, plus appendixes.) Issued July 1971.¹

Beyond Malthus: The Food/People Equation. A study of the interrelation of food and population and the resulting impact on international affairs by Allan S. Nanes. (96 pages.) Issued October 1971.²

The Mekong Project: Opportunities and Problems of Regionalism. A case study of the accomplishments and failures of the massive Indochina works project by Dr. Huddle. (68 pages.) Issued May 1972.²

The Baruch Plan: U.S. Diplomacy Enters the Nuclear Age. A study of an early, serious attempt to bring atomic energy and weapons under international control by Leneice N. Wu. (67 pages.) Issued August 1972.²

Commercial Nuclear Power in Europe: The Interaction of American Diplomacy With a New Technology. Analysis of the interaction during last 30 years between American diplomacy and the technological development of nuclear power in Europe by Warren H. Donnelly. (163 pages.) Issued December 1972.²

¹ Documents now out of print and not available from the Foreign Affairs Committee or the Government Printing Office.

² Documents available from the Foreign Affairs Committee only.

FOREWORD

The May 1972 summit meeting between President Richard Nixon and General Secretary Leonid Brezhnev represented a significant step forward in the normalization of relations between the United States and the Soviet Union. During the discussions of that historic conference a linkage was established between diplomacy, economics, and technology transfer. This study, *U.S.-Soviet Commercial Relations: The Interplay of Economics, Technology Transfer, and Diplomacy*, offers the Congress and the public an assessment of that development. It is intended to provide a deepened understanding of the new opportunities in U.S. foreign policy and to minimize any risks to U.S. national interests.

This study, the 10th in the series on "Science, Technology, and American Diplomacy," differs somewhat from earlier portions of the series in that it deals with a current issue of developing importance. Its authors are John P. Hardt, Senior Specialist in Soviet Economics, and George D. Holliday, Research Analyst in Economics, both of the Congressional Research Service, Library of Congress.

Dr. Hardt has a Doctorate in Economics from Columbia University (1955) and a Certificate from Columbia's Russian Institute (1950). His research has focused on Soviet economic policy, industrial investment, energy economics, and trade. In November-December 1972 he served as technical adviser to a congressional delegation to the Soviet Union, Poland, West Germany, and the United Kingdom. Mr. Holliday expects to receive his doctorate from George Washington University upon completion of his dissertation.

The series is sponsored by the House Foreign Affairs Subcommittee on National Security Policy and Scientific Developments. It is prepared by a Congressional Research Service task force under the direction of Dr. Franklin P. Huddle of the Science Policy Research Division, with Mr. Warren R. Johnston of the Foreign Affairs Division as Associate Director.

CLEMENT J. ZABLOCKI,
*Chairman, Subcommittee on National Security
Policy and Scientific Developments.*

CONTENTS

	Page
I. INTRODUCTION	1
A New Opportunity for U.S.-Soviet Relations.....	1
A Net Assessment of U.S. Interests in Expanding Commercial Relations With the U.S.S.R.....	2
Trade and Technology.....	3
II. SETTING	5
U.S.-Soviet Commercial Relations After World War II.....	5
Soviet-American Trade Prospects Come of Age.....	7
The Disengagement of Congress From U.S.-Soviet Trade Ne- gotiations	10
Trade and Diplomacy.....	11
III. THE SOVIET RATIONALE FOR EXPANDED FOREIGN ECONOMIC RELA- TIONS	15
Technological Requirements of the Ninth Five-Year Plan.....	16
Modernization of Soviet Industry.....	16
Quality of Soviet Life.....	19
Transportation	21
Improvement in Planning and Management.....	22
Changing Priorities in Resource Allocation: Growth Versus Defense	24
U.S.-Soviet Technology Transfers.....	29
U.S. Technology and Soviet Economic Development Prior to 1946.....	30
Current Soviet Technological Requirements.....	31
Soviet Balance-of-Payments Potential.....	32
Soviet Export Potential.....	33
Soviet Earnings From Invisible Trade.....	37
Multilateral Relations.....	38
Coproduction Agreements.....	38
Potential Level of U.S.-Soviet Trade.....	39
IV. U.S. INTEREST IN EXPANDED ECONOMIC RELATIONS WITH THE SOVIET UNION	42
Economic Benefits for the United States.....	42
Stability of U.S. Trade Gains.....	42
Technological Export Policy.....	44
High Technology Trade and a Pattern of Economic Involve- ment	45
V. RESTRICTIONS ON SOVIET TRADE WITH THE UNITED STATES	48
U.S. Controls on Exports to the Soviet Union.....	48
U.S. Restrictions on Imports From the Soviet Union; the Issue of Most-Favored-Nation Treatment.....	52
U.S. Restrictions on Credit Transactions With the Soviet Union..	55
Shipping Arrangements in U.S.-Soviet Trade.....	58
Soviet Institutions and Practices.....	59
Problems of Soviet Law and U.S.-Soviet Trade.....	60
Soviet State Trading.....	61
Prospects for Removal of Barriers to U.S.-Soviet Trade.....	64

VI

	Page
VI. ISSUES IN THE INTERPLAY OF TECHNOLOGY, TRADE AND DIPLOMACY -----	66
Benefits to the United States From Expanded Trade With the Soviet Union-----	66
The 1972-73 Grain Sales-----	67
Joint Development of Siberian Natural Gas Resources-----	69
Political Benefits From Expanded U.S.-Soviet Commercial Relations-----	72
Concluding Observations-----	73
Political Gains Likely to Outweigh Economic Benefits to United States-----	73
Relative Increase in U.S.-Soviet Trade May Be Impressive by 1980-----	74
Future U.S.-Soviet Economic Ties Dependent on Continued Relaxation of Institutional and Legal Barriers-----	74
New Soviet Emphasis on Technological Change and Material Incentives Stimulates Trade Prospects-----	75
Defense and Control Versus Economic Growth and Professional Performance Are Soviet Choices-----	75
Cost to Soviets of Supplying Raw Materials to Eastern Europe Is High and Rising-----	75
State Trading Poses Problems for a Country With a Market Economy Such as the United States-----	76
Improvements Are Needed in U.S. Procedures and Institutions for Administration and Negotiation-----	77
The Current Opportunity for Improved Soviet-U.S. Relations Is Crucial-----	78
Risks and Uncertainties of the New Relationship Can Be Reduced But Not Eliminated-----	78
APPENDIX -----	79
Basic Principles of Relations Between the United States of America and Union of Soviet Socialist Republics [May 29, 1972]-----	81
Maritime Agreement [October 14, 1972]-----	84
Agreement on Trade [October 18, 1972]-----	91
Agreement on Settlement of Lend-Lease, Reciprocal Aid, and Claims [October 18, 1972]-----	97
BIBLIOGRAPHY -----	101

LIST OF TABLES

Table 1—Soviet Energy Production, 1970 and 1975-----	18
Table 2—Consumption of Selected Foods in the Soviet Union-----	19
Table 3—Transportation in the Ninth Five-Year Plan-----	21
Table 4—Soviet Trade With Selected Western Countries and Japan-----	32
Table 5—Selected Soviet Commodities Traded With the Developed West--	34
Table 6—U.S. Imports From U.S.S.R.-----	35
Table 7—Estimates of Soviet Gold Output and Dispositions-----	37
Table 8—Total Projected United States Exports to Eastern Europe and the Soviet Union-----	40
Table 9—Soviet Exports and Imports of Grain-----	43

LIST OF FIGURES

Figure 1—The Levels of Technological Development: The U.S.S.R. Compared With Other Developed Countries-----	16
Figure 2—Primary Energy Consumption, United States and U.S.S.R.-----	17
Figure 3—Proposed Joint Ventures in Natural Gas-----	70

I. INTRODUCTION

The general purpose of this study is to examine the interaction of science and technology—including agricultural, commercial, managerial, and industrial technology—with diplomacy, in the context of the current and potential growth of U.S.-Soviet commercial relations. A more specific purpose is to assess the prospects for future U.S.-Soviet economic relations, primarily in terms of costs and benefits to the United States, as a subject of importance and immediate concern in itself.

The establishment of the Joint U.S.-U.S.S.R. Commercial Commission at the May 1972 Summit Conference and the signing of a comprehensive set of trade agreements on October 18, 1972 opened a promising new period of economic relations between the two nations. The agreements provided a mechanism for removing many of the barriers to normal economic interaction. More importantly, the agreements on economic matters represented another step toward general rapprochement between the United States and the Soviet Union. While the agreements were limited to questions of foreign trade and payments, officials of both countries asserted that they would influence the broader spectrum of diplomatic relations.

A New Opportunity for U.S.-Soviet Relations

The creation of a new U.S.-Soviet commercial relationship was an important event with historical parallels. In the 1920's and 1930's, a number of U.S. companies established close commercial ties with Soviet industries. After the two countries established diplomatic relations in 1933, the U.S. Export-Import Bank was created to finance U.S.-Soviet trade and a trade agreement was signed in order to expand commercial relations. During World War II a key aspect of the alliance between the United States and the Soviet Union was the delivery of U.S. military and civilian goods to the Soviet Union through the Lend-Lease program. Again, at the end of World War II, steps were taken to involve the Soviet Union in the world economic community and to improve U.S.-Soviet economic relations.

None of these earlier attempts to normalize East-West economic relations was successful. In each case, a change in the international political environment destroyed the basis for long-term economic cooperation.

Now, once more, a favorable political and economic climate exists for progress in Soviet-U.S. relations. The new commercial relationship is one vehicle for progress in relations between the two major world powers. The October 1972 commercial agreement was but one of a series of agreements, with others on science and technology, nuclear weapons, space cooperation, medical science, and the environment. In previous attempts to improve U.S.-Soviet relations, political understandings were followed by improved commercial relations

which, in turn, were expected further to facilitate improved political relations. On those earlier occasions the seeming reconciliation of the differences between the two systems led to an apparent assumption in the United States that Soviet leaders would be willing to modify their system for economic gains. In this earlier adversarial relationship Soviet political concessions appeared to be equated with political gains to U.S. interests. Now the idea that their loss is our gain—a zero-sum game approach—has given way in official thinking to Dr. Henry Kissinger's notion of mutual interest and constraint. In reference to the Joint Commercial Commission and the Summit accords, Mr. Willis C. Armstrong, Assistant Secretary of State for Economic and Business Affairs, observed:

... These programs are leading us into a stage of practical forms of intimate cooperation with the Soviet Union for years ahead. They constitute a framework of interlocking agreements to build a vested interest on both sides in reducing tensions and freeing us from confrontation.¹

The linkage of the new commercial relationship to U.S.-Soviet political relations highlights the need for careful scrutiny by the U.S. Congress. Members of Congress have expressed interest in improved East-West trade relations in a series of legislative proposals and hearings dealing with import restriction, export controls, and credits. Congress has already acted to reduce substantially the impact of export controls on U.S.-Soviet trade. As of May 1973, other issues of East-West trade await congressional action. The most important of these is consideration of the President's request for authorization to extend most-favored-nation (MFN) status to the Soviet Union. Favorable congressional action on the President's proposal is necessary for the trade agreement to enter into force. Congress may also be asked to consider Export-Import Bank (Eximbank) financing of U.S.-Soviet trade. While no additional authorization is needed for Eximbank participation in trade with the Soviet Union, it is likely that Congress will be asked to increase the Bank's overall lending authority and terms of loans so that it may accommodate some proposed large transactions between U.S. companies and Soviet foreign trade organizations.

A Net Assessment of U.S. Interests in Expanding Commercial Relations With the U.S.S.R.

This study will consider U.S. policymakers' expectations of diplomatic, national security, and economic gains to the United States from expanded economic exchanges with the Soviet Union, and will attempt to assess the net advantage to the United States. Are the projected changes likely to be in the best economic interests of the United States? What effect are increased economic exchanges, especially in technology-intensive products, likely to have on U.S. foreign policy goals and on U.S. national security?

A crucial consideration for U.S. policymakers is the Soviet leadership's motivation for seeking better economic ties with the United States. Consequently, this study will also attempt to provide a rationale for the apparent Soviet change in foreign economic policy. How is the

¹ Speech before the World Trade Institute of the World Trade Center at New York, N.Y., on November 28, 1972 (State Department press release 294 dated November 29).

new policy related to Soviet military-strategic goals? Does the Soviet leadership's interest in economic ties with the United States portend a new era of international stability and cooperation, or is it merely an effort to gain temporary economic advantage? Are there changes in Soviet security and foreign policy concomitant with expanding commercial relations which are likely to provide net benefit to the United States? Are there elements in the situation which could lead to potentially dangerous forms of interaction and interdependence in future U.S.-Soviet relations? If U.S. and Soviet leaders decide that expanded economic relations are mutually advantageous, major institutional changes may have to be made.

Trade and Technology

A central feature of Soviet economic relations with Western industrial countries, including the United States, has always been the transfer of technology from highly advanced Western industrial sectors to relatively backward Soviet industries. The Soviet Union has traditionally paid for its imports of technology primarily by exporting valuable raw materials, including energy resources. Despite important Soviet advances in certain industrial sectors, the technology gap between the Soviet Union and the West persists. Consequently, the basic structure of U.S.-Soviet trade is likely to remain unchanged in the foreseeable future.

Technology is transferred between countries in a number of ways. Flows of published information, such as technical journals and books, the foreign travel of students, scientists and engineers, technical aid and cooperation programs arranged by governments, and foreign commerce, are frequently-used channels for transferring technical information. While all of these channels may be used in future U.S.-Soviet relations, commercial exchanges of technology—the importation of machinery, equipment, and relevant literature, agreements on patents, licensing and know-how, and direct foreign investments and operations of multinational corporations—are the focus of this study.

A wide variety of U.S.-Soviet commercial exchanges are likely to involve technology transfers. Transfers may take place in new, dynamic industries, such as those producing computers, chemicals and electronics, or in traditional sectors, such as agriculture. Consequently, while giving special attention to prospective technological transfers, the study will consider the broad range of U.S.-Soviet economic relations.

Current projections indicate a substantial increase in U.S.-Soviet economic exchanges. Improved economic relations are officially considered to be part of a pattern of changing U.S.-Soviet relations in many areas. The trade agreement, along with the Summit agreements on strategic arms limitations and other matters, links national security considerations, economic relations, technology policy, and the conduct of diplomacy between the two major powers.² President Richard Nixon

² The interaction of various aspects of U.S.-Soviet relations is perhaps best demonstrated in the Joint U.S.-Soviet Communiqué issued at the conclusion of President Nixon's visit to the Soviet Union on May 29, 1972. The communiqué enumerates a number of areas in which the prospects for greater cooperation seemed favorable. See "Joint Communiqué," in *President Nixon in Moscow* (Washington, D.C.: United States Information Service, 1972), pp. 18-24.

and Soviet Communist Party Secretary Leonid Brezhnev both postulate that the changes occurring in U.S.-Soviet relations will influence the stability of the international community for some years to come.

The prospect of increased U.S.-Soviet technology transfers raises important questions of national security and creates special requirements for institutional changes that can insure mutual benefits in future economic interactions. U.S. policymakers, legislative as well as executive, will be faced with hard questions: What kinds of U.S. technology do Soviet leaders want to import? Can such technical information be safely exported to the Soviet Union without enhancing its military capabilities? What technological contributions will U.S.-Soviet commercial exchanges make to U.S. industry? What risks will these exchanges pose to specific U.S. industries and industrial corporations? Such questions suggest some of the complex and difficult problems which continue to be involved in the growing interaction of U.S. foreign economic policy, technology policy, and diplomacy.

II. SETTING

The signing of the U.S.-Soviet trade agreement in Washington, on October 18, 1972, represented the culmination of a gradual change in U.S. foreign economic policy toward the Soviet Union. It came after several years of discussion and review of a foreign trade policy designed in the early years of the Cold War. The new commercial arrangements are a part of an overall change in U.S.-Soviet diplomatic relations. The political detente between the two countries has provided a favorable atmosphere for long-term and mutually beneficial technology transfers. At the same time, the evolving commercial and technological relationship is likely to influence political decisionmaking in both the United States and the Soviet Union.

U.S.-Soviet Commercial Relations After World War II

The central feature of U.S. foreign trade policy toward the Soviet Union during the Cold War period was an attempt to deny the Soviet Union the benefits of trade with the more advanced industrial West. Those who advocated restrictions on U.S.-Soviet trade argued that the United States should not contribute to the economic and military power of a country whose domestic and foreign policies were inimical to U.S. interests. This argument was based on the assumption that the United States could retard the growth of Soviet economic and military power by preventing U.S. companies from trading with the Soviet Union. Exports of U.S. technology were considered to be particularly important to the Soviet Union and were therefore singled out for extremely strict controls.

Another major argument against trading with the Soviet Union was the alleged existence of unethical Soviet foreign trade practices. Among the charges directed at Soviet foreign trade organizations were those of dumping, pirating of foreign inventions, disruption of Western markets for political purposes, and use of slave labor. Such arguments were widely accepted in the early days of the Cold War. As a result, numerous artificial barriers were erected to inhibit normal economic ties between the United States and the Soviet Union. Economic rationality gave way to national security considerations as a major determinant of U.S.-Soviet economic relations in the early postwar period. The curtailment of commercial transactions with the Soviet Union was consequently made an important U.S. foreign policy goal.

U.S.-imposed restrictions were not the only causes of Soviet economic isolation. To a large extent, Soviet foreign economic policy in the late 1940's and early 1950's was a continuation of its prewar strategy of minimizing its economic ties to the industrial West. During the 1930's, Soviet foreign economic relations had been characterized by a policy of self-sufficiency or autarky. Although the importation of

high-technology products and, for a time, the services of foreign engineers were permitted to meet high-priority, short-run needs, minimum reliance on the non-Communist world economy was a primary indicator of economic success. Throughout his rule, Soviet Party Leader Joseph Stalin adhered to the principle that the world was divided into two hostile camps—the capitalist and socialist economic and political systems.

The Soviet leadership's ideological hostility toward the United States and the unresolved issue of Tsarist and Russian Provisional Government debts (which Soviet leaders refused to pay) inhibited economic relations between the two countries. The situation was exacerbated by a sharp fall in the world market prices for Soviet raw materials, which accounted for most of Soviet exports to the United States. Despite these problems, the establishment of diplomatic relations in 1933 and the signing of bilateral trade treaties in 1935 and 1937 provided the basis for some expansion of trade. However, the Soviet Union's general pattern of autarkical foreign trade and isolation from the West did not change.

The interwar policies were interrupted only temporarily by Soviet alliances with Western countries during World War II. Expectations that the wartime alliance might be followed by peacetime cooperation proved unfounded. Discussions of U.S. aid and credits to the Soviet Union and Soviet participation in a new multilateral world economic system came to an end with the emergence of the Cold War. The Soviet leadership's suspicion of Western "capitalist" countries and the Soviet predilection for comprehensive planning and control of the domestic economy probably led them to revert to a deliberate policy of economic independence. The economic isolation of the U.S.S.R. from the West reached a peak in the early 1950's, when less than 20 percent of its foreign trade was conducted with countries outside the Communist area.

In the late 1950's and throughout the 1960's attitudes toward U.S.-Soviet trade gradually changed in both countries. In the Soviet Union, the post-Stalin leadership began actively to seek business deals with Western industrial countries. Soviet Party Leader Nikita Khrushchev, in his travels abroad, personally lobbied for improved economic relations. Typical was his appearance at the Leipzig Trade Fair in 1959, where he presented himself as a businessman rather than a political leader. The West European countries and Japan took advantage of this economic opening to the East. Reduced trade restrictions, liberal credit policies, and participation in joint industrial ventures allowed them rapidly to expand their trade with the Soviet Union and other East European countries. The attitudes of U.S. policymakers toward East-West trade, however, tended to be more sensitive to political differences with the Soviet Union. The Cuban crisis, the Vietnam War, and the invasion of Czechoslovakia set back efforts to improve economic ties with the Soviet Union.

In spite of the unfavorable political climate, small but significant steps were made to remove some of the impediments to U.S.-Soviet trade. Several administrative changes, such as loosening export controls and extending credits for Soviet agricultural purchases from the United States, facilitated a gradual increase in U.S.-Soviet trade during the 1960's. Moreover, the rationale for East-West trade restrictions

slowly eroded. Restraints on U.S.-Soviet trade were criticized on several grounds. Advocates of expanded East-West trade claimed that U.S. controls were not effective. Communist countries which were denied certain U.S. goods could often import the same products from other Western countries. It was argued that U.S. companies were needlessly forced to forego mutually advantageous trade opportunities. Those who favored more trade with the Soviet Union also claimed that such trade would improve political ties between the two countries and would help to achieve a more stable international order. President Lyndon Johnson appointed a special committee, headed by J. Irwin Miller, to reexamine U.S. trade policy toward the Soviet Union and other East European countries. The committee recommended several trade liberalization measures and concluded:

The intimate engagement of trade, over a considerable period of time, when taken with the process of change already under way, can influence the internal development and the external policies of European Communist societies along paths favorable to our purpose and to world peace. Trade is one of the few channels available to us for constructive contacts with nations with whom we find frequent hostility. In the long run, selected trade, intelligently negotiated and wisely administered, may turn out to have been one of our most powerful tools of national policy.³

Such arguments led President Johnson to urge increased economic exchanges in order to "build bridges" to the East European countries.

Soviet-American Trade Prospects Come of Age

The U.S. domestic economic recession of 1969-70 and the recurring balance-of-payments deficits gave rise to a far-reaching review by the Nixon Administration of foreign economic policy. Expanded trade with Communist countries was considered as a means of increasing U.S. exports and stimulating domestic production and employment. Initially, however, the administration made no major effort to increase U.S.-Soviet trade. The report of the Commission on International Trade and Investment Policy, established by the President in May 1970 to study major problems in the field of U.S. foreign trade and investment, was cautious in its appraisal of U.S. foreign trade policy toward the Communist world:

We see few economic problems in our trade relations with Communist countries. The course of these relations is mostly determined by political factors. The volume of U.S. trade involved is small and is likely to remain so for the 1970's.⁴

While recommending change, the Commission expressed specific reservations on expanding technological transfers and on the use of bilateral arrangements in trade:

Within the bounds set by strategic considerations, the United States should attempt to expand its trade with the Communist countries. To this end, we should align our export restrictions and related regulations with those of other Western nations.

However, transfers of technologies, production processes, and/or assistance in the establishment of manufacturing facilities should continue to be subject to

³ "Report of the Special Committee on U.S. Trade With East European Countries and the Soviet Union," *Department of State Bulletin*, May 30, 1966, p. 855.

⁴ A. L. Williams (Commission Chairman), *United States International Economic Policy in an Interdependent World* (Washington, D.C.: U.S. Govt. Print. Off., July 1971), Vol. I, p. 10. [Hereafter cited as: Williams Report.]

careful review by appropriate government agencies to ensure that they do not contribute significantly to the military capabilities of Communist countries.

The President should be given authority to remove the existing tariff discrimination against imports from Communist countries, in return for appropriate benefits for the United States.

We should explore with other Western governments possible multilateral arrangements designed to loosen the existing bilateral constraints on East-West trade.⁵

The Nixon Administration's "New Economic Policy," inaugurated in August 1971, proposed a program for attacking foreign, as well as domestic, economic problems. With the new initiative in foreign trade matters, interest in East-West trade grew. The issue of expanding East-West trade ties became more closely linked to the broader range of security and political issues that were to make up the agenda of the May 1972 Summit meeting of President Nixon and Party Secretary Brezhnev. In December 1971, Mr. Peter G. Peterson, Assistant to the President for International Economic Affairs (later Secretary of Commerce), issued a report ranging broadly over the foreign economic policy interests of the United States. The *Peterson Report* called for a new U.S. approach to Communist trade in order to improve the trade prospects of the United States and to open the way for the Communist countries to join the world trading and monetary community.

Relations with the Communist world are now opening up rapidly. The United States has a long way to go in matching the trade levels of East and West Europe with each other. Presently, much of European trade with Eastern Europe and the Soviet Union is on the basis of bilateral agreements. A major effort may now be needed to see how to fit the non-market Communist countries into the multilateral framework of economic exchange among the Western economies. We shall also have to review at home the kinds of guidelines to apply in trading with non-market enterprises.⁶

Mr. Peterson noted that the share of the United States in Western trade with the U.S.S.R. and Eastern Europe was about 3 percent of exports and 2 percent of imports—roughly unchanged from 1960. With the tripling of total Western exports to the Soviet Union and Eastern Europe during the period 1960–1970 (from \$3.7 to \$10.0 billion), Western European and Japanese exports accounted for most of the increase.⁷

The trips to Moscow by Maurice Stans, Secretary of Commerce, in November 1971 and Earl Butz, Secretary of Agriculture, in April 1972 resulted in optimistic appraisals of the future course of U.S.-Soviet economic relations. Secretary Stans predicted that the level of U.S.-Soviet trade would rise substantially in the next few years. Secretary Butz was also optimistic, suggesting that significant grain sales to the Soviet Union might take place for a number of years.

The Summit agreements in May 1972 did not, however, include a commercial agreement. Instead, the Joint Commercial Commission was set up to negotiate:

- (a) an overall trade agreement including reciprocal most-favored-nation agreement;
- (b) arrangements for the reciprocal availability of government credits;

⁵ *Ibid.*, pp. 15–16.

⁶ Peter G. Peterson, *A Foreign Economic Perspective* (Washington, D.C.: U.S. Govt. Print. Office, December 1971), p. 28. [Hereafter cited as Peterson (1971).]

⁷ *Ibid.*, p. 23.

(c) provisions for the reciprocal establishment of business facilities to promote trade;

(d) an agreement establishing an arbitration mechanism for settling commercial disputes.⁸

The Joint Commercial Commission has no precise parallels in earlier periods of temporary improvement in U.S.-Soviet relations, although it does parallel recent Soviet arrangements with the Japanese and West Europeans. The Commission consists on each side of one principal, three deputies, and staff. The U.S. Secretary of Commerce and the Soviet Minister of Foreign Trade, Mr. Peter G. Peterson and Mr. Nikolai Patolichev, respectively, were the first principals.⁹ The U.S. staff for the new commission was supplied by a component of the new East-West Trade Bureau of the Department of Commerce.

On March 6, 1973 an East-West trade policy committee was created with George Shultz as chairman, and Frederick B. Dent, Secretary of Commerce, as vice chairman. Other members are Secretary of State Rogers, presidential assistants Henry A. Kissinger and Peter M. Flanagan, and Ambassador William D. Eberle, Special Representative for Trade Negotiations. James E. Smith, Deputy Under Secretary of Treasury is the executive secretary of the Committee.¹⁰

Even though the problems and issues of U.S.-Soviet trade were not resolved at the May 1972 Summit meeting, there appeared to be a serious disposition on the part of Soviet authorities to press for their early resolution. New York Times reporter Theodore Shabad reported a discussion with Mikhail Misnik, deputy chairman of the Soviet State Planning Commission, in which Mr. Misnik said:

It's about time we moved beyond the Stone age practice of, say, bartering a sheep for half a camel . . . if we advance beyond that stage into large-scale arrangements in which the United States would provide plant and equipment and we would pay with raw materials and the end products of such plants, then the possibilities are indeed immense.

. . . Once we feel that there is serious interest in a joint venture, the problem of access can be overcome.¹¹

The issues were formally joined again during the summer. In a report released by Secretary Peterson on his return from the first meeting of the U.S.-U.S.S.R. Commercial Commission, he suggested that the United States was also willing to compromise—even in the area of high technology transfers formerly restricted by association with national security.

With the industrial and technological development of other major economies, the U.S. no longer has the monopoly it once enjoyed in the production of certain goods. Our overall trade balance is a melancholy reminder of these changed circumstances. The increased availability of high technology products elsewhere rendered some of our original curbs on exports to the Soviet Union increasingly anachronistic. The real loser from these particular restraints would have increasingly been the U.S. producer and worker, not the Soviet consumer or the Soviet economy. There comes a point at which we must face the fact that business

⁸ "Communique Regarding Joint U.S.-U.S.S.R. Commercial Commission, May 26, 1972," *Department of State Bulletin* (June 26, 1972), p. 898.

⁹ On March 6, 1973, George Shultz, Secretary of the Treasury, was designated to succeed Mr. Peterson.

¹⁰ *Washington Post*, Mar. 7, 1973.

¹¹ *New York Times*, May 30, 1972, p. 19.

is business, and, if it is going to go on in any event, we might as well have a piece of the action.¹²

The new attitudes expressed by Mr. Misnik and Mr. Peterson provided the impetus for conclusion of a series of agreements regulating and promoting U.S.-Soviet trade. On July 8, 1972, an agreement was reached providing credit through the U.S. Commodity Credit Corporation for Soviet purchases of American grain. A maritime agreement was concluded on October 14, 1972, which removed several barriers to commercial shipping between the two countries. On October 18, 1972, a commercial agreement and a settlement of the Soviet Lend-Lease debt were signed. The commercial agreement projected a tripling of U.S.-Soviet trade within a three-year period and provided a number of regulatory measures. The Lend-Lease settlement arranged a repayment schedule for the Soviet World War II debt to the United States.

The Disengagement of Congress From U.S.-Soviet Trade Negotiations

Dealing with the broad question of American international economic policy, the *Williams Commission Report* in July 1971 made clear that a major and direct role of Congress in trade negotiations was necessary and desirable:

... The U.S. Congress has the constitutional responsibility for regulating trade. It delegates the administration of this responsibility to the Executive, which has the constitutional responsibility for negotiations with foreign governments. This makes it all the more important that we do our utmost to provide for continuous, close communications between the Executive and the Congress, so as to ensure the effective pursuit of our national objectives.

We recommend that the negotiations be buttressed in advance by appropriate congressional action. In some areas, such as tariffs, a specific delegation of authority to negotiate and proclaim changes in U.S. restrictions will be needed. In other areas, the Administration should negotiate on the basis of a congressional declaration of intent; the results of the negotiations would be submitted to Congress, either for affirmative action, or preferably subject to an understanding that they could be implemented by the Executive unless rejected by Congress within, say, 60 days. Furthermore, some Congressmen should be included in the United States delegations to the negotiations.¹³

The *Peterson Report* in December 1971 also referred to a special congressional role in fashioning a new international economic order:

Of critical importance in our efforts will be the new legislation needed to equip American negotiators with the tools for constructing a new, open and fair world trading system. Defining the negotiating authority we need will require close collaboration with the Congress. In the international negotiations undertaken with this authority, our intention will be to construct a new trading system to take the place of the old.¹⁴

However, no effort was made to involve Congress in U.S.-Soviet trade negotiations. Congress did not pass enabling legislation to facilitate a trade agreement between the two countries. Only after the trade agreement had been concluded did the Nixon Administration turn to

¹² Peter G. Peterson, *U.S.-Soviet Commercial Relationships in a New Era* (Washington, D.C.: Department of Commerce, August 1972), p. 13. [Hereafter cited as Peterson Report (1972).]

¹³ Williams Report, op. cit., pp. 16-17.

¹⁴ Peterson (1971) op. cit., p. v.

Congress for enactment of a law providing most-favored-nation treatment for the Soviet Union.

The various executive department delegations to the Soviet Union did not include congressional representation, nor was the Summit meeting attended by representatives of Congress. Moreover, the bipartisan official visits to China by congressional leaders were not repeated in the wake of the Moscow Summit, and the Joint U.S.-U.S.S.R. Commercial Commission set up at the Summit did not include congressional representation. Finally, the Peterson Report in August 1972 on the first meeting of the Commission made no direct reference to Congress.

The absence of congressional participation in U.S.-Soviet negotiations was in contrast with trade negotiations conducted under the authority of the *Trade Expansion Act of 1962* (19 U.S.C. 1873). Section 243 of that Act stipulated that four members of Congress (two members of the House Committee on Ways and Means and two of the Senate Committee on Finance) must be accredited as members of the U.S. delegation to trade negotiations authorized by the Act.

Congress necessarily will be involved in certain aspects of U.S.-Soviet economic relations in the future. Congressional approval is required for extension of MFN treatment to the Soviet Union. Moreover, Congress may be asked to consider new arrangements to facilitate U.S.-Soviet trade, such as expansion of U.S. Government credit facilities.

Trade and Diplomacy

Increased trade has generally been assumed to encourage more amicable and stable relations among nations. U.S. economic relations with the Soviet Union and Eastern Europe have specifically been assumed to be an effective lever to further U.S. national interests. For example, after World War II, U.S. leaders proposed including the Soviet Union and East European countries in the Marshall Plan for European recovery, presumably in return for adherence to U.S. views on the political settlements in Eastern Europe and other matters. U.S. leaders also specifically linked economic benefits from trade to assured access routes in the settlement of the 1948 Berlin Crisis. Again, Communist countries were apparently denied equal commercial relations because of their participation in the Korean War and their repressive domestic policies. Withdrawal of MFN status and imposition of export controls were among the penalties applied by U.S. policymakers. Later Yugoslavia and Poland were rewarded for their independence from Soviet domination and for a degree of moderation in domestic policies by a moderating of U.S. foreign trade policy. Romania has also been singled out on various occasions for less restrictive commercial treatment in recognition of its relatively independent foreign policy. Thus, changes in U.S. foreign economic policy toward the Soviet Union and Eastern Europe have been used for a number of political ends deemed consistent with U.S. foreign policy. Overarching the specific applications of economic leverage has been the general attitude that the Communist nations were enemies of the United States and should be de-

nied any assistance in development of capabilities which might be a threat to U.S. security. Although somewhat inconsistent in application, a policy of reward-penalty appeared to be followed by the United States, apparently with three main objectives:

(1) to encourage detente by reducing weapons development, lowering force levels, and moderating crisis management;

(2) to encourage detente through moderation and reform of the Soviet regime's domestic policies, including religious tolerance, economic reform, freedom of expression, and the right to emigrate;

(3) to encourage polycentrism in the Communist world, detente in the foreign policies of the individual Communist countries other than the U.S.S.R., and moderation in their domestic policies. The importance of these several objectives has varied over time, but each appears relevant today.

Although the United States and the Soviet Union still have political differences in various world crises, there is some evidence of a moderating of international tension. The U.S.-Soviet Strategic Arms Limitation Talks (SALT) provide a mechanism for moderation in the development of both strategic offensive and defensive weapons; the Treaty on the Limitation of Anti-Ballistic Missile Systems and the Interim Agreement on Certain Measures with respect to the Limitation of Strategic Offensive Arms signed in Moscow on May 26, 1972, are evidence of apparent progress.¹⁵ The multilateral European Security Conference (ESC) and discussions of mutual and balanced force reductions (MBFR) may reflect a similar development in the area of military force reductions.¹⁶

At the same time, questions remain on the significance and enduring character of the change in relations. In the three areas of detente—hostilities and security, internal moderation and reform, and easing of the control system in Eastern Europe—opinions vary on the changes to date and future prospects. Indeed, quite divergent views on these various aspects of the new relationship are expressed by different observers:

(a) *On hostilities and security.*—Some observers argue that the Soviet Union acts as a moderating influence on North Vietnamese and Middle Eastern leaders and uses its leverage to dampen tensions and hostilities. Others maintain that the Soviet Union fosters proxy wars to its own benefit, and that the continuations of the Arab-Israeli and Indochinese conflicts are not incompatible with Soviet aims.

Moreover, some argue that Soviet leaders have a pressing need to reorder priorities and that the SALT agreements permit them to proceed on badly needed civilian programs for modernization of the technologically backward Soviet economy. Others contend that the Soviet Union, with a well-developed military research and development base, will seek to turn its numerical advantage in strategic offensive weapons into a position of overall superiority by closing the technological lead

¹⁵ The ABM Treaty limits the deployment of anti-ballistic missile systems to two designated areas in the United States and the Soviet Union, and at a low level. The Interim Agreement limits the overall level of strategic offensive missile forces.

¹⁶ Preliminary talks on the European Security Conference began in Helsinki on November 22, 1972. The purpose of the Conference, which will include most of the countries of East and West Europe, the United States, and Canada, is to attempt to solve problems of European security and cooperation. Negotiations on mutual and balanced force reductions began on January 31, 1973, in Vienna. The purpose of the talks is to negotiate a reduction of military forces in Europe.

of the United States with respect to such advances in weaponry as the Multiple Independently Targetable Reentry Vehicle (MIRV).

(b) *On internal moderation or reform.*—Some observers point to a continuing need for moderation to encourage professionalism and accommodate modernization. Others, however, point to the restrictions on civil liberties, religious freedom, the right to emigrate, and access to foreign media as evidence of a retrogression or toughening of the Stalinist elements in the system.

(c) *On the control of the bloc.*—Some observers maintain that the relaxation of Soviet-U.S. tensions, the potential reordering of Soviet priorities, and a moderating of domestic controls may permit more foreign policy independence and internal reform in Eastern Europe. On the other hand, the Soviet Union, given some relaxation of tensions vis-a-vis the West, may decide it can get away with perpetuating the post-Czech invasion “Brezhnev Doctrine,” which severely limits Eastern European independence from Moscow.

Recent expressions by Dr. Henry Kissinger appear to incline toward the more hopeful, less threatening interpretation of the progress toward detente to date, while accepting the view that opposing trends and pressures exist. The Soviet leadership, Dr. Kissinger pointed out in a congressional briefing in June 1972, is responding to the pressures which make for detente as well as to the older, conservative pressures:

. . . Some factors—such as the fear of nuclear war, the emerging consumer economy, and the increased pressures of a technological, administrative society—have encouraged the Soviet leaders to seek a more stable relationship with the United States. Other factors—such as ideology, bureaucratic inertia, and the catalytic effect of turmoil in peripheral areas—have prompted pressures for tactical gains.¹⁷

Earlier in the same briefing, Dr. Kissinger noted:

But now both we and the Soviet Union have begun to find that each increment of power does not necessarily represent an increment of usable political strength.¹⁸

Dr. Kissinger also saw enhanced security in the collective benefits or linkage among various agreements such as those on arms limitations, trade, and the environment:

We hoped that the Soviet Union would acquire a stake in a wide spectrum of negotiations and that it would become convinced that its interests would be best served if the entire process unfolded. We have sought, in short, to create a vested interest in mutual restraint.¹⁹

. . . The SALT agreement does not stand alone, isolated and incongruous in the relationship of hostility, vulnerable at any moment to the shock of some sudden crisis. It stands, rather, linked organically to a chain of agreements and to a broad understanding about international conduct appropriate to the dangers of the nuclear age.²⁰

The process of creating a “vested interest in mutual restraint” is likely to be a very gradual and protracted one. Moreover, future changes in Soviet foreign policy and the motivations of Soviet leaders in their conduct of diplomacy will not be easily discerned. The political

¹⁷ Kissinger briefing to Congressional leaders, *Congressional Record*, June 19, 1972, p. S9600.

¹⁸ *Ibid.*

¹⁹ *Ibid.*, p. S9600.

²⁰ *Ibid.*, pp. S9599-9600.

benefits to the United States must by their nature be uncertain of fulfillment, especially in the short run. On the other hand, the economic benefits to the Soviet Union from improved commercial relations may be certain and significant, even in the short run. Thus, the risk of unfulfilled expectations appears greater for the United States than for the Soviet Union. More specifically, increased technology transfers to the Soviet Union may show only long-term benefits to the United States in the diplomatic and political area.

III. THE SOVIET RATIONALE FOR EXPANDED FOREIGN ECONOMIC RELATIONS

The Ninth Five-Year Plan Directives discussed at the Twenty-Fourth Soviet Party Congress in March-April 1971 called for many advances in technology. Technological change was projected to modernize the Soviet civilian economy, improve the quality of consumers' real income, and raise the efficiency of economic planning and management. Meeting the targets in each of these areas required technological assistance from abroad, including the United States. This reordering of priorities underlies Soviet interest in increased commercial relations with the United States.

The Soviet leadership's emphasis on technological change in the Soviet economy reflects a growing concern that Soviet technology lags considerably behind that in the industrial West. While there are no precise measures of technology levels, there is much evidence that a technology gap between the Soviet Union and the West does exist. Michael Boretsky, for example, examined a number of key technological innovations in the Soviet economy and concluded that the overall level of Soviet technology in 1962 lagged behind that in the United States by some 25 years.²¹ The existence of a technology gap has been confirmed by many others, including Soviet observers. Premier Alexei Kosygin asserted in 1965: "The pattern of production of machinery and equipment being turned out by the many branches [of Soviet industry] does not conform to modern standards."²² Three Soviet scientists who have been critical of the leadership's policies described the technology gap in more detail:

When we compare our economy with that of the United States, we see that ours is lagging behind, not only quantitatively, but—and this is the saddest part—also qualitatively. The more novel and revolutionary the aspect of the economy, the wider becomes the gap . . . We are ahead of the U.S. in the production of coal, but behind in the production of oil, gas, and electric power, ten times behind in chemistry, and immeasurably behind in computer technology

In the late 1950's, our country was the first to launch a sputnik and to send a man into space. By the end of the 1960's, we have lost the lead in this field (as in many others). The first men to set foot on the moon were Americans. This is one of the outward signs of an essential and ever-growing gap between our country and the West extending through the whole spectrum of scientific technological activity.²³

²¹ Michael Boretsky, "Comparative Progress in Technology, Productivity, and Economic Efficiency: U.S.S.R. Versus U.S.A.," in U.S. Congress, Joint Economic Committee, *New Directions in the Soviet Economy*, Part II-A, *Economic Performance*, 89th Cong., 2d sess. Washington, U.S. Govt. Print. Office, 1966, p. 149.

²² Alexei Kosygin, "On Improving Management of Industry, Perfecting Planning and Enhancing Economic Incentives in Industrial Production," in *New Methods of Economic Management in the USSR*, Moscow, Novosti Press Agency Publishing House, 1965, p. 19.

²³ "Appeal of Scientists A. D. Sakharov, V. F. Turchin and R. A. Medvedev to Soviet Party and Government Leaders," March 19, 1970. Translated in *Survey*, Summer, 1970, pp. 160-170.

Another indicator of the technology gap is the difference in factor productivity—the amount of output generated per unit of capital and labor input. One comparison showed overall productivity in the Soviet economy to be about one-third of that in the United States in the mid-1960's. (See Figure 1.)

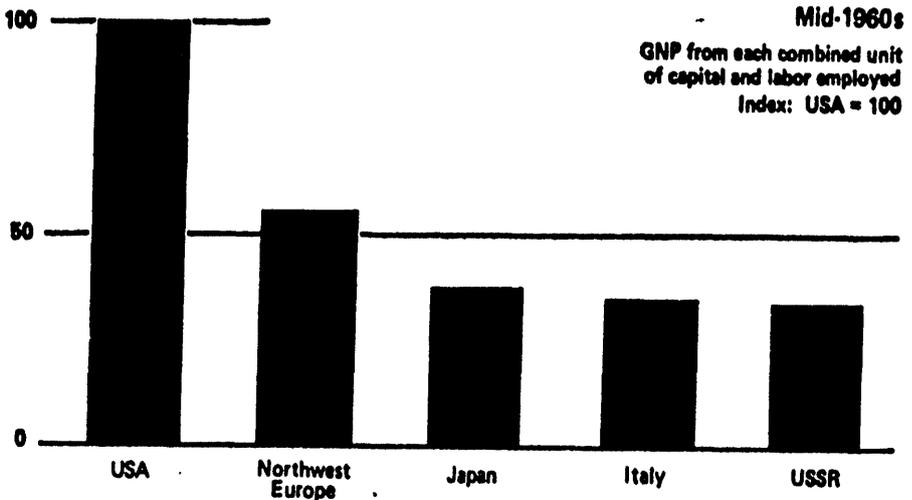


FIGURE 1.—The Levels of Technological Development: The U.S.S.R. Compared With Other Developed Countries.

Source: Peterson Report, 1972. Annex A, p. 34.

The lower level of Soviet civilian technology is surprising in view of a consistently higher share of Soviet GNP devoted to investment than in the United States—33 and 17 percent, respectively, in 1971.²⁴ Presumably, both the military burden and the inefficiency in utilization of investment had something to do with the disproportion. Likewise, labor productivity in Soviet industry and agriculture were a fraction of the U.S. level—41 and 11 percent, respectively, in 1971.²⁵

Technological Requirements of the Ninth Five-Year Plan

The Ninth Five-Year Plan enumerated several sectors of the economy which were to receive primary attention for technological change. Most of the proposed changes have important implications for Soviet foreign economic relations.

MODERNIZATION OF SOVIET INDUSTRY

Soviet ability to stimulate economic growth through technological change will depend largely on expansion of energy from hydrocarbon sources. The exploitation of hydrocarbon resources with American assistance would facilitate technological change in the Soviet Union in at least three important ways: (1) it would bring in advanced U.S. technology for the Soviet oil and gas industry; (2) it would provide critically needed energy supplies to Soviet industry; and (3) it would provide a source of foreign exchange earnings, which are needed to import Western technology for other branches of Soviet industry.

²⁴ Peterson Report (1972), op. cit., p. 32.

²⁵ Ibid., p. 33.

Increased output of the more efficient hydrocarbon fuel sources, such as petroleum and natural gas, is particularly important. Soviet energy consumption in 1971 was about half that of the United States—1,291 as compared with 2,130 million metric tons of coal equivalent—while the respective GNPs of the two countries were 548.6 and 1,000.4 billion 1970 U.S. dollars. However, the structure of primary energy consumption in the U.S.S.R. is less developed: coal still supplied 44 percent of the energy as compared with 19 percent in the United States. (See Figure 2.) Petroleum and natural gas accounted for all but about one percent of the remainder in each case, with hydro and nuclear power of negligible importance.

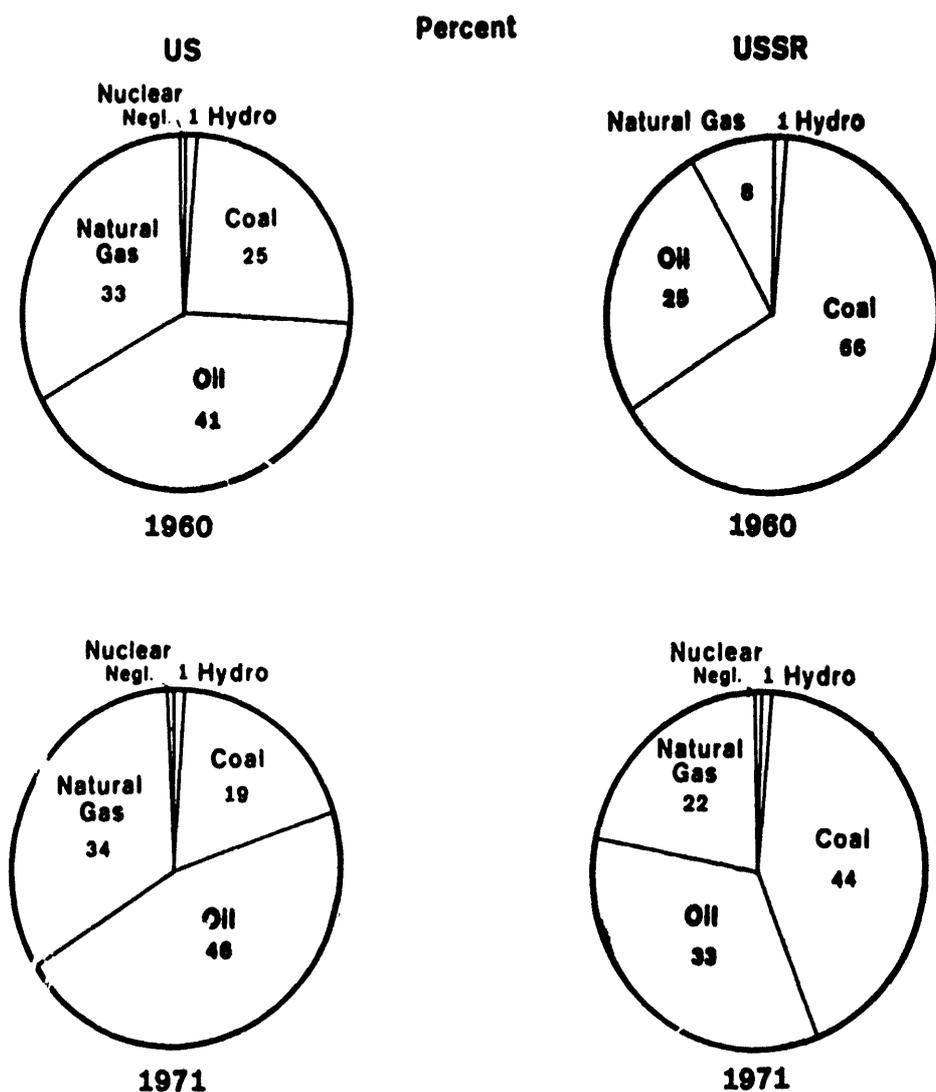


FIGURE 2.—Primary Energy Consumption, United States and U.S.S.R.
Source: Peterson Report (1972). Annex A, p. 14.

The trend toward reduced coal utilization (from 66 to 44 percent from 1960–1971) may continue if petroleum and natural gas produc-

tion goes according to the Plan, but at a diminished rate—another 5 to 6 percent reduction. (See Table 1.)

Success in this modest improvement in the energy balance will depend on Soviet ability to expand hydrocarbon output in Western Siberia, where two-thirds of the increased output is projected for the Ninth Five-Year Plan.²⁶ The West Siberian development, in turn, requires considerable importation of extraction, transmission, and refinery equipment. Moreover, the technology of construction in permafrost may dictate some industrial cooperation with American firms familiar with Alaskan Northern Slope technology. The projected expansion of the West Siberian energy project would require a huge investment. Consequently, Soviet decision makers may have to choose between a major economic growth and modernization project and costly defense programs.²⁷

TABLE 1.—SOVIET ENERGY PRODUCTION, 1970 AND 1975

	1970			1975			1975 as percentage of 1970
	Percentage of			Percentage of			
	Extraction and production	Fuel resources	Fuel and power resources	Extraction and production	Fuel resources	Fuel and power resources	
Oil, including condensed gas (million metric tons).....	352.6	41.0	39.6	505.0	44.1	42.4	143.2
Gas, natural (billion cubic meters).....	198.0	19.4	18.6	320.0	23.3	22.4	161.6
Coal (million metric tons).....	624.1	35.9	34.6	694.9	29.5	28.4	111.3
Peat, for fuel (million metric tons).....	57.3	1.5	1.4	78.3	1.5	1.4	136.6
Oil shale (million metric tons).....	24.3	.7	.7	32.7	.7	.7	134.6
Firewood, for fuel (million cubic meters).....	69.0	1.5	1.4	55.5	.9	.9	80.4
Fuel resources—total (million metric tons of conventional fuel).....	1,227.0	100.0	96.3	1,639.0	100.0	96.2	133.6
Hydroenergy (billion kWh).....	124.4	.....	3.6	165.0	.....	3.3	132.6
Atomic energy (billion kWh).....	3.5	.....	.1	25.0	.....	.5	700.0
Fuel and power resources—total (million metric tons of conventional fuel).....	1,274.3	.....	100.0	1,703.5	.....	100.0	133.7

Source: Baibakov, p. 98.

In metal output, non-ferrous metals are particularly important in the Ninth Five-Year Plan. In 1969 non-ferrous metals represented only 8.75 percent of the total value of base metals in the Soviet Union (as compared with 20 percent in the United States).²⁸ An effort is currently underway to increase the proportion of non-ferrous metals: output of most important metals in this category are projected to increase by 50 percent.²⁹ Development of the aluminum, copper, and other metal sources which are abundant in East Siberia, close to the Soviet Union's low-cost hydroelectric system, is particularly attractive. Increases in non-ferrous metal production are projected to provide valuable inputs for modernizing other industrial sectors. A shift in building materials to non-ferrous metals, paralleling the pattern in other industrial countries, is prescribed.

²⁶ The first published Soviet plan in 30 years provides some detailed insights on projected Soviet energy consumption: N. K. Baibakov, *Gosudarstvennyi pyatiletnyi plan razvitiia narodnogo khoziaistva SSSR na 1971-1975 gody*. (State Five-Year Plan for Development of the USSR National Economy for the Period 1971-1975) (Moscow, Gosplan, April 1972). (Hereafter cited as Baibakov.)

²⁷ For a discussion of this Soviet dilemma see below, *Changing Priorities in Allocation: Growth vs. Defense*, pp. 24-29.

²⁸ Alexander Sutulov, *The Soviet Challenge in Base Metals* (Salt Lake City: The Univ. of Utah Printing Service, 1971), 183.

²⁹ Baibakov, p. 115.

The Directives of the Party Congress and the Five-Year Plan specifically refer to "speeding the technological progress in machine-building."³⁰ Among the indicators of technological success for the machine-building industry are lowering weight-to-power ratios, raising capacity and efficiency levels, and improving reliability. Some 26 lines of machines and equipment are listed as specific objects for technological change in the period 1971-1975.³¹

Other industries, such as chemicals and petrochemicals, are a part of the technological plan, but with less specific technological targets.

QUALITY OF SOVIET LIFE

The Ninth Five-Year Plan projected significant improvements in the quality of consumer goods; it stressed the need for better diets, clothing, personal transportation, and housing for the Soviet citizen. The proposed improvements require not only increased output, but also technological change in consumer industries.

The quality of the Soviet diet had been gradually improving for several years before the Ninth Five-Year Plan, but the Plan's projections of considerable increases in quality foods underlie Soviet claims that it is more consumer-oriented. (See Table 2.)

TABLE 2.—CONSUMPTION OF SELECTED FOODS IN THE SOVIET UNION

(Yearly, per capita, in kilograms)

	1965	1970	1975	1975 as a percentage of 1970
Meat and meat products.....	41.0	48.0	59	123
Milk and milk products.....	251.0	307.0	340	111
Eggs.....	124.0	159.0	192	121
Fish and fish products.....	12.6	15.4	22	143
Sugar.....	34.2	38.8	43	111
Vegetable and melon products.....	72.0	82.0	109	133

Source: Baibakov, p. 300.

In spite of an impressive increase of 14 percent in meat output from 1965 to 1971, the Soviet citizen averaged just one-third of the quantity of meat consumed by his counterpart in the United States.³² Moreover, if the ambitious increase—about twice the earlier rate—is achieved, the meat output per capita in 1975 will only approach the level common in Eastern Europe today.³³ In order to reach this goal, improvement in animal husbandry, as well as a significant increase of feed grain output and feed grain imports for a number of years, is required. Foreign technology—the animal husbandry of American agricultural business—could greatly assist Soviet agriculture. Specific Soviet import needs include high-protein feed grains, better breeding stock, and livestock raising and processing equipment.³⁴ Although

³⁰ *Ibid.*, pp. 121ff.

³¹ *Ibid.*, pp. 124-5.

³² Peterson Report (1972), op. cit., p. 23.

³³ Comecon, *Statisticheskii ezhegodnik*, 1970, p. 300.

³⁴ See Hubert H. Humphrey and Henry Bellmon, *Observations on Soviet and Polish Agriculture, November-December, 1973*. A trip report prepared for Committee on Agriculture and Forestry of the U.S. Senate (Washington, D.C.: U.S. Government Printing Office, 1973).

Soviet agriculture suffered a very bad weather year in 1972, Soviet leaders appear committed to retain their livestock expansion plans.³⁵

Increases in output of other consumer goods, such as clothing, shoes, and household goods are also projected in the Ninth Five-Year Plan. However, recent experience indicates that increases in output alone will not satisfy the growing needs of Soviet consumers. Since the early 1960's, poor quality, rather than insufficient quantity, of consumer goods has been the major irritant to Soviet citizens. In the past, increased output of consumer goods frequently resulted in increased stocks and inventories. Soviet consumers refused to buy shoddy consumer goods, choosing instead to put their money into savings accounts. One attempt to solve this problem has been enterprise management reform:³⁶ consumer industries were among the first to experiment with market-oriented reforms. Another possible approach to improving light industry performance lies in importing foreign technology. The 1972 agreement to purchase designs, engineering services and equipment from two American firms for building tableware factories in the Soviet Union³⁷ is an example of the latter approach.

The problem of low-quality consumer goods has also been attacked by changing priorities on the types of consumer goods produced.³⁸ Instead of further rapid expansion of inferior consumer goods, Soviet officials have begun to rely more on production of key commodities, in which quality is still not a major factor in the Soviet Union. Some commodities, such as meat and automobiles, are so highly valued by Soviet consumers that high prices and low quality are not likely to deter them from spending their rubles. The manner in which automobile sales can be used to absorb excess spending power can be readily comprehended by comparing the price of Soviet cars with Soviet wages. Whereas the average industrial worker's gross monthly pay is 135.4 rubles, he must pay 9,250 rubles for a new Volga automobile.³⁹ Still, current payments are being offered against future delivery for automobiles. The chronic repair problems for Soviet domestic brands is presumably a reason why foreign producers were sought to facilitate the current expansion. But even Soviet-produced Fiats must meet problems of inadequate repair facilities and mechanics. Domestic requirements for meat and automobiles underlie Soviet interest in foreign animal husbandry and automobile technology.

Passenger car production in the Soviet Union is far below the level needed to satisfy consumer demand. The Volga Automobile Plant in Tol'jatti, a cooperative venture between the Italian firm of Fiat and the Soviet automobile industry, produced its first cars in 1970. While the Fiat plant represents a significant increase in Soviet automobile production, output will still fall short of Soviet needs. Future expan-

³⁵ A January 1973 inventory indicated that cattle holdings had increased by 1.6 percent in 1972, while swine holdings showed only a 7 percent decline. See *Pravda*, Jan. 30, 1973.

³⁶ See below, *Improvement in Planning and Management*, pp. 22-24.

³⁷ Richard S. Frank, "Trade Report: U.S. Sees Surplus, More Jobs in Early Years of Expanded Trade With Soviet Union," *National Journal*, vol. 4, No. 48 (Nov. 25, 1972), p. 1800.

³⁸ Douglas B. Diamond, "Principal Targets and Central Themes of the Ninth Five-Year Plan," in Norton T. Dodge, ed., *Analysis of the USSR's 24th Party Congress and 9th Five-Year Plan* (Mechanicville, Md.: Cremona Foundation, 1971), p. 52.

³⁹ *Narodnoe khoziaistvo SSSR, 1922-1972 gg.* (Moscow, Tsentral'noe Statisticheskoe Upravlenie, 1972, p. 350; Keith Bush, "Soviet Inflation," *Radio Liberty Dispatch*, Jan. 5, 1973, p. 5.

sion of the Tol'jatti and other automobile factories is expected.⁴⁰ More importation of foreign equipment and more industrial cooperation with Western firms will undoubtedly be necessary for further progress. In addition to assisting in Soviet automobile production, Western companies are likely to participate in related activities, such as road building and construction of repair facilities.

Housing construction has been a treadmill for Soviet planners. Urban growth accounts for most of the expansion in space. The increase from about 6 to 7.5 square meters per capita for 1960-1970 is not likely to be improved on much by 1975. Still more important is the availability of reliable consumer durables and bathroom and kitchen space. In 1972, Soviet citizens had about one-third to one-half of the number of refrigerators, washing machines, and television sets per capita found in American households. Moreover, many urban apartments in the U.S.S.R. require the sharing of bathrooms and kitchens,⁴¹ and many household durable goods sold to Soviet consumers are apparently of inferior quality. Much can be gained from technology transfers from other industrial nations. For example, Soviet officials arranged for adoption of French color television in 1965. As it has not yet been perfected at competitive cost, the Soviets may have to look elsewhere for assistance.

TRANSPORTATION

A key element in Soviet plans to modernize industry and improve consumer welfare is the modernization of the Soviet transportation system. Increases in pipeline construction and in auto transport (for both freight and passengers) are highlighted in the Ninth Five-Year Plan. (See Table 3.)

TABLE 3.—TRANSPORTATION IN THE 9TH 5-YEAR PLAN

	1970		1975 (planned)		1975 as a percentage of 1970
	Billions of ton kilometers	Percent of total	Billions of ton kilometers	Percent of total	
Freight transport:					
Turnover of freight transport (ton kilometers).....	3, 829. 2	100. 0	5, 171. 9	100. 0	135
railroad.....	2, 494. 7	65. 1	3, 050. 0	59. 0	122
sea.....	656. 1	17. 1	918. 6	17. 7	140
lake.....	174. 0	4. 5	217. 3	4. 2	125
automobile.....	220. 8	5. 8	338. 0	6. 5	153
air.....	1. 9	. 1	3. 0	. 1	161
pipeline.....	281. 7	7. 4	645. 0	12. 5	229
	Billions of passenger kilometers	Percent of total	Billions of passenger kilometers	Percent of total	1975 as a percentage of 1970
Passenger transport:					
Turnover of passenger transport (passenger kilometers).....	548. 9	100. 0	782. 3	100. 0	143
railroad.....	265. 4	48. 3	330. 0	42. 2	124
sea.....	1. 6	. 3	1. 9	. 2	119
lake.....	5. 4	1. 0	6. 4	. 8	118
automobile (bus).....	198. 3	36. 1	311. 0	39. 8	157
air.....	78. 2	14. 3	133. 0	17. 0	170

Source: Planovoe khoziaistvo (Planned Economy). No. 5, 1972, p. 16.

⁴⁰ A large increase in passenger car production was projected in the Ninth Five-Year Plan. An output of 1,335,000 cars is planned for 1975, compared with 392,000 in 1970. See Baibakov, *op. cit.*, p. 126.

⁴¹ Peterson Report (1972), *op. cit.*, Annex A, p. 22.

Improvements in Soviet transportation have depended heavily on imports of technology from abroad. Cooperative ventures with Western European companies have aided in the construction of pipelines from Siberia to Europe. The Soviet automotive industry is importing large quantities of Western machinery, equipment, and know-how. Major imports of Western technology, including American, have aided in building the Kama River Truck Plant. The Kama Plant, currently under construction, is a massive project which will produce 150,000 trucks a year plus 250,000 diesel engines. About three-fourths of all the machinery, equipment, and technology for the project is expected to come from Western firms.⁴²

Improvement in Planning and Management

Soviet interest in foreign technology extends to planning and management techniques. Moreover acceptance of the conditions required in joint ventures with Western market economies will tend to push the Soviet economy further in the direction of economic change needed to improve performance.

A new Five-Year Plan and a Soviet Party Congress are the usual occasions for an assessment of past performance, current problems, and future prospects of the world's second largest economy. The discussions preceding the Ninth Five-Year Plan were of particular interest because of the Party leadership's preoccupation with lagging economic performance. The discussions in Party and professional circles ranged from issues relating to resource allocation policy to changes in the system of planning and management.⁴³ While plan figures provide evidence of Soviet resource allocation policy, it is difficult to assess the leadership's dedication to economic reform.

The key elements in the economic reform discussions are the creation of a new role for economic enterprises and a new approach to central planning.⁴⁴ The reformers propose more independence for enterprise managers to decide on what and how to produce. Fewer guidelines and success indicators would be handed down to enterprise managers from the central bureaucracy. One new indicator would be profitability; each enterprise would be required to take demand factors into consideration and to generate sufficient sales to earn a profit. An important aspect of the reforms is a renewed emphasis on material incentives—profit incentives to encourage enterprise efficiency and wage incentives to stimulate worker productivity. New planning techniques, a more flexible price system, and increased reliance on market forces are key aspects of the reforms.

The reform proposals represent a dramatic departure from past Soviet practices and have predictably run into opposition from conservative elements in the Party and government bureaucracies. The Party Congress was apparently delayed from the fall of 1970 to the spring of 1971 to accommodate further debates on resource allocation

⁴² Imogene Edwards, "Automotive Trends in the USSR," in U.S. Congress, Joint Economic Committee, *Soviet Economic Prospects for the Seventies*, 93d Cong., 1st sess. Washington, D.C., U.S. Govt. Print. Off., 1973.

⁴³ *Pravda*, Feb. 4, 1970; Interview of Mr. Goreglind of Gosplan, *Moskovskaya Pravda*, Feb. 21, 1971; *Pravda*, July 4, 1971; *Pravda*, Feb. 14, 1971; *Sovetskaya Rossiya*, Feb. 4, 1970.

⁴⁴ See Richard Judy, "The Economists," and John Hardt and Theodore Frankel, "The Industrial Managers," in H. G. Skilling and Franklyn Griffith, eds., *Interest Groups in Soviet Politics* (Princeton: Princeton University Press, 1971).

and planning and management reform in the formulation of the Plan. Yet the Plan Directives and the leadership speeches at the Congress were disappointing as blueprints of the future course of reform in the Soviet economy.

In the debate on planning and management, Party General Secretary Leonid Brezhnev identified himself with a variety of differing positions. He appeared to bless a conference chaired by Academician Fedorenko in April 1970 which featured more professional techniques in planning.⁴⁵ He also supported the extension of market simulating enterprise reforms, such as the Shchekino chemical plant experiment, to all industrial enterprises. At the same time, by rhetoric, if not by direct support, he aligned himself with traditional views of management by criticizing labor disciplining and supporting the revival of the revolutionary *subbotnik* (an unpaid "voluntary" Saturday work-day by workers organized by the Party).⁴⁶ Thus, Brezhnev was not to be tacked down to any firm commitment on the system of planning and management.

The evidence of the Congress or the pre-Congress deliberations did not suggest that Soviet leaders were undertaking serious changes in planning and management. Although the leadership was pushed by the logic of rationalization to develop better models for forecasting and to favor market simulating enterprise reforms, it apparently found the political-economic cost of change unacceptable. At some point, the cost of not changing may be perceived by the Soviet leadership to be greater than the cost of change. Whether the need for change is fully perceived by the leadership is unclear.

Alec Nove has suggested that the apparent setbacks of the reformers or economic modernists are only temporary. Time, he claimed, is on their side, and the search for a synthesis between a market and planned economy must begin again.⁴⁷ An important article written by Soviet Academician T. S. Khachaturov shortly after the 24th Party Congress provides some substantiation of Nove's view.⁴⁸ Khachaturov's article, which argued in favor of planning and management reforms, may have indicated the beginning of a policy swing of the Brezhnev leadership back to reform. If it did, it may yet result in significant changes during the Ninth Five-Year Plan.

How do the discussions of economic reform relate to Soviet foreign economic relations? While Soviet reformers have not emphasized the international implications of the reforms, it is clear that a more rational economic decision-making structure would facilitate the integration of the Soviet economy into the international economic system. Rationalization of Soviet prices would encourage the importation of goods produced inefficiently by domestic industries. At the same time, by fostering efficiency in domestic enterprises, the Soviet Union may be able to expand its exports to Western markets. Moreover, economic reform would remove many of the features of Soviet central planning

⁴⁵ *Pravda*, Apr. 14, 1970; *Ekonomika i matematicheskie metody*, vol. VI, No. 4, 1970, pp. 631-638.

⁴⁶ *Pravda*, Apr. 14, 1970; Jan. 13, 1970.

⁴⁷ See *Neue Zuercher Zeitung*, April 5, 1970; and T. Kirstein, "The Controversy over the Market and the Plan in the Soviet Union," *Neue Zuercher Zeitung*, March 31, 1971.

⁴⁸ *Pravda*, May 15, 1970. T. S. Khachaturov is a member of the Academy of Sciences and editor of one of its publications, *Voprosy ekonomiki* (Problems of Economics).

which inhibit Western businessmen from dealing with Soviet foreign trade organizations.⁴⁹

Soviet economic reforms center on adoption of modern mathematical methods, improved computer capability, and new management techniques. Systems analysis in regional planning, and input-output analysis in national economic planning, are examples of the new trend. More computer capability is required to support the more sophisticated economic analysis. If, or as, the change proceeds, more application of Western techniques, analysis, and hardware will become relevant. The professional bridge between Soviet and Western economists, statisticians, and management science specialists will likely follow economic reform in the Soviet Union. At the same time, industrial cooperation or joint ventures of industrial nations with the Soviet Union may encourage and facilitate these reform trends.

In this early stage of expanding U.S.-Soviet commercial relations, the correlation between domestic economic reform and foreign economic policy cannot be tested empirically. It could be argued that the trends are offsetting rather than complementary. Thus, it may be that Soviet awareness of a need for technological change and improved efficiency in the domestic economy has convinced the leadership that they should turn to foreign technological assistance as a substitute for domestic reform. Only future experience in East-West economic cooperation will resolve the question of the interrelationship of foreign involvement and domestic reform in the Soviet economy.

Changing Priorities in Resource Allocation: Growth Versus Defense

The technological priorities in the Ninth Five-Year Plan, which are designed to modernize the civilian economy, improve the quality of living, and raise the efficiency of planning and management, imply a shift in resource allocation policy from military to civilian investment and consumption. These goals are suggested in the detailed publication of planned targets. An increase in civilian programs above past levels suggests a decrease in the prior defense priorities. The specific goals for increased energy output—focusing on the West Siberian oil-gas complex—provide evidence of a reordering of priorities.

The Soviet leadership's commitment to new priorities in resource allocations, if sustained, will have important implications for Soviet foreign economic relations. Increased expenditures on major investment projects, such as oil and gas exploration, and on consumer goods, such as quality foods and automobiles, will increase Soviet demand for imports of foreign technology. Presumably, Western technology is needed less during a defense-priority period, since Soviet military technology is widely considered to be near parity with that in the West, and, in any event, military technology is not generally transferred to the Soviet Union in normal commercial transactions. Thus, in assessing future Soviet needs for U.S. technology, it is important to evaluate the prospects for a reorientation of Soviet priorities.

A firm commitment to new priorities runs counter to the traditional policy of the Party and is also uncharacteristic of Party Secretary

⁴⁹ See below, pp. 62-64.

Brezhnev's past record. During the period preceding the announcement of the Plan (i.e., 1969-1971), Brezhnev voiced his displeasure over the performance of the economy, but committed himself firmly to neither a reform of planning and management, nor a new set of priorities. Indeed, he advocated a variety of programs in the pre-Congress period. He favored the military in a speech at the Dvina River Maneuvers in February 1970; he favored agricultural investment in the July 1970 Party Plenum and at the meeting of the Collective Farmers (Kolkhozniki) Congress; he apparently approved a call for more housing in a February 1971 revision of the Plan; and he identified himself with technological change by personally signing the Plan Directives that same month. Finally, he approved the publication of the Ninth Five-Year Plan, under the editorship of his State Planning Committee Chairman, N. K. Baibakov, in April 1972. In short, on the allocation of resources, he behaved like a politician who was securing his position by supporting everyone's programs. But the grim fact faced by all politicians, whether the President of the United States or the Prime Minister of the United Kingdom, is that *choice* is the inexorable requirement of political economy. Especially when growth is slow, a leader must be *against* some programs to be *for* others. Specifically, there was no indication that the high military priority of the 1960's was being scaled down as it had been by Khrushchev in 1959.

If expensive development of weapons systems is to continue, the level of military claims on resources will then be at least equal to past levels and will probably require a large share of the new resources generated by modest economic growth. Unless military spending is curtailed, increased requirements for modernization and consumer improvement must lead to overcommitment in the Ninth Five-Year Plan. Brezhnev's dilemma illustrates that the two central economic policy issues in Soviet politics remain civilian investment versus military output, and the question of changes in planning and management.

In view of Brezhnev's equivocation on economic issues in the past, why should he be expected to pursue the politically risky changes in economic policy projected by the Ninth Five-Year Plan? A possible answer is that Brezhnev for the first time is able and willing to convince conservative Party interests to permit such change. The General Secretary appears to have emerged from the 24th Party Congress with more power and responsibility than he enjoyed in the pre-Congress Brezhnev-Kosygin collegial leadership.⁵⁰ At the same time, Brezhnev's future tenure in office and position of power are likely to depend to a large extent on economic performance. Thus, there is a more persuasive post-Congress logic for Brezhnev to make firm decisions and reasonable commitments that he judges will facilitate improved economic performance. A stronger power base might enable Brezhnev to overcome Party conservatives who oppose economic change and to resist greater military outlays to compete with the United States, to meet the Chinese threat, and to exploit the opportunities of Middle Eastern instability. A decision to change priorities would be reinforced by success in the SALT talks, by possible European troop cuts, and by other post-Summit developments.

⁵⁰ See Myron Rush, "Brezhnev and the Succession Issue," *Problems of Communism*, vol. XX, No. 4 (July-August 1971), pp. 9-15.

The progress of the SALT talks could also have a negative influence: i.e., failure of the talks would strengthen the influence of those resisting change, even if Brezhnev should decide to change priorities. It is important to assess whether Brezhnev was influenced by the interpretations placed on the Interim Agreement by members of Congress who insisted on future parity in the number of strategic weapons as a precondition for SALT and for a comprehensive agreement on offensive weapons. The Soviet press has been critical of congressional reservations on the SALT agreements. It was also critical of Secretary of Defense Melvin Laird's view that an acceleration of certain weapons systems development was necessary to assure parity and stability. This critical reaction points to some uncertainty among Soviet leaders on future military spending.

History has provided two scenarios which suggest alternative courses for the present Soviet leadership—one in 1956 which led to a reduction in the emphasis on defense, and one in 1962, an upgrading of the defense priority. In 1956 Nikita Khrushchev, Minister of Defense Zhukov, and the Party leadership agreed to reduce military manpower and modernize the Soviet armed forces. The stimulus to economic growth from the release of resources was a factor in the continued high growth rates and may have led Khrushchev subsequently to promise to overtake and surpass the United States. It was only later, after the first Kennedy budget and the Cuban missile crisis, that Khrushchev apparently reversed these priorities, initiating the buildup of some of the weapons now deployed by the Soviet Union and temporarily stopping the progress of military manpower reduction. This reversal and the concurrent, and possibly resultant, poor economic performance may have been a factor in Khrushchev's removal from power.

The interrelationship of political and economic variables in these two scenarios may be relevant to the current scene. Leonid Brezhnev is certainly no Khrushchev in power or personality, but the political context in which he perceives himself may influence his interpretation of economic alternatives, as an earlier political context influenced Khrushchev. Is Brezhnev emulating the Khrushchev of 1956 or the one of 1962? Some evidence suggests the 1956 scenario: (1) the apparent commitment of a very high priority to the West Siberian development; and (2) repeated evidence that Western technology is highly valued and required for completion of civilian programs.

The Soviet leadership's policy in the West Siberian development best illustrates how military and civilian claimants may be competing for scarce investment funds. The explicit Party and Government directive of January 1970 on the West Siberian development called for coordination of many Ministries, including the *Ministry of Defense Industries* (a rare public reference), to bring about the expeditious completion of the regional development.⁵¹ Moreover, the number of projects related to the West Siberian development specifically mentioned in the Plan Directives suggests continuing high priority consideration in 1972. In the Ninth Five-Year Plan a good portion of the identified, large projects are directly related to the West Siberian complex.⁵² To have effective priority, the particular new claims of the Siberian projects would appear to be competitive with military hardware output

⁵¹ *Pravda*, Jan. 15, 1970, p. 1.

⁵² *Voprosy ekonomiki*, No. 6 (June 1971), p. 3; *Pravda*, Apr. 11, 1971.

for high test metals, sophisticated machines, manpower, and other important inputs. Military leaders would thus appear to have an interest in downgrading the priority for the Siberian projects.

Significant progress could perhaps be made in critical military areas, such as installation of MIRV warheads for the existing Soviet ICBM inventory, without new construction of either silos or missiles. This alone would tend to convert numerical advantage into a strategic advantage by offsetting the technological leadership of the United States. In this special sense, it is conceivable that the Soviets could continue to improve their strategic position *and* reorder priorities. However, MIRV retrofitting may not be a low-cost operation, if the Soviet military is not already well developed in this area.

The potential competition between military projects and the West Siberian development has a special time dimension to it. The longer the Siberian development proceeds in time, the more compelling the logic to allocate the necessary resources to bring it to full effectiveness. If the development of new strategic systems, e.g., the SS-9, SS-11, and SS-17 ICBMs, should involve a long, risky, and expensive process—the gestation period for such systems is said to be 8–10 years—the question would arise as to whether the two patterns of resource allocation could be simultaneously supported. If both military and civilian projects were begun, at what point could overcommitment be perceived and resources shifted to bring the effort having first priority to timely completion? Underfunding and delay of both military and civilian programs would not be an attractive prospect to the Party or its leader.

Moreover, if overcommitment should be permitted, it might be difficult, even technologically impossible, to shift resources from one program to the other. The long completion times required for such sophisticated military and civilian projects create both technological and management problems in conversion, and the ability to shift resources committed to these projects becomes increasingly limited over time.

Brezhnev may soon have to act decisively in order to avoid overcommitment on two competitive, nonconvertible patterns of resource allocation. If Brezhnev views the West Siberian development and the deployment of SS-9 and SS-11 missiles as competitive patterns of resource allocation, and if some relatively irreversible decisions on allocations are necessary, he may be inclined to divert resources from the potential military program to bring to fruition the civilian investment project. At present, it appears that there may be a delay in the program for further buildup of the SS-9 and SS-11.⁵³ Commitments may not yet be made to a new round in strategic weapons buildup. On the other hand, the West Siberian oil-gas complex appears to be moving ahead, possibly with support from the military industries.

Although oil and gas targets were not met in the 1972 Plan, and the 1973 Plan has scaled down targets, the West Siberian priority appears intact. A four-day visit by Premier Kosygin to the Siberian oil and gas fields in January 1973 may have been intended to give further evidence of the leadership's support for the Siberian project.⁵⁴

⁵³ *New York Times*, Mar. 8, 1971, p. 1 and Mar. 27, 1971, p. 1. Some indications suggest the MIRV-equipped SS-11s are being tested. *New York Times*, Oct. 9, 1972.

⁵⁴ *New York Times*, Jan. 15, 1973.

Another problem area in the Soviet leadership's dilemma over resource allocation is the chronic manpower shortage in the Soviet economy. Although only limited information is available, the Plan directives indicate the severity of the problem. Increased labor productivity is planned to account for 87-90 percent of the total increment in output during the Ninth Five-Year Plan. While the total labor force is to increase at an annual rate of 1.7 percent, the key industrial force is stipulated to grow by only one percent. This modest increase in the industrial labor force is about one-third the rate realized during the Eighth Five-Year Plan (1.0 percent as compared to 2.8 percent). In the past, overambitious plans for increased labor productivity were offset by higher-than-planned expansion of the industrial labor force at the expense of "buffer" sectors such as agriculture and services. However, shifts from low priority sectors are becoming more difficult. As noted by Murray Feshbach of the Commerce Department, "in most years prior to the 1960's the planned number of workers and employees was met, and in industry the actual number frequently was 200,000-300,000 persons above the plan. In 1965, however, the actual number for industry was barely 25,000 above the plan, and by 1967 there was a shortage of 125,000 industrial-production personnel relative to plan requirements."⁵⁵ This fact graphically measures the end of "buffer" sectors to cover short falls in industry manpower needs.

At present, not only is labor unlikely to be released from other sectors to meet industrial needs, but in the current Plan, income, investment, and administrative policy are designed to keep skilled workers in agriculture from migrating to urban industrial jobs. Nonetheless, 90 percent of the high school graduates from rural schools still seek urban employment.⁵⁶ Shortfalls in the improvement in labor productivity are likely to aggravate the labor shortage. While labor productivity was scheduled to rise by 6.1 percent in 1972, it grew by only 5.2 percent.⁵⁷ Improvement in labor productivity may turn on technological change in output—better energy and equipment—and such improved managerial techniques as the Shchekino experiment and the agricultural *zveno*.⁵⁸

Demobilization of some 3 million members of the armed forces in the late 1950's (from 5.8 to 3.0 million in the period 1955-1961) eased Khrushchev's labor problem and coincided with rather good years of economic performance.⁵⁹ Although the reduction in military manpower may have been facilitated by technological modernization of the military forces and a reduction of such missions as the withdrawal from Austria, it may provide a precedent for current Soviet policy. Again, at a time when manpower deficiencies are becoming more serious, no ready major source of labor—especially young males to meet civilian needs—is available other than the military forces. Military demobilization would probably be stoutly resisted but not necessarily with suc-

⁵⁵ Murray Feshbach, *Manpower Trends in the USSR* (Washington, D.C.: Department of Commerce, Bureau of Economic Analysis, May 1971), pp. 1, 18.

⁵⁶ *Ibid.*, p. 12.

⁵⁷ *Izvestiya*, Jan. 30, 1973, p. 1.

⁵⁸ The Shchekino experiment provides a set of incentives which encourage the enterprise to fulfill its plan without increasing employment or by reducing it. At the 24th Party Congress, Brezhnev specifically endorsed the Shchekino experiment. The *zveno* provides a continuous relationship of the work unit and the common plot—a partial property right.

⁵⁹ John Godaire, "The Claim of the Soviet Military Establishment," U.S. Congress, Joint Economic Committee, *Dimensions of Soviet Economic Power*, 87th Cong., 2d sess., 1962, p. 43.

cess. Indeed, demobilization was apparently quietly resumed after 1961, as noted by Nikita Khrushchev in 1963 at the Party Plenum; by 1965 his original target of 2.4 million in military manpower reduction was reached.⁶⁰ Soviet military leaders probably did not favor the reduced term of service in the 1967 draft reform, but they were overridden by the Brezhnev-Kosygin leadership. With the China border crisis and the Czech invasion, the strength is apparently again above the 1961 level of about 3 million, possibly as high as 3.6 million (including the border guards and internal security forces).⁶¹ The logic for reduction in the size of the military force might now again be based on improved economic performance, especially if Soviet leaders decide to reduce substantially the number of Soviet forces in Eastern Europe. However, the Sino-Soviet border situation would seem to preclude a massive cutback in military manpower.

Thus, three options for economic change open to the Soviet leadership are, in order of probability: (1) a reduction of the priority for new strategic weapons systems; (2) a cutback in military manpower; and (3) a withdrawal of Party control and involvement in the economy so as to permit improved efficiency through economic reform. All are issues which will be influenced by both the international situation and domestic political considerations. A downward revision in the priority for further military weapons buildup, for example, is likely only if the economic rationale is persuasive and the domestic political and international climate are favorable.

The Moscow Summit agreements, the Vietnam settlement, and progress in solving other political problems in East-West relations should help to provide the basis for a change in Soviet domestic economic priorities. Increasing Soviet interest in technologically oriented trade may be evidence that the Soviet leadership is indeed committed to a reordering of priorities. The linkage of moderation in the strategic arms race and settlement in Vietnam to a mutually beneficial trade agreement, as described by Dr. Kissinger, may be a valid interconnection, especially in the minds of Leonid Brezhnev and Richard Nixon.

U.S.-Soviet Technology Transfers

Secretary Peterson remarked on his return from the first meeting of the Joint U.S.-U.S.S.R. Commercial Commission in August 1972 that the United States had let the other industrial countries steal a march on trade with the Soviet Union, and that U.S. businessmen are now anxious to get "a piece of the action." This "action" includes technological transfers and industrial cooperation that was characteristic of Soviet-U.S. relations before but not after World War II. The prospect of resuming the pre-World War II relationship raises important questions. What contribution will U.S. technology make to Soviet economic and military development? In the past, U.S. export control legislation was enacted under the assumption that controls would retard Soviet development by limiting transfers of U.S. technology to Soviet industry. Soviet achievements in military technology

⁶⁰ Confirmed in an interview of Marshal Sokolovsky. See *New York Times*, Feb. 18, 1965, p. 6.

⁶¹ Institute of Strategic Studies, *The Military Balance 1970-1971*, London, 1972, p. 6.

Another important question involves the ability of U.S. companies assessing that assumption.

Another important question involves the ability of U.S. companies to compete with other Western exporters in sales of high-technology products to the Soviet Union. In view of evidence of the loss of American technological leadership in many areas to Japan and Western Europe, why should Soviet importers prefer the United States to other Western sources? Two hypotheses may help to explain an apparent Soviet inclination to expand trade with the United States—especially in high-technology products. First, there is a traditional Soviet view that American technology is the best. Second, and perhaps more persuasive, U.S. technology and the ability of U.S. industry to deal in large projects is attractive. Specifically in areas such as petroleum and natural gas development, computer systems, and agribusiness the ability of the United States to supply the latest technology and the necessary credit facilities are demonstrably superior.

U.S. TECHNOLOGY AND SOVIET ECONOMIC DEVELOPMENT PRIOR TO 1946

Most students of Soviet economic development agree that foreign technology played an important role in Soviet industrialization. In the pre-World War II period, Soviet industries imported advanced Western machinery and equipment, purchased foreign technical information, and employed industrial specialists from the West. American technology was imported and applied in many sectors of the Soviet economy. The U.S.-Soviet technology transfer continued during the war, largely through the Lend-Lease program.

Antony Sutton, who has published comprehensive studies on Western technology and Soviet economic development, has concluded that "Western technical assistance was the major causal factor in Soviet economic growth for the period 1928-1945."⁶² Sutton's conclusion differs somewhat from the findings of other scholars and may overstate Soviet dependence on Western technology. Richard Moorsteen and Raymond Powell, for example, concluded in a 1966 study that the major part of Soviet economic growth can be attributed to increments of capital and labor, rather than technological progress.⁶³

Nevertheless, the importance of the technology transfer from the United States and other Western countries is undeniable. Certainly, the high regard for U.S. technology is well documented in Soviet sources. For example, the admiration of the American engineer Hugh Cooper, who supervised the building of both Muscle Shoals (a dam on the main stream of the Tennessee River) and the Dnepr River hydroelectric system (a key project in the Soviet First Five-Year Plan) was symbolic of the Soviet view of American technical assistance. Moreover, the American approach to mass production in machine-building was chosen in the First Five-Year Plan over the European small-scale operations. The Soviet tractor and automobile industry were applications of American mass production techniques.⁶⁴ U.S. technological contributions were frequently acknowledged by

⁶² Antony Sutton, *Western Technology and Soviet Economic Development*, vol. II: 1930-1945 (Stanford: Hoover Institution Press, 1971), p. 339.

⁶³ Richard Moorsteen and Raymond P. Powell, *The Soviet Capital Stock, 1928-1962* (Homewood, Ill.: Richard D. Irwin, Inc., 1966).

⁶⁴ David Granick, *Soviet Metal-Fabricating and Economic Development* (Madison: University of Wisconsin Press, 1967), pp. 24, 40, 41.

Soviet political and industrial leaders. Even Joseph Stalin paid homage to American work techniques:

American efficiency is that indomitable force which neither knows or recognizes obstacles; which with its businesslike perseverance brushes aside all obstacles; which continues at a task once started until it is finished, even if it is a minor task; and without which serious constructive work is inconceivable.⁶⁵

Sutton claimed that Soviet industry generated very little technology of its own in the period prior to 1946:

No major plant under construction between 1930 and 1945 has been identified as a purely Soviet effort. No usable technology originated in Soviet laboratories except in the case of synthetic rubber. . . .⁶⁶

Soviet achievements since World War II in military and space technology, presumably independent of technology transfers from the West, raise doubts of the current validity—even accepting its earlier basis—of the view that Soviet industry is incapable of generating necessary technological change. Certain civilian sectors have also made important technological innovations. Huge Soviet expenditures on research and development have apparently created a new capability for generating technology. Thus, while Soviet officials are again showing an interest in importing U.S. technology, the present situation differs somewhat from that of the prewar period.

CURRENT SOVIET TECHNOLOGICAL REQUIREMENTS

In official negotiations of the Joint U.S.-U.S.S.R. Commercial Commission and in private talks with U.S. businessmen, Soviet officials are again expressing an interest in importing various kinds of U.S. technology. Soviet representatives have shown most interest in those areas in which the United States appears to have a legitimate claim to world technological leadership:

(1) large-scale petroleum and natural gas extraction, transmission, and distribution systems, including special permafrost problems and oil recovery systems;

(2) management control systems utilizing computer facilities;

(3) mass production machinery output, such as of trucks and cars;

(4) animal husbandry as characterized by U.S. agricultural business; and

(5) tourist systems including hotels, packaged tours, and transport.

Each of these technological areas requires large-scale financing, consortium operations, and marketing systems. The experience of U.S. multinational corporations might lend itself to industrial cooperation with the Soviet Union.

European and Japanese firms may wish to limit their commitments to the Soviets. For example, Italian Fiat and French Renault involvement in the Tol'jatti and Kama plants, respectively, may be as far as they wish to go. Japanese leaders may prefer some joint U.S.-U.S.S.R.-Japanese arrangements.

For political reasons, the Soviet leadership may wish to spread the participation of non-Communist countries to minimize outside leverage. Japan, the United Kingdom, and Germany have been the lead-

⁶⁵ Joseph Stalin, *The Foundations of Leninism* (Moscow: Foreign Languages Publishing House, 1950), p. 160.

⁶⁶ Sutton, *op. cit.*, p. 346.

ing non-Communist trading partners with the U.S.S.R. (See Table 4.) It may well be that a more balanced pattern—with the share of the United States increasing—is in line with Kremlin policy.

TABLE 4.—SOVIET TRADE WITH SELECTED WESTERN COUNTRIES AND JAPAN¹
[In million U.S. dollars]

	1966	1967	1968	1969	1970	1971
Japan:						
Exports.....	239	353	391	357	379	419
Imports.....	224	166	185	264	345	396
Turnover.....	463	519	576	621	725	815
United Kingdom:						
Exports.....	330	303	367	427	465	452
Imports.....	169	197	273	240	248	272
Turnover.....	499	501	640	667	713	671
West Germany:						
Exports.....	189	196	215	229	257	292
Imports.....	144	176	242	350	375	484
Turnover.....	333	372	457	579	632	776
Finland:						
Exports.....	257	244	244	262	287	359
Imports.....	217	269	266	294	303	273
Turnover.....	474	513	510	556	590	632
Italy:						
Exports.....	155	233	232	232	212	259
Imports.....	95	154	208	317	313	291
Turnover.....	251	387	441	548	524	550
France:						
Exports.....	130	145	137	141	140	216
Imports.....	160	188	294	323	319	313
Turnover.....	290	333	432	464	459	529
United States:						
Exports.....	47	39	43	61	64	60
Imports.....	63	63	57	117	115	143
Turnover.....	110	102	99	177	179	203
Canada:						
Exports.....	15	23	20	12	8	18
Imports.....	346	141	126	33	131	151
Turnover.....	361	163	146	45	139	164
Total Soviet trade with the developed countries:						
Exports.....	1,711	1,886	2,051	2,230	2,345	2,712
Imports.....	1,742	1,782	2,144	2,495	2,780	2,859
Turnover.....	3,453	3,668	4,195	4,725	5,125	5,571

¹ Components may not add to the totals shown because of rounding.

Source: Peterson report (1972), annex B, p. 13.

Soviet Balance-of-Payments Potential

For the past few years, Soviet exports to the United States have lagged far behind imports (see Table 4). While Soviet exports to the

United States expanded significantly in 1972, they still totaled only \$95 million, and the trade deficit worsened (imports from the United States were \$547 million). In 1973, the imbalance is likely to be at least as great because of the large amounts of grain purchased by the Soviet Union. Thus, Soviet obligations to the United States can be expected to grow at a rapid rate. How will these obligations be met? The following are areas in which increases in Soviet dollar earnings are possible:

- (1) Increased Soviet exports of raw materials, such as energy sources and metals, and industrial goods;
- (2) Gold sales;
- (3) Non-trade income, such as tourism and shipping;
- (4) Multilateral relations, such as balancing a trade deficit with the United States by a trade surplus with Japan;
- (5) Cooperative ventures; and
- (6) Credits (only a short-term consideration, as eventual repayment is required, plus interest).

SOVIET EXPORT POTENTIAL

Soviet exports to the developed West (see Table 5) appear to include several commodities with inelastic demand, i.e., regardless of the price of Soviet exports, the foreign demand is unlikely to change much. Foreign demand for Soviet furskins, for example, appears to be inelastic. Other commodity exports such as petroleum, natural gas, and some non-ferrous metals face more elastic demands. For this latter group, development of rich Soviet sources in Siberia may facilitate a reduction in price and an increase in supply. If the Northern Sea Route in the Arctic Ocean should become economically usable on closer to a twelve-month basis, the transport by water of wood and wood products, coal and coke, and some other raw materials to Europe, the United States, and Japan might help to expand Soviet exports.

Metal products such as nickel, palladium, platinum, and chrome ore have been the Soviet Union's biggest exports to the United States (see Table 6). An expansion of U.S.-Soviet trade would bring some increase in Soviet exports of these commodities, as the demand of certain U.S. industries for them is growing. Palladium and platinum, for example, are becoming increasingly important in the automobile industry for antipollution catalytic exhaust devices. Chrysler Corporation reportedly contracted to import 100,000 ounces of Soviet palladium in 1973 at a price of \$60 an ounce.⁶⁷ U.S. imports of nickel, traditionally important in U.S.-Soviet trade, are also increasing.

⁶⁷ *U.S. News and World Report*, Oct. 16, 1972.

TABLE 5.—SELECTED SOVIET COMMODITIES TRADED WITH THE DEVELOPED WEST¹

[Amount in millions of U.S. dollars]

Commodity	1966		1967		1968		1969		1970		1971	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Exports:												
Total.....	1,711	100.0	1,886	100.0	2,051	100.0	2,230	100.0	2,345	100.0	2,710	100.0
Crude oil and petroleum products.....	366	21.4	446	23.6	506	24.7	468	21.0	528	22.5	757	29.0
Coal and coke.....	100	5.8	104	5.5	100	4.9	115	5.2	131	5.6	158	5.8
Wood and wood products.....	298	17.4	322	17.1	338	16.5	346	15.5	386	16.5	380	14.0
Cotton fiber.....	80	4.7	107	5.7	102	5.0	77	3.5	37	1.6	88	3.2
Base metals and manufactures.....	246	14.4	204	10.8	210	10.2	168	7.5	209	8.9	252	2.3
Food.....	115	6.7	145	7.7	143	7.0	198	8.9	121	5.2	182	6.7
Furs and pelts.....	63	3.7	55	2.9	54	2.6	49	2.2	46	2.0	48	1.8
Other.....	261	15.2	306	16.2	314	15.3	299	13.4	336	14.3	367	13.5
Unspecified ²	183	10.7	195	10.3	285	13.9	510	22.9	551	23.5	478	17.7
Imports:												
Total.....	1,742	100.0	1,782	100.0	2,144	100.0	2,495	100.0	2,780	100.0	2,860	100.0
Machinery and equipment.....	560	32.1	670	37.6	896	41.8	1,118	44.8	1,099	39.5	1,042	36.4
Base metals and manufactures.....	91	5.2	132	7.4	157	7.5	177	7.1	337	12.1	386	13.5
Chemicals.....	142	8.2	166	9.3	195	9.1	215	8.6	214	7.7	215	7.5
Wheat and wheat flour.....	413	23.7	147	8.2	121	5.6	28	1.1	122	4.4	170	5.9
Other consumer goods.....	116	6.7	219	12.3	259	12.1	276	11.1	280	10.1	381	13.7
Other.....	375	21.5	406	22.8	422	19.7	500	20.0	593	21.3	495	17.1
Unspecified.....	43	2.5	40	2.2	92	4.3	180	7.2	135	4.9	171	6.0

¹ Components may not add to the totals shown because of rounding.

² Largely platinum group metals, nickel, and gem diamonds.

Source: "Peterson Report" (1972). Annex B, p. 14.

TABLE 6.—U.S. IMPORTS FROM U.S.S.R.

(In thousands of dollars)

Major commodity type ¹	1966	1967	1968	1969	1970	1971
Crude materials.....	16,377	14,410	15,505	14,470	18,314	15,388
Furskins.....	6,302	4,227	4,633	5,059	3,334	2,731
Chrome ore.....	6,323	6,785	7,297	7,807	13,691	11,147
Nonferrous metal scrap.....	739	914	1,332	700	767	1,292
Mineral fuels and related materials.....	2	5	5	1,777	2,807	652
Chemicals.....	1,387	1,125	1,017	1,312	913	1,062
Organic chemicals.....	9	98	8	429	399	220
Inorganic chemicals.....	1,208	822	857	727	143	584
Manufactures.....	30,251	21,725	39,969	32,079	46,451	35,725
Glass.....	931	1,050	1,264	1,315	1,492	1,614
Diamonds and precious stones.....	3,542	6,810	10,828	11,018	13,439	11,244
Platinum, etc.....	19,048	10,725	24,963	14,063	22,887	19,515
Nonferrous base metals.....	1,041	2,993	2,228	5,295	7,996	2,728
Miscellaneous.....	459	557	1,071	1,610	2,668	3,044
Manufactured articles: Jewelry and precious metal articles.....				943	1,872	1,973
Total imports.....	49,414	41,046	58,357	51,504	72,312	57,598

¹ Subcommodity types may not add to total because of omission of insignificant items.

Source: "Peterson Report" (1972), Annex B, p. 16.

Other products which the Soviet Union now exports in large quantities to the industrial West are crude oil and petroleum products and wood and wood products. The United States currently imports relatively little of these two categories from the Soviet Union. (See Tables 5 and 6.) With a relaxation of barriers to U.S.-Soviet trade, the Soviet Union is unlikely to increase substantially its sales of wood products to the United States (a net exporter of wood); probably, only small quantities of certain types of wood not produced in the United States would be sold. However, rising prices and timber product shortage in the United States may generate a greater demand for Soviet wood. On the other hand, Soviet exports of petroleum products (which the United States imports in ever increasing quantities) would undoubtedly expand rapidly if the Soviet Union could produce sufficient surpluses.

A major hard-currency earner for the Soviet Union is diamonds. Although Soviet foreign trade officials do not reveal the value of diamonds sold to Western countries, it is reported to be quite large. For example, the Soviet Union reportedly sells up to \$200 million worth of diamonds every year through a London bank.⁶⁸ Other sales have been reported in New York, Frankfurt, and Amsterdam.⁶⁹ Because the Soviet Union does not enjoy MFN status, Soviet diamonds are at present subject to high U.S. tariffs. If MFN status is granted, Soviet exporters will undoubtedly increase their sales of diamonds in the United States.

The potential for Soviet exports of high-technology industrial products to the United States remains uncertain. Unlike that of most industrialized countries, the structure of Soviet exports remains heavily biased toward raw materials, foodstuffs, and semi-manufactures. The commodity composition of Soviet exports may result from the leadership's priorities—that is, potentially exportable, technologically advanced products may be reserved for high-priority domestic civilian

⁶⁸ *Economist*, Jan. 6, 1973, p. 18.⁶⁹ "The USSR's Undisclosed Assets," *Radio Free Europe Research*, Jan. 11, 1973.

and defense programs. Conceivably, Soviet leaders might change priorities and concentrate on development of high-technology products for export, as the Japanese have done.

Soviet foreign trade organizations have demonstrated their ability to export high-technology products in certain sectors. Those exports demonstrate that the Soviet Union now has the capacity to generate technology. Some Soviet industries have undoubtedly benefited from technological spin-off of high-priority military and space programs. Other industries may have developed independent technologies in response to foreign export control policies which deprived them of some technical information from the West.

Listed below are some types of Soviet machinery and equipment—the most technologically intensive category of exports—which have been exported by the Soviet Union, or which Soviet officials have said they want to sell:⁷⁰

Machinery and mechanical equipment.—Forging and pressing equipment; rolling equipment; mining machinery; power equipment—hydraulic and steam turbines; machinery for food preparation; textile machines; printing equipment; road-building machinery; and parts of machines—anti-friction bearings.

Electrical machinery and equipment.—Generators, transformers; radio receivers and components; and electronics components.

Transportation equipment.—Aircraft—supersonic airplanes, helicopters; motorcycles; seagoing freighters—tankers, dry cargo; seagoing passenger ships—hydrofoils; and tractors.

Miscellaneous equipment.—Measuring instruments—optical, meteorological, et cetera; medical equipment; tools, watches and components; cameras, photographic accessories; and movie projectors and accessories.

While many of these items will probably prove noncompetitive in the U.S. market, some of them should find buyers. Soviet ability to export machinery and equipment to the United States will depend largely on whether the Soviet Union receives most-favored-nation treatment.⁷¹

One very marketable commodity of the Soviet Union is its gold stock. Soviet state gold reserves in 1972 were estimated to be 1800 metric tons, and annual gold production was believed to be about 220 metric tons.⁷² Gold has been exported in large quantities when Soviet hard currency needs were particularly pressing, as in 1964, 1965, and 1972, to pay for large grain imports. (See Table 7.) It is uncertain how much gold Soviet leaders will be willing to export in the future; they appear to share the "Midas complex" of their Western counterparts in associating great value to a substantial gold stock. As large sales of gold in 1972 and 1973 have reduced state reserves. Soviet officials may be reluctant to export gold in future commercial transactions. They may prefer to accumulate gold in the event of another

⁷⁰ See, for example, Hubert H. Humphrey and Henry S. Reuss, *Observations on East-West Economic Relations: U.S.S.R. and Poland*. A trip report prepared for the U.S. Congress Joint Economic Committee (Washington, D.C.: U.S. Government Printing Office, 1973).

⁷¹ See below, *U.S. Restrictions on Imports from the Soviet Union; the Issue of Most-Favored-Nation Treatment*, pp. 52–55.

⁷² Keith Bush, "The Best Western Estimates on Soviet Gold," *Radio Liberty Dispatch*, Aug. 29, 1972; "The USSR's Undisclosed Assets," *op. cit.*

agricultural crisis. The Soviet preference for maintaining considerable state reserves may preclude a policy of continuous export of gold.

TABLE 7.—ESTIMATES OF SOVIET GOLD OUTPUT AND DISPOSITIONS (METRIC TONS)

Year	Output	Domestic consumption	Sales to Comecon	Sales to West	Changes in reserves
1964.....	145	12	5	401	-272
1965.....	156	14	5	488	-351
1966.....	167	16	5	(1)	+146
1967.....	177	19	5	13	+140
1968.....	188	22	6	10	+151
1969.....	198	36	6	(1)	+157
1970.....	208	42	6	(1)	+160
1971.....	212	52	6	20 ²	+134
1972.....	220	(²)	(²)	250	-90

¹ Negligible.

² Samuel Montagu & Co. Ltd., "Annual Bullion Review 1971," London, 1972, p.6 suggests a figure closer to 65 tons.

³ No estimates available.

Sources: Michael Kaser, "Soviet Gold—Production and Use," *Gold 1971* and "Soviet Gold Production and Sales in 1971," *Gold 1972*; "The U.S.S.R.'s Undisclosed Assets," *Radio Free Europe* research, Jan. 11, 1973.

SOVIET EARNINGS FROM INVISIBLE TRADE

Yugoslavia and other East European countries have demonstrated that a rapid expansion in tourism is possible even for Communist countries. In Yugoslavia, for example, the tourist business is thriving. In recent years, tourism has been a major factor in improving the Yugoslav balance of payments; \$335 million was earned in the first nine months of 1972.⁷³ Perhaps the uneven quality of Intourist, Aeroflot, and other Soviet tourist facilities will continue to restrict tourism in the Soviet Union to a more modest scale. However, there are signs that the Soviet Union may try to capture a larger share of the tourist trade. Arrangements have been made with Western airlines and hotel chains to provide better facilities for foreign visitors. Further Soviet changes, such as a relaxation of travel restrictions and security harassment, could lead to a substantial increase.

Tourism has already brought a small, but significant, inflow of hard currency. Intourist claimed that 2.5 million visitors would visit the Soviet Union in 1972, an increase of 12 percent over 1971.⁷⁴ Generally, a larger number of tourists travel from hard currency countries to the Soviet Union than vice versa.⁷⁵ Thus, the Soviets have a considerable positive balance in the tourist trade. Without major changes in present policies, the Soviets are unlikely to be as successful as their East European neighbors in promoting tourism.

Soviet merchant shipping has expanded at an impressive rate in recent years. The merchant marine now totals over 16 million gross registered tons, and is the sixth largest fleet in the world. During the current five-year plan, 1971-1975, the Soviet merchant marine plans to add five million tons. Soviet ships now carry most goods shipped to and from the Soviet Union, and Soviet shipping officials have recently begun to compete for cargoes in other parts of the world. For example, they now do a considerable amount of business on the Australia-to-Europe shipping routes.

⁷³ Zdanko Antic, "Yugoslav Balance of Payments Improving," *Radio Free Europe Research*, Nov. 20, 1972.

⁷⁴ "The Tourist in Russia," *Washington Post*, Sept. 3, 1972.

⁷⁵ For Soviet travel statistics, see International Union of Official Travel Organizations, *International Travel Statistics*.

Its enlarged fleet gives the Soviet Union the capacity to earn substantial sums of hard currencies. Since the early 1960s, Soviet merchant shipping has made net contributions to the Soviet balance of payments with hard currency countries. One estimate, for example, put the Soviet merchant marine's net hard currency earnings in 1966 at 106 million rubles.⁷⁶ Its earning capacity is undoubtedly growing. However, the Soviet fleet's contribution to its balance of payments in Soviet-American trade will be limited by the terms agreed to in the recently signed maritime agreement. The agreement stipulates that vessels of each country would have the opportunity to carry one-third of all cargoes between the two countries. Moreover, the Soviet Union contracted to pay higher than world rates for shipments of agricultural goods in U.S. ships.

MULTILATERAL RELATIONS

Although the Soviet Union has shown a preference for bilateral trade in the past, it could conceivably attempt to use multilateral balancing arrangements to alleviate its negative trade balance with the United States. The Soviet Union has enjoyed a favorable balance of trade with some of the major trade partners of the United States, including Japan and the United Kingdom. Ideally, it could transfer its positive balances with those countries to pay for needed imports from the United States. A precedent for multilateral balancing in East-West trade is the pattern of Soviet trade with the Sterling Area. The Soviet Union has used its earnings from trade with the United Kingdom to buy from other countries in the Sterling Area.

However the potential for multilateral balancing arrangements is limited at present. The Soviet Union does not have many positive balances in its trade with hard-currency countries, partly because some hard-currency countries are unwilling to accept deficits in their trade agreements with Communist countries. Generally, the Soviet Union runs an overall deficit in its trade with Western industrial countries.

COPRODUCTION AGREEMENTS ⁷⁷

New forms of industrial cooperation between Soviet state enterprises and Western firms help the Soviets to import high-technology machinery and equipment without large outlays of hard currency. Most joint ventures in the Soviet Union involve the technical and financial participation of Western firms in the exploitation of natural resources or the construction of plants. The Western partners generally

⁷⁶ Robert E. Athay, *The Economics of Soviet Merchant-Shipping Policy* (Chapel Hill: The University of North Carolina Press, 1971), p. 68.

⁷⁷ A distinction is sometimes made between the terms "coproduction arrangement" and "joint venture" on the grounds that the latter involves equity ownership and more control by the foreign investor. In this paper, the terms are used synonymously.

supply equipment and technical services on credit and are repaid by deliveries of raw materials or commodities produced in the joint ventures. Western European shipments of gas pipeline in return for natural gas, and joint Soviet-Japanese exploitation of Siberian timber resources, are examples of East-West coproduction arrangements.

Representatives of several American companies have discussed coproduction ventures with Soviet officials. By far the largest project envisioned at present is a bid by several U.S. and Japanese companies to help finance development of Soviet natural gas reserves. The transaction could reportedly result in repayment delivery of \$45.6 billion of natural gas to the United States and Japan.⁷⁸ Several other large projects for raw material development have been discussed. If U.S.-Soviet cooperative ventures on this scale should be established and the central problem of credits resolved, the U.S.-Soviet balance of payments would look quite different. For a number of years, large U.S. surpluses in the trade balance would be offset by outflows of U.S. credits. Some of the projects now being discussed would increase Soviet export capabilities only after an extended development period.

Potential Level of U.S.-Soviet Trade

A number of optimistic estimates have been made on the future expansion of U.S.-Soviet trade. The former Secretary of Commerce Maurice Stans predicted that Soviet-U.S. trade turnover increases might cumulate \$5 billion from 1971-1975.⁷⁹ This would imply a trade turnover of over \$1 billion in 1975, as compared with \$200 million in 1971. The U.S.-Soviet commercial agreement more modestly forecast a threefold cumulative increase in three years (1972-75), over the previous three years (1969-71).

Mr. Steven Lazarus, Director of the Bureau of East-West Trade in the Department of Commerce, speaking in Houston in January 1973 stated:

We hope the volume of U.S. East-West trade will approach 4 billion and will yield a positive contribution to our trade balance of approximately one billion annually by the end of the decade.⁸⁰

The trade imbalance of a billion dollars implies U.S. exports of \$2.5 billion and imports of \$1.5 billion with Communist countries. How much of the trade was projected for the U.S.S.R. and how much for the East European countries and the People's Republic of China in 1980 is not clear.

The Lazarus projection may well be very conservative. Preliminary estimates of individual analysts in the Department of Commerce indicate that U.S. exports to the Soviet Union and other Eastern European countries might reach \$2.6 billion in 1978.⁸¹ (See Table 8.)

⁷⁸ *Washington Post*, Nov. 3, 1972 and Dec. 26, 1972.

⁷⁹ *New York Times*, Nov. 18, 1971, p. 1.

⁸⁰ World Trade Club, Houston, Tex., Jan. 16, 1973.

⁸¹ Erast Borissoff and Stephen Sind, *Projections of U.S. Exports to U.S.S.R. and Eastern Europe*. U.S. Department of Commerce, Bureau of East-West Trade. Research Note No. 3, May 1973.

TABLE 8.—TOTAL PROJECTED U.S. EXPORTS TO EASTERN EUROPE AND THE SOVIET UNION (UNDER VARYING CONDITIONS)

(Millions of U.S. dollars)

	1972 actual exports	Classifi- cation	1972, if trade were "normal- ized"	1973, if trade is "main- tained"	1973, if trade were "normal- ized"	1978, if trade is "main- tained"	1978, if trade is "normal- ized"
Total Eastern Europe/U.S.S.R.....	816.45	High.....	1,272.83	530.03	1,441.60	964.04	2,601.13
		Middle.....					
		Low.....	1,103.07	439.10	1,183.91	588.52	1,572.34
Eastern Europe.....	269.84	High.....	804.61	348.64	905.97	607.39	1,550.32
		Middle.....	736.03	309.50	806.94	464.52	1,238.54
		Low.....	654.83	273.64	696.40	356.40	888.42
U.S.S.R. ¹	546.61	High.....	468.62	181.79	535.63	356.65	1,050.81
		Middle.....					
		Low.....	448.24	165.46	487.51	232.12	683.92

¹ Projections exclude any possible grain deals of the type concluded in July 1972, whose nature and causes prevent them from being estimated.

² 1976 actual includes grain.

Source: Office of East-West Trade Analysis, Bureau of East-West Trade, Department of Commerce.

This estimate suggests a trade turnover of over \$5 billion in 1978 and presumably larger by 1980. If U.S.-Chinese trade is added to this figure,⁸² total U.S. trade with Communist countries might exceed \$7 billion by the end of this decade.

The basis for such optimistic estimates appears to be the large import requirements of the Soviet Union and other Communist countries for Western goods and services. A 1973 estimate by a Soviet observer confirms that these requirements are substantial. The Soviet projection placed import requirements in 1980 (from Western industrial countries) at \$7-7.5 billion for the U.S.S.R. and \$17-18 billion for all of the nations of Comecon,⁸³ also from Western industrial countries.

However, in 1972 the Soviet trade deficit with the United States was \$452 million (Soviet imports totaled \$547 million, while exports were only \$95 million). It is unlikely that the Soviets will be able or willing to maintain such deficits in future trade with the United States. Thus, in order to rapidly expand their trade with the United States, the Soviets must either increase their commodity exports or offset the imbalance with invisible trade earnings from tourism, gold sales and shipping, or with credits from the Export-Import Bank or private commercial banks.

In assessing these projections, it is best to concentrate on Soviet ability to export to the United States, because Soviet dollar earnings will be a major constraint on future trade. Soviet dollar earnings from tourism, shipping, and gold sales are likely to grow in the next few years; but without changes in present policies, these items may add only several hundred million dollars to Soviet hard-currency holdings. If the Soviet Union adopts a new policy of maximizing income in dollars from gold sales, tourism, and shipping, annual earnings of nearly \$500 million do not seem unattainable. This amount would involve

⁸² James B. Stepanek cites estimates of U.S.-Chinese trade in 1980 of \$500 million to \$1 billion. *Sino-American Trade* (Washington, D.C.: Library of Congress, Congressional Research Service, May 1973), p. 54.

⁸³ N. Shmelev, "Novye gorizonty ekonomicheskikh svyazey" (New Horizons of Economic Relations), *Mirovaia ekonomika i mezhdunarodnye otnosheniia*, No. 1, January 1973, p. 18.

sales of the bulk of the U.S.S.R.'s annual gold output, a more effective system of attracting American tourists, and a full exploitation of the new shipping opportunities for both freight and passengers. Joint ventures in the tourist and shipping areas would probably be necessary to reach the higher levels.

In assessing Soviet export trade potential, the following variables are most relevant:

(1) Soviet willingness to shift exports of oil and gas from other markets, including domestic and Comecon, to the United States;

(2) the size of U.S. Government (Export-Import Bank and Commodity Credit Corporation) and private credits to the Soviet Union as part of large-scale joint ventures for raw material extraction processing, transportation, and marketing. Without large-scale projects, potential energy, metal, timber and other raw material resources may not be economically exploitable. Moreover, without Western capital, credit, and technology, many of the rich potential Siberian resources may not be exploited for decades. Increased output marketed by Western multinational corporations may permit a significant net increase in export capability above that required to repay the financing.

(3) U.S. willingness to extend most-favored-nation treatment to the Soviet Union;

(4) Soviet ability to launch a major effort to produce industrial products for the Western market facilities that provide efficient marketing not subject to market disruptions problems. Use of such multinational companies, as International Telephone and Telegraph Corporation, which might involve trade of machine tools for electric equipment—an industrial version of the Pepsi for vodka barter arrangement—could prove attractive.

These variables will largely determine the size of total U.S.-Soviet trade turnover in the years ahead. With current Soviet priorities for technologically advanced goods, the detente environment, and the equalization of U.S. commercial policy toward the U.S.S.R. with that of other industrial countries through liberalized export control and credits, the Soviet demand for U.S. imports is likely to run ahead of their ability to pay. Therefore, the Soviet-U.S. trade turnover may be expected to maintain its current level, increase modestly, or rise significantly, depending on the above noted variables.

These three steps in potential turnover of 1980 may be illustrated by the following estimates:

(1) A diversion of Soviet oil and gas exports and other hard currency earning exports to the United States and modest credit allowances, for example, might lead to an expansion of trade to an average annual level of \$700-800 million.

(2) If the Soviet Union receives MFN status and liberal credits and initiates an aggressive industrial product sales effort, a \$2-3 billion trade turnover is possible.

(3) A projection of \$4-5 billion annual trade turnover is conceivable if negotiations on joint U.S.-Soviet development of Siberian natural gas resources are successful. The two Liquefied Natural Gas (LNG) projects under discussion could total investments of \$5-6 billion each with repayment presumably over an 8-10 year period (the presumed Export-Import Bank maximum).

IV. U.S. INTEREST IN EXPANDED ECONOMIC RELATIONS WITH THE SOVIET UNION

In assessing the new U.S.-Soviet commercial relationship, the primary task for U.S. policymakers is to determine its effect on the U.S. economy and on U.S. foreign policy goals. The United States has an obvious interest in importing valuable raw materials and selected manufactured goods from the Soviet Union. But how will U.S.-Soviet trade influence the U.S. economy as a whole? In view of the small volume of trade, can U.S. consumers and producers expect significant benefits? Administration officials have frequently cited improved U.S.-Soviet diplomatic relations as a primary motivation for expanding commercial relations. What diplomatic benefits will the United States reap, in terms of specific U.S. foreign policy goals?

Economic Benefits for the United States

The economic advantages of Soviet-U.S. economic relations are likely to be significant in particular sectors, rather than for the national economy as a whole. Grain traders and petroleum companies, for example, may benefit, but the overall effect on the national economy will be modest.

U.S. trade with the Soviet Union represented less than 1 percent of total U.S. foreign trade in 1971. In 1972, trade turnover increased substantially. However, if U.S.-Soviet trade should increase in eight years to \$3 billion—a remarkable attainment—it would still be only about 2 percent of U.S. foreign trade. Currently, the United States imports as much in a week from Canada as it imports in a year from the Soviet Union.⁸⁴ As a result, a major relative change or increase in trade with the Soviet Union could be offset by a relatively minor change in U.S. trade relations with its major trading partners. Moreover, job creation, economic growth, and other economic benefits associated with increased trade would be modestly affected by Soviet or East-West trade.

Furthermore, the U.S. trade and balance-of-payments deficits will probably not be substantially reduced by increased Soviet trade. Although the United States is likely to have considerable surpluses in its trade with the Soviet Union, they will be small in comparison with overall U.S. deficits.

Stability of U.S. Trade Gains

Soviet foreign trade organizations have frequently been criticized by Western businessmen as erratic and unreliable trade partners. Indeed, several aspects of past Soviet practices support this notion:

⁸⁴ Peterson (1971), *op. cit.*, Appendix II, pp. 18, 23.

agricultural trade is periodic, depending on the grain harvest; trade may take place in technologically advanced products, to fill short-run, non-recurrent needs; and some trade is required to meet unexpected bottlenecks in Soviet domestic plans.

Soviet imports of cereal grains are particularly unstable. The Soviet Union changes from a net exporter in good weather years to a substantial net importer in bad years. (See Table 9.) The United States exported large amounts of grain in 1964 and in 1972-1973. However, in the intervening years, exports were negligible, as the Soviet Union returned to its role as a net grain exporter. Moreover, the Soviet Union may not buy from the United States even when it is a net importer (as in 1965 and 1966). In 1972-1973, the Soviet Union might have traded more extensively with Canada, Australia, or France, if those countries had not already exhausted their export capability. France exported a million tons to the Soviet Union in 1972. Canada and Australia reportedly could not take any more orders because of grain shortages and saturation of their transport facilities.

TABLE 9.—SOVIET EXPORTS AND IMPORTS OF GRAIN (EXCLUDING GROATS AND FLOUR)

(In thousands of metric tons)

	1963	1964	1965	1966	1967	1968	1969	1970	1971
Cuba.....	462	516	464	492	513	481	526	550	574
Czechoslovakia.....	1,501	900	1,169	1,242	1,349	1,422	1,383	1,378	1,489
Egypt.....					1,000	298	301		
GDR.....	1,577	1,191	1,054	1,148	1,187	1,256	1,488	1,596	1,913
Hungary.....	141	15	378		101	277	288	114	426
North Korea.....	50		100	118	251	105	130	247	152
Poland.....	820	110	491	504	1,042	830	1,272	1,073	2,133
United Kingdom.....	276				49	224	404	302	283
Total exports including.....	6,260	3,514	4,330	3,557	6,248	5,406	7,205	5,698	8,640
Argentina.....	6	106	763	1,443	21	30	165		196
Australia.....	273	1,402	1,239	137					277
Canada.....	2,323	3,785	3,310	4,494	1,613	1,289	30	1,634	1,805
France.....			834	1,168	171			1	437
United States.....		1,785							
Total imports including.....	3,103	7,287	6,375	7,746	2,185	1,606	639	2,200	3,500
Net exports.....	3,157				4,063	3,800	6,566	3,498	5,140
Net imports.....		3,573	2,045	4,189					

Sources: U.S.S.R. Ministerstvo Vneshnei Torgovli, "Vneshniaia torgovlia za 1964-71 god; statisticheski obzor, Moscow 1965-72, and "The Soviet Grain Trade Balance," Radio Liberty Dispatch, Aug. 30, 1972.

Soviet imports of other goods may also be sporadic. In the past, the Soviet Union has occasionally chosen to import, rather than tool up, to meet short-run, high-technology requirements. The short-term requirement of diesel locomotives in the 1959-1965 Seven-Year Plan, imported largely from France, is a case in point. The Soviet reluctance to manufacture large-diameter gas transmission pipe may be another example. Pipe is currently imported from West Germany and Italy.

The Soviet Union also imports to meet unexpected bottlenecks in high-priority economic activities. Once this type of requirement is satisfied, it may not recur. Such unforeseen requirements may be caused by shifts in priorities, rather than technical bottlenecks. A classic example occurred in 1954: the British textile industry tool up to meet an apparent Soviet demand for consumer goods brought on by Premier Malenkov's new economic policies. However, another change in leadership, the replacement of Premier Georgi Malenkov by Khrushchev,

led to a further revision in Soviet economic priorities, and large orders for British textiles were not forthcoming.

The traditional Soviet foreign trade policy of autarky or self-sufficiency seems to foster instability in foreign trade relations. Soviet leaders who advocated an autarkical foreign trade policy believed that continued reliance on foreign sources would be politically undesirable and economically hazardous. There was a tendency among Soviet policy makers to overestimate the political and economic dangers of trading in the "anarchic" capitalistic markets. The present Soviet leadership appear to be willing to reassess the ideological underpinnings of the traditional policy of autarky; if so, the Soviet Union may become a steadier customer over time.

Certainly, the new policy of industrial cooperation with Western industrial countries would suggest a change in policy. Coproduction ventures with Western firms to develop oil and gas resources in Siberia would presumably be negotiated to continue for a decade or more. Moreover, feed grain sales and other agricultural exports to extend over multiple years—three at the outset—may create a more stable pattern of trade.

Increasing U.S. sales in agribusiness facilities, petroleum and natural gas equipment, computer systems, and a variety of other high-technology lines may be an effective wedge into the Soviet market; once begun, these sales tend to accelerate over time. Soviet purchases of U.S. computers, for example, may lead to follow-up sales of software, to new Soviet requirements for peripheral equipment, and to broader Soviet requirements for managerial expertise. The complexity of modern technology transfer creates a need for long-term commitments. In many cases, the Soviet Union will be required to make substantial purchases over a number of years in order to receive and continue to benefit from U.S. technology. Thus, requirements for long-term technological transfers will tend to stabilize the pattern of Soviet foreign trade.

Technological Export Policy

Increased Soviet demand for U.S. high-technology products should help to achieve the U.S. goal of increasing that type of export. Such industries as electronics, agribusiness, petroleum refining, and automotive tooling and forging equipment are characterized by economies of scale, i.e., the larger the volume of production, the lower the per unit cost. At a time when government investment, subsidies, and tax incentives are being used to ensure that U.S. prices are competitive in the world market, an expansion of foreign markets is a factor that may facilitate reductions in cost and presumably prices. The opening of the Soviet market to U.S. business may provide the basis for a larger, more economical scale of domestic output. Moreover, an expanding market may encourage research and development on a scale that would help U.S. industries maintain their competitive position.

Two important considerations should be kept in mind in assessing the advantages of increased U.S.-Soviet technology transfers. First, does the sale of high-technology products to the Soviet Union encourage or discourage Soviet military preparedness?⁸⁵ Second, will such

⁸⁵ See above, *Changing Priorities in Resource Allocation: Growth vs. Defense*, pp. 24-29.

technology transfers produce long-term advantages for the U.S. economy? The Soviet leadership may be intent on absorbing U.S. technology in as short a time and as inexpensively as possible. Thus, in assessing the net benefit of increasing transfers of technology to the Soviet Union, U.S. policy makers must attempt to answer the question of whether or not Soviet leaders are reordering priorities toward a civilian economy that is increasingly linked to the world economic system. The question may be raised in different contexts: (1) Do Soviet requirements for U.S. technology require longer periods of commitment that was the case in the past? (2) Does the trade agreement represent a part of a new pattern of relationship between the Soviet Union and the United States? and (3) Does the agreement presage a new relationship between the Soviet economy and the non-Communist world economic system? If these questions can be answered affirmatively, the outlook for political and economic net benefits to the United States will be favorable.

High Technology Trade and a Pattern of Economic Involvement

Current Soviet requirements for high technology assistance from the United States appear to represent a pattern of technical and managerial interrelatedness that would limit the ability of Soviet leaders to take short-term advantages, borrow technology, and then withdraw from continued U.S.-Soviet economic relations in particular lines. Formal agreements, such as the arrangements with Fiat and Renault in auto and truck production, respectively, extend for a decade. Informal continuity derives from a continued need for technology transfer. Some examples follow:

(1) *Advanced industrial systems.*—Several kinds of U.S. technology might be applied in the Soviet Union's oil and natural gas industry: Alaska Northern Slope technology, advanced drilling techniques, transmission and construction materials, and oil recovery systems (especially applicable in the Soviet Union's older Caucasian fields). Presumably, agreements on cooperation in this field will involve a degree of joint managerial responsibility, a definite period of repayment—largely in natural gas and oil deliveries—and a continuing technological interdependence.

(2) *Management-Control-Communications Systems.*—The Soviets are clearly interested in advanced American computer and electronic hardware, but they also seem to be interested in the systems that the hardware represents. The Soviet postal, telephone, and telegraph system will be improved by installation of an electronic message switching system valued at \$1.3 million from a French subsidiary of the International Telephone and Telegraph Corporation. The system will process six million messages a month and will be in operation by the end of 1973.⁸⁶

Computer-assisted systems would appear to have a wide application throughout the Soviet economy. The many Soviet managerial service specialists studying the United States may stimulate Soviet interest in this area. European experience suggests that the field is one in which the United States not only has the leadership, but seems

⁸⁶ *Wall Street Journal*, Oct. 23, 1972.

able to maintain and expand on its advantages. Transfer of this sort of technology appears to create markets for export rather than satisfy them.

(2) *Mass Production Machinery Output.*—Traditionally, the Soviet machine-building industry has patterned itself after the large-scale industries of the United States. The Gorki auto works, patterned after the Ford Plant in Michigan in the 1930s, was an example of this pattern. Although the Soviets are at present relying on Italian and French assistance in auto and truck production, there is still a major role for U.S. technology. Some of the key equipment for the new Soviet auto and truck plants was purchased from the United States by European companies for installation in the Soviet Union. The trade agreement includes a special arrangement for a Soviet purchasing office in New York to buy American equipment for the new Kama River Truck Plant. If the Soviet economy is "entering the automotive age," then a continuing requirement may be expected. Likewise, in other areas where production for the large American market justifies assembly line and mass production techniques, the machinery outputs of the United States may find an expanding market.

(4) *Agribusiness: A System and A Technological Development.*—If the Soviet planners are serious in seeking a qualitative improvement in the diet by increased meat output, the agricultural approach prevalent in the United States—the so-called "agribusiness"—would be an appropriate approach for them to adopt. The performance of Soviet leaders after the poor 1972 harvest suggests a genuine commitment to attain their new goals for food output. It was estimated that nearly \$24 billion was shifted to agriculture because of the crop failures.⁸⁷ The Soviet Union also exported substantial quantities of gold. Major outlays of scarce hard currency were made in order to import feed grains and wheat. While purchases on the 1972 scale are unlikely to recur, large imports of agricultural commodities and technology will be needed.

A new system of animal husbandry for the Soviet Union would involve imports of soybean products, feed grains, breeder stock, and technical advice. Also, improved meat supplies would require storage, transport, and sales facilities. These needs add up to a sizeable investment over time. Nikita Khrushchev attempted to increase meat production by introducing a new program for corn and pig production. But discovery of the corn-hog cycle was not enough to raise the meat supply, particularly when livestock holdings were sharply diminished in the poor crop year of 1963. The Soviet livestock inventory was again threatened during the even more extreme crop failure in 1972, but survived without major reductions.

(5) *Tourist Systems.*—With better facilities, Soviet tourist income from the United States, Western Europe, and Japan might rise substantially. Judging by the changes in tourism in developing countries—including Yugoslavia—a consortium or Western-Soviet joint venture approach seems most appropriate. The tourism package in-

⁸⁷ *New York Times*, Oct. 31, 1972.

volves travel facilities, hotels, and a tourist agency to arrange the trips. Aeroflot, Soviet hotels, and Intourist are not the greatest stimulants to tourism; such comparable Western concerns as Pan American Airlines, Holiday Inn, and Cooks, Ltd. might be more conducive to foreign travel in the Soviet Union. The opening of direct Pan Am flights to Moscow and the Soviet agreement in principle with Occidental Petroleum Corporation to build a Holiday Inn facility suggest that this sort of development is possible. The easing of Soviet restriction on internal travel, the availability of tourist credit facilities such as American Express, and improved facilities for foreign sales of Russian goods might stimulate the development of tourism.

Such an arrangement would not lend itself to short-term advantages for the Soviet Union. However, if the political costs of tourism could be tolerated, the advantages would build over time. A Soviet decision to accept the political costs and promote tourism could create a demand for more goods and services from the U.S. tourist industry.

V. RESTRICTIONS ON SOVIET TRADE WITH THE UNITED STATES

The Nixon Administration and the Congress are considering steps that would bring U.S. trade policy toward the Soviet Union more closely into line with those of other Western industrial nations. Among the changes which are under active consideration or which have already been made are: reducing tariffs on imports from the Soviet Union to the same level as those of other trade partners, i.e., granting most-favored-nation treatment; making available more credits, at better terms; limiting export controls to items with direct military applications; and reducing restrictions on shipping between the two countries. What impact will such changes have on the volume of U.S.-Soviet trade? The answer hinges on a number of economic and political variables—Soviet export capabilities, Soviet preference for U.S. technology over that of other Western countries, the willingness of the U.S. business and banking community and the Export-Import Bank to finance transactions with the Soviet Union, and the ability of the Soviet Union to adapt its institutions and practices to new roles in expanded U.S.-Soviet economic relations.

The following is a discussion of past obstacles to U.S.-Soviet trade and of the likely consequences of prospective changes.

U.S. Controls on Exports to the Soviet Union

Several legislative enactments since 1945 have provided the authorization for the U.S. export control program. Their original purpose was primarily to deny the Soviet Union and other Communist countries exports which could facilitate their industrial growth and enhance their military potential. The following text describes the major acts which have regulated U.S. exports to the Soviet Union.

The Export Control Act of 1949 (50 U.S.C. App. 2021 et seq., 1964) authorized the President to "prohibit or curtail" all commercial exports except shipments to U.S. territories and most exports to Canada. The purpose of the Act was to use export controls: (1) to prevent domestic economic shortages; (2) to protect the national security; and, (3) to promote the foreign policy of the United States. The Act was extended several times through December 1969, with some modifications. The 1962 extension of the Act specified that its intent was to prevent a significant contribution not only to a Communist country's military potential, but also to its economic potential.

To regulate U.S. exports, a licensing system was established. Under this system, which is still in effect, the Office of Export Control of the Department of Commerce regulates virtually all U.S. exports by granting (or not granting) one of two types of licenses: a general authorization which permits shipment of certain types of goods to certain destinations without a specific application by the exporter, or a validated license to an individual exporter for a specified export.

Most U.S. exports are made under general licenses. Validated licenses are required for commodities and technical data of a more sensitive nature which may not be exported freely to designated countries. To administer the program the Department of Commerce maintains the Commodity Control List which identifies, for each listed commodity, the destinations to which a validated license is required. For export control purposes, the Soviet Union is classified in Country Group Y with most of the Eastern European countries, Mongolia, and the People's Republic of China. Other Government agencies, such as the Department of State, the Federal Power Commission, and the Atomic Energy Commission, exercise authority (under other legislation) for regulating exports of specialized commodities and technical data. The most important criteria for approval or denial of a commodity for export to Communist countries are: (1) the military applicability of the item; (2) the nature of the technological contribution which the item is likely to make to the military or economic potential of the country; and (3) the availability of the item from other countries.

In March 1951, all general licenses to export to the Soviet Union were revoked. This requirement for validated licenses was relaxed somewhat in 1956, when a number of specified items was again made exportable to the U.S.S.R. under general licenses. Since that time, there has been a gradual trend toward relaxation in the licensing of exports to Eastern Europe. Poland, in 1957, and Romania, in 1964, were placed in a separate category for which validated licenses for fewer exports were required. In 1966, the requirement for validated licenses for exports to the other Eastern European countries, including the Soviet Union, was removed for over 400 items. In subsequent years, several hundred more commodities were placed in the general license list for export to Eastern Europe.

This trend toward relaxation accelerated in the late 1960s, particularly after passage of the *Export Administration Act of 1969* (50 U.S.C. App. 2401 et seq., 1970), which replaced the Export Control Act. The new Act maintained export controls, but called for a review of control regulations and control lists. It called on the Commerce Department to lift controls on commodities freely available to Communist countries from non-U.S. sources and on items that are only marginally of military value. In short, the 1969 legislation represented a congressional mandate for a new direction in export controls. Whereas the thrust of the Export Control Act of 1949 was to limit East-West trade, the new legislation was designed to foster such trade. The Export Administration Act expired on June 30, 1971, but Congress enacted resolutions (twice in 1971, once in 1972) extending export controls to August 1, 1972.

Upon expiration of the Export Administration Act on August 1, 1972, the President invoked the authority of Section 5(b) of the *Trading With the Enemy Act of 1917* (50 U.S.C. App. 5(b) 1970) to continue the export control program. That Act authorized the President to prohibit all private financial and commercial transactions with U.S. enemies and their allies during time of war or during any period of national emergency. In the postwar period, this law had previously

been used to regulate trade with North Korea, the People's Republic of China, and North Vietnam (it no longer applies to trade with China).

On August 29, 1972, the Export Administration Act was extended and amended. The new law called for further relaxation of controls on exports freely available from sources outside the United States. It also directed the Secretary of Commerce to report to the President and to the Congress on the progress of export control liberalization.

A number of laws regulate the export of specific commodities to the Soviet Union and other Communist countries. Among these are the *Mutual Security Act of 1954* (22 U.S.C. 1934, 1970) which authorizes the President to restrict the exportation to any nation of arms, munitions, implements of war, and related technology. Another such law is the *Agricultural Trade Development and Assistance Act of 1954*, as amended (7 U.S.C. 1691-1736d, 1970) which prohibits sales agreements on agricultural commodities for local currencies or long-term dollar credit to some Communist countries.

The United States also attempts to coordinate its strategic export controls with the foreign trade policies of its NATO allies (except Iceland) and Japan. In 1949, a Consultative Group of seven countries (later increased to 15) set up the Coordinating Committee (COCOM) to discuss the embargo and control lists that the members were to apply in their trade with the Soviet Union and other Eastern European countries. The *Mutual Defense Assistance Control Act of 1951* or "Battle Act" (22 U.S.C. 1611 et seq., 1970) provides the legislative basis for U.S. support of the coordinated approach to export controls.

The Battle Act (subsequently amended in 1961) not only prohibits the export of implements of war, atomic energy materials, and other strategic commodities to Communist countries, but also provides that all U.S. military, economic, or financial assistance be denied to any nation that knowingly permits shipment of such goods to the Communist Bloc. Although the President may waive this provision if he finds it in the national interest, its enactment provided him with a bargaining tool for persuading other countries to apply the strategic embargo.

As COCOM has no formal charter, its decisions are not binding on member countries. Rather, it is an advisory board which issues recommendations of goods to be embargoed or controlled. These are regarded as minimum lists to which each member might add commodities. Since its inception, COCOM has steadily reduced its list of embargoed items. The U.S. Commodity Control List has considerably more controlled items than COCOM's International List. Perhaps because of their traditional trade ties with the Soviet Union and other East European Communist countries, the other members of COCOM have consistently lobbied for fewer controls, while the United States has favored more. For example, Japan and the European NATO countries have exported advanced electronics, communications and transport equipment, and many other items that are still prohibited for export in the United States.

The COCOM liberalization of export controls has been paralleled (at a much slower rate) by the trend in U.S. export control policy.

The Export Administration Act has effected significant changes in the U.S. administration of export controls. In the first year after its passage, 1,550 commodities were made available under general license for countries in Group Y. Trade with Romania was further liberalized, and in 1971 the President relaxed the U.S. embargo on Communist China, freeing many nonstrategic goods for export to China under general license. Since passage of the law in 1969, there has been a sustained effort to remove controls from most items not controlled by other COCOM countries. Most of the export license applications for Eastern Europe that have been denied by the U.S. Government have been for items also under COCOM controls. In its 100th quarterly report, for example, the Commerce Department reported that all applications that were denied for the second quarter of 1972 involved commodities subject to COCOM controls.⁸⁸ The reduction of the number of embargoed items has been accompanied by new export clearance procedures to expedite the licensing process.

The U.S. exporter to Communist countries is still confronted with greater barriers than his counterparts in other Western countries. U.S. businessmen complain that tighter U.S. controls and time-consuming procedures for licensing exports of technology give other Western companies a considerable advantage. Foreign competitors sometimes obtain information on pending U.S. exports which puts them in a favorable competitive position. Approval of applications of export licenses can take from a few weeks to several months.

Nonetheless, evidence suggests that relaxation of controls has rapidly expanded opportunities for sale of American technology to the Soviet Union. In 1971, for example, there was a significant increase in the dollar value of export licenses for the Soviet Union: the total dollar value in 1971 was \$1.27 billion, compared with only \$1.51 million the year before.⁸⁹ The bulk of the increase was attributable to the licensing of U.S. machinery and technology for the Soviet automotive industry. In accordance with the Export Administration Act, the Department of Commerce has narrowed the range of exports subject to controls. Many items embodying modern technology but having no direct military significance are now exportable to the Soviet Union under general licenses. Among the items decontrolled in recent months are construction and agricultural equipment, electronic equipment, selected synthetic rubber manufactures, selected metals and metal manufactures, chemicals, and photographic equipment. Moreover, many exports of technical data, blueprints, and patented processes which were formerly controlled are now exportable under general licenses.

In the past, export controls have been the most direct barrier to the transfer of technology from the United States to the Soviet Union. However, changes brought about by the Export Administration Act have minimized the effect of export controls on U.S.-Soviet economic relations. In conjunction with other changes in Soviet-American trade relations, export control liberalization paves the way for U.S. exporters to expand their sales in the Soviet Union. The ability to export

⁸⁸ *Export Control*, 100th Quarterly Report, 2d Quarter 1972. Washington, D.C., U.S. Dept. of Commerce, 1972, p. 7.

⁸⁹ *Export Control*, 99th Quarterly Report, 1st Quarter 1972. Washington, D.C., U.S. Dept. of Commerce, p. 8.

commodities embodying modern technology will undoubtedly make U.S. exports more attractive to Soviet buyers. At the same time, the changes will allow the Soviet Union to import needed technology for certain sectors of its economy.

U.S. Restrictions on Imports From the Soviet Union; the Issue of Most-Favored-Nation Treatment

U.S. tariff discrimination against Communist countries has its origin in the *Trade Agreements Extension Act of 1951* (65 Stat. 72). Section 5 of that Act directed the President to:

... suspend, withdraw or prevent the application of any reduction in any rate of duty, or binding of any existing customs or exercise treatment, or other concession contained in any trade agreement . . . to imports from the Union of Soviet Socialist Republics and to imports from any nation or area dominated or controlled by the foreign government or foreign organization controlling the world Communist movement.

Section 11 directed the President to prevent the importation of ermine, fox, kolinsky, marten, mink, muskrat, and weasel furskins from the Soviet Union and Communist China. The rationale for section 5 was grounded in heightened international tensions, particularly during the Korean War. The position was taken that Communist nations which were aiding aggression in Korea should not share in the benefits of trade concessions made by the U.S. to other countries. Section 11 may have been enacted in part to protect domestic producers from foreign imports.

In accordance with the law, all concessions granted by the U.S. in trade agreements with Communist countries (except Yugoslavia) were suspended. With respect to U.S.-Soviet trade, this measure resulted in abrogating the trade agreement concluded between the two countries on August 4, 1937. That agreement had, in effect, granted conditional most-favored-nation (MFN) treatment to the Soviet Union in return for Soviet guarantees to import specified quantities of American goods.⁹⁰

The denial of trade concessions to Communist countries and the ban on the importation of certain furskins were later embodied in section 231 of the *Trade Expansion Act of 1962* (19 U.S.C. 1861, 1970) and the *Tariff Act of 1930* (19 U.S.C. 1202, Schedule 1, Part 5, Subpart B, 1970). The MFN provision of the Trade Expansion Act differed somewhat from the 1951 legislation. While the original law in effect applied only to countries that, in the President's opinion, were controlled by the world Communist movement, the 1962 Act was made applicable to all Communist countries. Therefore, Yugoslavia and Poland, which had previously enjoyed MFN treatment, were no longer eligible for it. However, this provision was relaxed in 1963 to allow those two countries to regain their MFN status. Subsequently, in the late 1960s and early 1970s, unsuccessful attempts were made to extend MFN status to Romania and Czechoslovakia. The prohibition against trade concessions to the Soviet Union remains in effect, despite several attempts at repeal (most recently, in the proposed "East-West Trade Relations Act of 1971").

⁹⁰ See Vladimir N. Pregelj, "Most-Favored-Nation" Principle: Definition, Brief History, and Use by the United States. (Washington, D.C.: The Library of Congress, Congressional Research Service, Oct. 26, 1972, Report No. 72-226E).

New legislation would be required to extend MFN treatment to the Soviet Union. Such legislation is certain to run into strong congressional opposition. Many congressmen have opposed trade concessions to the Soviet Union because of repressive Soviet domestic policies. Soviet policy of restricting emigration of Soviet citizens has become the focal point of recent efforts to block MFN status for the Soviet Union. The proposed "Jackson Amendment," endorsed by a majority of the members of the Senate, ties trade concessions to Soviet domestic policies:

...no nonmarket economy country shall be eligible to receive most-favored-nation treatment or to participate in any program of the Government of the United States which extends credits or credit guarantees or investment guarantees, directly or indirectly, during the period beginning with the date on which the President of the United States determines that such country—

- (1) denies its citizens the right or opportunity to emigrate; or
- (2) imposes more than a nominal tax on emigration or on the visas or other documents required for emigration, for any purpose or cause whatsoever; or
- (3) imposes more than a nominal tax, levy, fine, fee, or other charge on any citizen as a consequence of the desire of such citizen to emigrate to the country of his choice. . . .⁹¹

The issues of tariff discrimination and most-favored-nation treatment were among those discussed at the 1972 U.S.-Soviet trade negotiations. Tariff negotiations between the United States and Communist countries tend to be more complex than others because of the differences in the conduct of foreign trade in the two economic systems.

Since 1923, U.S. policy has been to extend MFN treatment to its trade partners automatically and unconditionally. Such treatment assures equal access to the domestic market for all trade partners. Generally, the United States expects only equivalent treatment, assuring non-discrimination against U.S. exports. The Soviet Union also accords its trade partners MFN treatment. However, under the Soviet system of state-directed foreign trade, a grant of MFN tariff treatment does not guarantee access to its domestic market. Soviet enterprises do not purchase freely abroad according to their production needs and cost limitations. Imports are planned by government agencies and are purchased by government-controlled foreign trade enterprises. Thus, when the Soviet Union reduces its tariffs on U.S. exports, purchases of American goods do not automatically increase.

Consequently, in trade negotiations with the U.S.S.R. the United States has traditionally taken the position that MFN status is a negotiable trade concession which requires some special form of reciprocity from the Soviet Union. Soviet leaders, however, regard MFN status as a symbol of good will and friendship; they believe that the Soviet Union is entitled to the same treatment as other U.S. trade partners. For this reason, they have taken the position in trade negotiations that MFN status is not a matter for *quid pro quo* bargaining, but a natural concomitant to improved diplomatic relations.

As part of the comprehensive trade agreement between the two countries, concluded on October 18, 1972, the President agreed to submit

⁹¹ Amendment No. 1691 to S. 2620, 92d Cong., 2d sess., Oct. 4, 1972. 260 members of the House of Representatives cosponsored similar legislation (the "Mills-Vanik Amendment") in the first session of the 93rd Congress (H.R. 3910).

legislation to the first session of the 93rd Congress to extend most-favored-nation treatment to the Soviet Union. The agreement enters into force only after such legislation is enacted. While the issue of reciprocity was not explicitly addressed in the agreement, perhaps in deference to Soviet views, the agreement included several features which were undoubtedly related in part to the MFN question. The Soviet agreement to repay the Lend-Lease debt, the assurance that business facilities would be provided in Moscow for American businessmen, and the understanding that the level of U.S.-Soviet trade would expand rapidly may all be interpreted as reciprocal concessions.

These provisions are intended to assure that the United States will receive reciprocal benefits in future U.S.-Soviet economic relations. The new business facilities to be established in Moscow for U.S. businessmen should provide them with some of the necessary trade infrastructure to expand their operations in the Soviet Union. Furthermore, the understanding that the level of U.S.-Soviet trade will triple over the next three years and the Soviet Government's announced intention to place "substantial" orders for U.S. machinery, plant and equipment, agricultural products, industrial products, and consumer goods portend considerable benefits for U.S. exporters.

Soviet leaders also expect considerable economic benefits from MFN treatment. Some Soviet exports currently face very high U.S. tariffs which would be substantially reduced if the U.S.S.R. received MFN status. The Soviet Union will need to increase its exports to the United States if it is to pay for the American technology and agricultural products it apparently needs. The effect of MFN treatment on Soviet exports is uncertain. In the past, most Soviet exports to the United States have consisted of raw materials and primary products. Such goods are largely unaffected by the absence of MFN treatment because the rates of duty in the U.S. tariff schedules tend to escalate according to the degree of processing. A recent U.S. Tariff Commission study suggests that, with the current structure of exports by the Soviet Union to the United States, no significant increase in exports would result from MFN treatment.⁹²

However, if the structure of Soviet trade should change—for example, if some industrial products of advanced technology and Soviet manufactured goods were available for export—MFN status might bring significant advantages. Given the Soviet Union's chronic need for hard currency, Soviet foreign trade enterprises might be expected to take advantage of lower tariff rates and make a vigorous effort to export machinery and manufactured goods to the United States. In some lines, this effort might be successful. For example, businessmen in the United States and other developed countries have already shown an interest in advanced Soviet metal-working machinery, machine-building and electronics industries, electrical engineering technology, and other areas. Furthermore, some low and medium quality machinery and consumer manufactures may become competitive in segments of the U.S. market.⁹³

⁹² Anton F. Mallah, Jr., *United States-East European Trade Considerations Involved in Granting Most-Favored-Nation Treatment to the Nations of Eastern Europe* (Washington, D.C.: United States Tariff Commission, 1972).

⁹³ See above, pp. 78-79.

By facilitating imports of Soviet machinery and industrial products, the United States might reap an unexpected benefit from expanded trade ties with the Soviet Union, namely, the acquisition of new Soviet technology in a few industrial sectors. In certain high-priority industries, the Soviet Union has devoted considerable resources to research and development. Some Soviet industries have made important technological innovations which could prove very valuable to U.S. firms. The steel and aluminum industries and certain mining industries are examples of U.S. sectors which could benefit from such an exchange of technology.

The structure of Soviet exports to other industrial nations does not, however, suggest that a dramatic shift in the pattern of Soviet-American trade would follow tariff concessions. While the volume of trade between the Soviet Union and Western industrial nations increased in the 1960s, the structure of trade remained fairly stable. Although some new Soviet products will inevitably be sold to U.S. buyers, past experience indicates that the pattern of U.S.-Soviet trade outlined by Secretary Peterson and others of U.S. exports of capital-intensive products in return for Soviet raw materials will dominate U.S.-Soviet economic relations in the near future.

U.S. Restrictions on Credit Transactions With the Soviet Union

In trade negotiations with the United States, Soviet representatives have indicated that the availability of credits is an indispensable condition to expanded U.S.-Soviet trade. Because of the Soviet Union's shortage of foreign exchange reserves and its limited export possibilities, the availability of credit is, in fact, crucial to expanded commercial relations. Soviet leaders are seeking two types of credit from the United States. First, Soviet trade enterprises need deferred-payment credits for specific transactions. These are routine, short- or medium-term loans which are commonplace in all foreign trade transactions. Secondly, the Soviet government wants long-term "project loans" for such large-scale projects as the exploitation of Siberian mineral reserves. U.S. Government restrictions have, in the past, inhibited both types of credits.

The Export-Import Bank plays an important and expanding role in most U.S. foreign trade. However, past legislation has restricted its participation in the extension of credits to the Soviet Union. Title III of the *Foreign Assistance and Related Agencies Appropriation Act of 1965* (P.L. 88-634) prohibited the Eximbank from lending or in any other way participating in the extension of credits to any Communist country except when the President made a determination that credits to a particular Communist country would be in the national interest. This prohibition was later included in Section 2 of the *Export-Import Act of 1945* (12 U.S.C. 635, 1970), by an amendment approved on March 13, 1968. The 1968 legislation added an absolute prohibition on Eximbank participation in the extension of credit to any country furnishing by direct government action "goods, supplies, military assistance or advisers" to a nation which engages in armed conflict with the armed forces of the United States. The latter prohibition was not subject to Presidential waiver.

In 1971, the *Export Expansion Finance Act* (85 Stat. 345) removed the absolute prohibition on Eximbank credit operations in trade with those Communist countries not in armed conflict with the United States. Only North Vietnam is currently prevented by legislation from receiving Eximbank credits. All other Communist countries are eligible for such credits if the President determines that credit transactions with a specific Communist country would be in the national interest. In conjunction with the comprehensive U.S.-Soviet trade agreement of October 18, 1972, the President used the authority of the Export-Import Bank Act of 1945, as amended, to allow Eximbank credits and credit guarantees to the Soviet Union.

The *Johnson Debt Default Act of 1934* (18 U.S.C. 955, 1970) as amended, prohibits private persons or institutions in the United States from extending loans to, or purchasing or selling bonds, securities or other obligations of a foreign government which is in default on obligations to the United States (unless the country is a member of the International Monetary Fund and the International Bank for Reconstruction and Development). At the time of the bill's passage, the Attorney General found that the Soviet Union was among those countries in default in their payments of obligations to the United States. In October 1963, in connection with the proposed sale of wheat to the Soviet Union, the Attorney General issued an Opinion to the effect that the intent of the Johnson Debt Default Act was to prohibit the extension of financial loans to countries in default, but that it did not intend to rule out supplier's credit, which he defined as "the assignment or negotiation by an American seller, in the ordinary course of business, of contract rights or commercial paper resulting from sales of goods on normal commercial terms."⁴ This Opinion was reaffirmed by the Attorney General in 1967.

The Attorney General Opinions and the settlement of the Soviet Lend-Lease debt in 1972 have left some questions about the applicability of the Johnson Act to U.S.-Soviet transactions. The Soviet Union is still technically in default on Russia's World War I debt to the United States. Therefore, private long-term loans are illegal. Private commercial credits, or loans made directly by Government agencies or with the participation of Government agencies (e.g., Eximbank guarantees) are permitted under the Act. The distinction between private loans and commercial credits is not always clear and is subject to legal interpretation. Generally, any financial arrangement which has an underlying business transaction and is made on normal commercial terms is considered exempt from the Johnson Act.

In past negotiations on credit matters the U.S. position has been that no major concessions were possible until the Soviet Lend-Lease debt was settled. The debt proved to be a major stumbling block to expanded U.S.-Soviet trade. The two Governments unsuccessfully attempted to negotiate a settlement on several occasions. Negotiations took place in 1960 and broke up after only two weeks. At that time, the U.S. representatives demanded \$800 million and Soviet negotiators offered \$300 million. The U.S. assessment of the debt was based on the value of civilian goods or military goods usable in the civilian economy, which

⁴ U.S. House of Representatives, Committee on Agriculture, *Communication from the President of the United States*. Document No. 163, 88th Cong., 1st sess., Oct. 29, 1963.

were delivered under Lend-Lease and remained in the hands of the Soviet Union after World War II. The major element in the disparity between the U.S. and Soviet figures was the determination of which goods were essential to the Soviet war effort—the United States did not try to collect for those goods—and which were civilian goods not consumed by the end of the war. In addition, there were problems in setting an appropriate rate of interest and repayment schedule for the Lend-Lease debt. The U.S. negotiating position was recently summarized by Sidney Weintraub, Deputy Assistant Secretary of State for International Finance and Development :

The original value of all lend-lease equipment provided the Soviet Union during World War II is estimated at \$10.8 billion. This figure excludes both merchant and naval vessels which, for technical reasons, were not included under the lend-lease agreement.

In lend-lease settlement negotiations with all our allies including the Soviet Union, it was our policy to seek payment only for those goods which had usefulness in the civilian economy. After repeated requests for an inventory of these "civilian-type" articles in the Soviet Union went unanswered, the United States estimated their value at approximately \$2.6 billion.

In reaching agreements with our other World War II allies, we settled for a percentage of the value of the "civilian-type" equipment. As noted in this testimony to which this explanation is appended, the U.S. Government has made specific settlement offers of \$1.3 billion and \$800 million. Both offers were rejected by the Soviet Union. Our present negotiations are approaching a figure which will compare favorably with the final terms reached with other lend-lease recipient countries.⁹⁵

The Soviet Union and the United States agreed on the amount of the Soviet Lend-Lease debt on October 18, 1972. The total debt was finally assessed at \$722 million, of which the Soviet Union paid \$12 million on the day of the agreement. \$24 million is to be paid on July 1, 1973, \$12 million on July 1, 1975, and the balance in 28 equal annual installments of \$24,071,429 through the year 2001. The Soviet Union is permitted four postponements provided interest is paid at an additional three percent a year. The settlement covers all Soviet World War II indebtedness to the United States. However, Soviet repayment of the debt is contingent on U.S. extension of MFN status to the Soviet Union. At the same time, the Soviet Union executed an operating agreement with the Eximbank which provides that its foreign trade enterprises would receive equal treatment with those of other U.S. trade partners in all credit matters—amount of credit, interest rate and repayment provisions.

Settlement of the Soviet debt and the President's determination that Eximbank financing for the Soviet Union is in the national interest removed most major governmental restrictions on credit transactions. Not only are direct Eximbank credits available, but the way is now open for private individuals and institutions to extend Eximbank-guaranteed credits—both short term and long term—to the Soviet Union.⁹⁶ Because of Eximbank's unique role in U.S. foreign trade,

⁹⁵ U.S. Congress, House, Committee on Government Operations, *Delinquent International Debts Owed to the United States*, Hearings before a subcommittee of the Committee on Government Operations, House of Representatives, 92d Cong., 1st and 2d sess., 1972, p. 125.

⁹⁶ The Jackson Amendment and similar legislation could prohibit the Soviet Union from participating in U.S. Government credit operations. See above, *U.S. Restrictions on Imports from the Soviet Union; the Issue of Most-Favored-Nation Treatment*, p. 53.

its programs may play a particularly important role in future Soviet-American trade.⁹⁷ Eximbank extends direct credits and serves as guarantor and insurer only when private financial institutions are unable or unwilling to do so. As some private institutions may balk at dealing with Soviet foreign trade enterprises because of inadequate credit worthiness information or because of general unfamiliarity with the Soviet economy, frequent Eximbank participation may be required.

The Eximbank extends credits at a favorable rate of interest—currently 6 percent on direct loans to foreign borrowers. This practice has raised some controversy over whether such credits are a form of export subsidy.⁹⁸ The question of whether the Soviet Union should continue to receive such low-cost credits is certain to be an important issue when Congress is asked to extend the Eximbank's franchise. (It is currently authorized to operate through June 1974.)

That the Eximbank, with its present resources, can fill all Soviet credit needs is unlikely. Its current overall operational authority is \$20 billion, and its largest exposure to any single country is about \$1.3 billion.⁹⁹ Soviet negotiators have indicated that they hope to attract huge sums of American capital—far more than Eximbank could provide—for projects in the Soviet Union.¹⁰⁰ Such large-scale financing is available only from private institutions in the United States. Furthermore, no Government program is available for insuring large, long-term capital investments in the Soviet Union. Government programs such as those of the Overseas Private Investment Corporation are denied to the Soviet Union, unless a Presidential waiver is granted, by Section 620(f) of the *Foreign Assistance Act of 1961* as amended (22 U.S.C. 2151 et seq., 1970).

Despite these problems, the removal of restrictions on Eximbank and private credits represents a major step toward improved U.S.-Soviet economic relations. The Soviet Union is expected to run heavy deficits in its balance of trade with the United States, and U.S. credits will be needed to help finance them. Soviet trade with most other Western industrial countries has followed a similar pattern: imports from these countries have continually exceeded exports in recent years, and liberal credit policies have been necessary. If U.S. exporters are to compete effectively with other Western exporters to the Soviet Union, large amounts of credits will have to be made available.

Shipping Arrangements in U.S.-Soviet Trade

Various shipping regulations have been issued by U.S. Government agencies in their administration of legislative restrictions on commerce with the Soviet Union. Department of Commerce Transportation Order T-1 regulates the transport by U.S. ships or aircraft of certain controlled commodities (even though originating in a foreign port) to

⁹⁷ While the Eximbank's operations have generally been credited with increasing the level of U.S. exports, this view was disputed in a 1972 article. See Douglas R. Bohl, "Export Credit Subsidies and U.S. Exports: An Analysis of the U.S. Eximbank," in U.S. Congress, Joint Economic Committee, *The Economics of Federal Subsidy Programs*, 92d Cong., 2d sess., 1972, pp. 157-175. For a contrasting view, see Howard S. Piquet, *The Export-Import Bank of the United States: An Analysis of Some Current Problems*. (Washington, D.C.: National Planning Association, 1970).

⁹⁸ See articles by Bohl and Piquet, *Ibid.* Also see *Congressional Record*, Jan. 23, 1973, pp. S1179-S1183.

⁹⁹ Peterson Report (1972), op. cit., p. 20.

¹⁰⁰ *Ibid.*, p. 20.

most Communist countries, including the Soviet Union. Such shipments are prohibited unless a validated license (for shipments from U.S. ports) or an authorization issued by the Assistant Secretary (for shipments from foreign ports) has been obtained.

Soviet ships are also affected by U.S. restrictions on shipping to Cuba and North Vietnam. Foreign vessels which call on Cuban or North Vietnamese ports are not allowed to carry U.S. Government-financed cargoes shipped from U.S. ports (pursuant to National Security Action Memoranda No. 220, dated February 5, 1963, and No. 340, dated January 25, 1966). This restriction applies to Commodity Credit Corporation-financed grain shipments to the Soviet Union. Moreover, the sale of petroleum fuels and other petroleum products to vessels and aircraft which have recently called on, or will soon be calling on, Cuban or North Vietnamese ports is prohibited.

Until recently, Soviet merchant shipping in U.S. waters was severely restricted by various port security regulations. For example, Soviet ships were allowed to call on only 15 U.S. ports and were required to give 14 days notice in advance. (The Soviet Union maintained similar restrictions on U.S. shipping.) These restrictions were considerably lightened by the Soviet-American maritime agreement signed on October 14, 1972. The agreement opened ports in each country to the ships of the other upon four days' notice. Soviet ships are now able to call at East and Gulf Coast ports for the first time since 1963.

The maritime agreement also resolved the difficult problem of determining U.S. and Soviet shares of the maritime business between the two countries. In the 1963-64 grain sales to the Soviet Union, shipping was a major problem. Reacting to domestic political pressures, President Kennedy stipulated that 50 percent of all U.S. grain sold to the Soviet Union must be shipped in American vessels. This provision proved to be a barrier to further grain shipments. Because of the high cost of U.S. shipping, U.S. grain shipments to the Soviet Union virtually ceased. President Nixon rescinded the 50 percent requirement in June 1971. The maritime agreement stipulates that each country's ships will have the opportunity to carry at least one-third of the cargoes between the two countries. Third country ships can compete for the remaining third. The agreement also provides that the Soviet Union will have to pay shipping rates that are higher than the world average for goods transported on American ships.

Soviet Institutions and Practices

A major barrier to expanded U.S.-Soviet economic relations is the unfamiliarity of U.S. businessmen with Soviet foreign trade techniques, with Soviet import needs and export possibilities, and with provisions of Soviet law pertaining to foreign trade matters. Serious problems inevitably arise from any attempt to widen commercial ties between two countries with very different political, economic, and legal systems. The U.S.-Soviet trade agreement has provided a mechanism for resolving some of the problems and facilitating commercial exchanges between American companies and Soviet foreign trade organizations. Other important problems remain to be solved.

PROBLEMS OF SOVIET LAW AND U.S.-SOVIET TRADE

By Soviet law, a foreign visitor to the Soviet Union is accorded the same legal rights and obligations that any Soviet citizen enjoys. In actual practice, foreign businessmen enjoy considerably more rights, such as private property ownership privileges denied to the average Soviet citizen. The rights of foreign corporations are somewhat more nebulous. The trade agreement stipulates only that American corporations "shall be recognized as having a legal existence" in the Soviet Union. The Soviet legal code adds little to this. It provides only that "foreign juridical persons" (a term that presumably includes U.S. corporations) may conclude foreign trade transactions with officially designated Soviet foreign trade organizations.¹⁰¹

Issues involving Soviet accreditation of foreign corporations, banks, and other commercial institutions are now being negotiated. Currently, accreditation confers no special rights, such as the right to deal directly with Soviet enterprises or to travel freely in the Soviet Union.

In recent years, the Soviet Union has entered into coproduction agreements with Japanese and West European firms. Under such arrangements, foreign companies generally provide machinery and equipment and technical assistance for Soviet projects on long-term credit and receive a share of the output in return. However, direct foreign investments in the sense of equity ownership would appear to be ruled out by Soviet law and by recent Soviet practice. Since the early 1930s, the Soviet Government has prohibited agreements which would allow foreign firms to participate in management or in control over profits of economic activities inside the Soviet Union. A resolution of the All-Union Soviet of People's Commissars on December 27, 1930, discontinued the practice of granting foreign concessions for manufacturing and mining operations in the Soviet Union.¹⁰² Furthermore, private ownership of the means of production is prohibited by the Soviet Constitution.

If future joint Soviet-American projects require very large outlays of American private capital, the usual coproduction arrangement may prove to be inadequate. U.S. companies are unlikely to make huge investments without some managerial control. Soviet willingness to compromise on this issue is one of the important intangibles in future Soviet-American relations. In a recent interview with the West German magazine *Der Spiegel*, Dzherman Gvishiani, deputy chairman of the Soviet State Committee for Science and Technology, suggested that there were no basic obstacles "in principle" to the establishment of foreign owned property in the Soviet Union:

... Even now in our country the trend for multinational property is emerging. For instance, we are ready to set up and organize joint research institutes. In Dubna we have the research institute for atomic energy, which is the property of the countries participating in it. I think that this is no goal in itself. What really matters is to find a favorable form of cooperation with the partners.¹⁰³

However, he added that he saw no practical need for such arrangements at the present time.¹⁰⁴

¹⁰¹ James Henry Giffen, *The Legal and Practical Aspects of Trade With the Soviet Union* (New York, Praeger Publishers, 1971), pp. 151-152.

¹⁰² Sutton, op. cit., p. 17.

¹⁰³ Dzherman Gvishiani, interview with *Der Spiegel* (May 1, 1972, pp. 67-73), translated in Foreign Broadcast Information Service (Western Europe), May 3, 1972, p. U8.

¹⁰⁴ *Ibid.*, p. U2.

The foreign businessman who wants to buy from or sell to the Soviet Union generally conducts his business with a Soviet foreign trade organization which specializes in a given line of imports or exports. The Soviet foreign trade organization has a somewhat ambivalent status. On the one hand, it is an official agency of the Ministry of Foreign Trade which conducts its foreign trade operations in strict accordance with governmental dictates. On the other hand, it is a juridical person under Soviet law which can possess property, acquire rights to property under its name, incur obligations, and sue or be sued.¹⁰⁵ The foreigner may enter contracts with a foreign trade organization, as long as the organization is operating in accordance with the charter which is granted to it by the Soviet Government. In short, the foreign trade organization has a legal status which is somewhat similar to that of Western corporations. Some legal complications may arise in foreign trade transactions, however, because of the Government's foreign trade monopoly. The Ministry of Foreign Trade may refuse to issue or revoke an export license. There are also strict Soviet regulations to prevent the foreign trade organization from making contracts that the state considers contrary to national interests.

Arbitration of foreign trade disputes involving Soviet foreign trade organizations must normally take place under the auspices of the Soviet Foreign Trade Arbitration Commission, a panel of 15 Soviet nationals which convenes in Moscow. While Western specialists acknowledge that the Commission's procedures have been generally fair, the United States has insisted that parties to a dispute should have the right to have arbitrators from a third country, in accordance with the Arbitration Rules of the Economic Commission for Europe. The latter procedure was agreed to in the U.S.-Soviet trade treaty, although parties to a dispute are permitted to decide upon any other form of arbitration which they mutually prefer.

For the American corporation considering the export of commodities embodying new technology, Soviet laws dealing with protection of patents, trademarks, and copyrights are a crucial consideration.¹⁰⁶ Soviet laws and practices have changed considerably in recent years. The widely publicized Soviet practice of buying prototypes and copying them is no longer the most prevalent method of acquiring foreign technology. Soviet leaders have apparently concluded that the older method did not enable Soviet industry to keep pace with the rapid growth of technological innovation in the rest of the world. Not only did it inhibit Western corporations from exporting technology to the Soviet Union, but Soviet enterprises frequently found that by the time a prototype was obtained from the West and readied for production, it was already obsolescent. Moreover, as Soviet expenditures on research and development grew, Soviet leaders became more concerned about protecting Soviet innovations.

Symbolic of the Soviet leadership's new attitude toward the international exchange of technology and know-how was their ratification

¹⁰⁵ Giffen, *op. cit.*, pp. 152-156.

¹⁰⁶ For a more detailed discussion of this aspect of Soviet law, see Samuel Pinar, *Coexistence and Commerce* (New York: McGraw-Hill Book Company, 1970), pp. 336-374.

in 1965 of the Paris Convention for the Protection of Industrial Property. The terms of the Paris Convention require signatories to extend to individuals and companies of other signatories the same degree of protection as the country provides its own citizens.

Soviet law provides protection for both foreign patents and foreign trademarks. Trademarks may be registered in the Soviet Union and are protected for a specified period of time, in much the same manner as in Western countries. Soviet patent law, however, is quite different from Western laws. Under Soviet law, an inventor is given the option of receiving a patent or an inventor's certificate for his innovation. The foreign inventor who submits an application to the Soviet Union is given the same choice. The certificate gives the inventor recognition for his achievement and assures him of a predetermined financial reward, but vests in the state all rights to use, develop, and exploit the invention. The Soviet patent is similar to its Western counterpart; the patentee gains the right to exploit his invention for his own personal profit, up to a ceiling established by law. As an innovation by a Soviet citizen can generally be exploited only by a state enterprise, the incentive to own a patent is reduced. Moreover, legal requirements for obtaining a patent and various tax benefits and compensation advantages for certificate holders induce most Soviet inventors to apply for certificates.

Most foreign inventors prefer the Soviet patent; they generally consider the certificate's scale of remuneration too small. However, the Soviet patent does not provide the foreigner the same protection as most Western patents. A patented invention can be exploited only by a state enterprise. If the patentee is dissatisfied with the way it is to be used, or with the state enterprise's terms of compensation, he cannot go to a competitor. Furthermore, Soviet enterprises generally have inadequate provisions for the kind of inspection and reporting that could insure the patent-holder's compensation rights. For example, there is often no way for the patent-holder to insure that he is being compensated according to volume of output or the savings his innovation generates. There is also no independent judicial authority to handle disputes involving patents; they are handled by the Soviet Chamber of Commerce. These and other problems involving patents have not been resolved in U.S.-Soviet trade negotiations.

The problem of copyrights was also examined by the Joint U.S.-U.S.S.R. Commercial Commission. Until 1973, the Soviet Union did not belong to the Universal Copyright Convention and had few bilateral treaties dealing with copyrights. Nor did Soviet law provide for protection of copyrights of materials first published outside the Soviet Union. Many U.S. books and articles, especially in the scientific and technical fields, have been published in the Soviet Union without compensation for U.S. authors. The Soviet decision to adhere to the Universal Copyright Convention on May 27, 1973 should help to solve this longstanding problem.

SOVIET STATE TRADING

Some of the barriers to expanded U.S.-Soviet trade arise from the nature of Soviet state trading itself. The essence of the Soviet state trading monopoly is State control over all Soviet foreign business

activities. The State not only performs the regulatory function common to all Governments, but also acts as manufacturer, merchant, and banker. A fundamental problem of the U.S. businessman trading with the Soviet Union or of a government agency attempting to regulate and promote such trade is that of operating in an entirely new commercial environment. Westerners who have traded with the Soviet Union frequently complain that Soviet institutions are not conducive to normal commercial ties.

One feature of Soviet state trading to which Western businessmen object is the necessity of dealing with Soviet foreign trade enterprises. The foreign businessman is prevented from conducting business directly with Soviet producers, consumers and distributors. Instead, he must deal with middlemen in the foreign trade apparatus who may lack firsthand information about items being bought or sold. Although Soviet foreign trade enterprises are specialized according to export or import lines, they often cannot give the foreigner exact specifications for the import needs and export offerings of domestic enterprises. In addition, since Soviet foreign trade enterprises have no domestic competitors, they can exercise monopolistic bargaining power when dealing with a single foreign company. The U.S. businessman has the choice of dealing with a Soviet export-import monopoly or not dealing at all. The Soviet foreign trade enterprise, on the other hand, is free to take advantage of the competition among American companies or between American companies and their foreign competitors.

Another Soviet institution which encumbers commercial ties with the West is central economic planning. As Soviet production and consumption are centrally planned, the U.S. businessman cannot estimate potential supply and demand conditions in the Soviet economy. Nor can he judge, on the basis of arbitrary Soviet prices, which goods are marketable in the Soviet Union. Centrally planned foreign trade can also be extremely unstable because the government sometimes uses trade to dispose of unplanned surpluses or to meet unplanned shortages. Furthermore, since there is no necessary link between cost of production and price in the Soviet economy, it is difficult for U.S. Government agencies to regulate dumping or market disruption on the part of Soviet exporters. The U.S.-Soviet trade treaty addresses the latter problem by establishing a procedure for imposing import quotas or other restrictions for preventing market disruptions.

Soviet isolation from the international trade community also creates problems for Western companies seeking to buy from or sell to the Soviet Union. The Soviet Union lacks some of the fundamental requirements for unencumbered foreign trade transactions, such as a convertible currency and a realistic exchange rate. The 1972 agreement in which Pepsi Co., Inc., agreed to market Soviet vodka in the United States in return for a Pepsi Cola franchise in the Soviet Union typifies many Soviet foreign trade transactions. This characteristic often leads Soviet foreign trade enterprises to insist on barter trade, tied transactions, and other clumsy arrangements. Another Soviet deficiency which results from its traditional isolation from Western markets is the lack of a basic foreign trade infrastructure for Soviet-American trade. Such basic requirements as office space, communications services, and advertising facilities are virtually nonexistent. In the 1972 commercial agreement, provisions were made to alleviate this

deficiency. Business facilities for U.S. companies and a large trade center are to be built in order to facilitate U.S.-Soviet foreign trade transactions.

Another set of problems arising from Soviet institutional arrangements is related to the necessity of dealing with state agencies. As discussed above, trading with a government agency raises a number of difficult legal problems. In addition, state trading can degenerate into politically motivated trading. A state trading monopoly may reward or punish a trade partner for purely political reasons. Among the political devices at the state trading monopoly's disposal are market disruption, preemptive buying, discrimination against imports, and denial of exports. As the State decides what to buy and sell on a somewhat arbitrary basis, the existence of such practices may be difficult to prove and counteract.

Prospects for Removal of Barriers to U.S.-Soviet Trade

A definite trend toward trade liberalization has characterized recent Soviet-American economic relations. U.S. policy changes with regard to exports, imports, credits, and shipping arrangements have removed many of the artificial barriers to normal economic relations with the Soviet Union. Furthermore, the maritime and trade agreements and the agreement on the Soviet Lend-Lease debt have demonstrated a willingness on the part of both countries to make concessions on many substantive matters.

The Nixon Administration took another step toward normalization of U.S.-Soviet trade relations when it submitted the "Trade Reform Act of 1973" to Congress on April 11, 1973.¹⁰⁷ Among the measures in the comprehensive trade legislation were two important sections which are applicable to U.S.-Soviet trade. One proposal would grant the President the power to extend most-favored-nation treatment to countries not now enjoying it (including the Soviet Union). Another would repeal the Johnson Debt Default Act, thus removing another barrier to U.S.-Soviet credit operations.

Some innovations and experiments in the Soviet foreign trade system may in the long run help to normalize U.S.-Soviet commercial relations. Export councils composed of government officials and industry representatives now act as a liaison between domestic industries and foreign trade enterprises. This development could alleviate some of the problems confronted by the foreigner who deals with the Soviet foreign trade apparatus. A small percentage of Soviet foreign trade is now conducted by local officials in border regions of the Soviet Union. Such decentralized state trading is now taking place between outlying regions and neighboring countries including Japan, North Korea, Iran, Turkey, and several European countries adjoining the Soviet Union.¹⁰⁸ Material incentives have been introduced to encourage production for export. Industrial enterprises which successfully fulfill their export targets are allowed to use part of their foreign currency

¹⁰⁷ U.S. House of Representatives, Committee on Ways and Means, *Trade Reform Act of 1973* (Washington, D.C.: U.S. Govt. Print. Off., 1973).

¹⁰⁸ Keith Bush, "A New Impetus for Border Trade," *Radio Liberty Dispatch*, August 21, 1972.

earnings for imports of needed machinery and equipment.¹⁰⁹ Such changes may portend a more flexible Soviet foreign trade system for the future. However, the evolution has not proceeded very far.

In recent years, important new practices have helped to expand Soviet commercial ties with the West. Coproduction ventures, joint marketing arrangements, licensing agreements, and other special arrangements play an increasingly important role in East-West trade. Such practices will undoubtedly be used in furthering U.S.-Soviet economic cooperation.

However, many potential roadblocks remain. The trade agreement, Export-Import Bank financing, and the Lend-Lease agreement, for example, are contingent on congressional approval of MFN status for the Soviet Union. Moreover, U.S. financial institutions may be unable to provide sufficient credits to meet Soviet needs. Eximbank's resources are apparently inadequate, and the Johnson Act still restricts private loans to the Soviet Union. Furthermore, considerable differences of opinion remain over interest rates and repayment schedules. Even if all U.S. restrictions should be removed, limited Soviet export capabilities might be a serious constraint on the volume of future trade. Another uncertainty is the adaptability of some Soviet foreign trade institutions to large-scale economic cooperation with the United States.

Furthermore, there is still considerable opposition in the United States to exports of certain kinds of U.S. technology. Although export controls have been relaxed, questions on the national security and industrial espionage aspects of foreign trade continue to be raised. Even technology transfers to long-time allies are sometimes questioned. The sale of the Thor-Delta rocket to Japan, for example, was cited by a representative of the AFL-CIO to Congress as an export of technology with adverse national security implications.¹¹⁰ Many technology transfers to the Soviet Union are likely to be more controversial.

The changes that have already been made seem likely to strengthen trade ties between the United States and the Soviet Union, but many obstacles to completely normalized economic relations remain. The long-run growth of Soviet-American economic relations will depend in large part on the continuation of the liberalization process.

¹⁰⁹ Nikolai Patolichev, *U.S.S.R. Foreign Trade: Yesterday, Today, Tomorrow* (Moscow: Novosti Press Agency Publishing House, n.d.), p. 131.

¹¹⁰ Mr. A. Blumenthal to the Senate Finance Committee. *Congressional Record*, Mar. 6, 1973, 83977-3982.

VI. ISSUES IN THE INTERPLAY OF TECHNOLOGY, TRADE, AND DIPLOMACY

U.S. foreign trade policy toward the Soviet Union has always been motivated by a combination of political and economic factors. U.S. policymakers have encouraged trade with the Soviet Union—in the mid-1930s, in the immediate postwar period, and in the past few years—because they believed that benefits would accrue to the U.S. economy and that U.S.-Soviet diplomatic relations would improve. At other times—in the 1920s and early 1930s and in the Cold War period—trade has been restricted in order to discourage Soviet leaders from pursuing policies considered hostile to U.S. interests. Indeed, this inclination to use trade for political purposes is a deeply imbedded tradition in American diplomacy dating back to the earliest years of the republic. Moreover, commercial relations have been used to further foreign policy goals. As observed by Professor Harold Berman,

Of course, in one sense, all trade is "embedded in politics," but in another sense, trade, like diplomacy and cultural and scientific exchange, is a way of maintaining mutually advantageous relations among countries whether or not they are politically antagonistic to each other.¹¹¹

U.S.-Soviet trade has been characterized by the exchange of U.S. technologically-advanced goods and services for Soviet raw materials. While the absence of normal U.S.-Soviet trade relations has probably been an economic burden to both countries, U.S. leaders have acted under the assumption that the promise of trade (and U.S. technology) to the Soviet Union was an effective lever for exacting political concessions. Denial of trade, on the other hand, has been assumed to be a barrier to Soviet industrial and technological progress.

The U.S.-Soviet technology transfer, the new commercial relationship, and U.S.-Soviet diplomatic relations present an interrelated pattern of policy issues, illustrated by the following questions:

(1) How will the emerging commercial relationship benefit the U.S. economy?

(2) How can economic exchanges with the Soviet Union, particularly those involving technology transfers, be used to further U.S. foreign policy?

(3) What changes are needed in negotiating procedures and commercial institutions necessary to insure that the United States maximizes its political and economic benefits?

Benefits to the United States From Expanded Trade With the Soviet Union

The U.S. grain sales to the Soviet Union in 1972-73 and prospective U.S.-Soviet cooperation in Siberian natural gas exploitation demonstrate some of the potential benefits and costs of expanded U.S.-Soviet

¹¹¹ *New York Times*, Letter to the Editor, Apr. 2, 1973, p. 34.

commercial relations. Both the 1972-73 grain deal and the potential gas deal have important implications for the U.S. economy and for U.S.-Soviet diplomatic relations.

THE 1972-73 GRAIN SALES

The experience gained in 1972 by private grain exporters and U.S. Government officials should provide valuable guidelines for future U.S.-Soviet transactions. With respect to U.S. economic benefits, the grain sales raised an important question: *How good a market is the Soviet Union?*

In the summer of 1972, the Soviet Union purchased an estimated 440 million bushels of wheat from the United States, about one-fourth of the total U.S. crop.¹¹² From July 7, 1972, when the Soviet grain sale was first announced, to September, when Soviet agents stopped buying, the price of U.S. hard red winter wheat, the principal kind sold to the Soviets, rose from \$1.69 to \$2.49 per bushel. The Soviet Union purchased the wheat at approximately \$1.63 per bushel. The difference between the price paid by the Soviet Union and the U.S. domestic price was made up by U.S. Department of Agriculture subsidy payments to grain exporters, which totaled approximately \$300 million for the July-September period.

The U.S. Government's role in the sales caused considerable controversy. For almost two years prior to the sales, the Department of Agriculture had pegged the world market price of wheat at \$1.63 a bushel. However, because of a world shortage of wheat in 1972, the competitive world market price judged by normal commercial practices should have been much higher. In fact, the world price without price supports would have approximated the U.S. domestic price because the United States was the only country exporting significant quantities of wheat. Inasmuch as the United States was the only source for large amounts of wheat and as its domestic price equaled the competitive world market price, the subsidies represented a net price advantage for the Soviet Union.

U.S. grain exporters had been involved in major grain sales to the Soviet Union on one previous occasion in 1963-64.¹¹³ In those sales, as in the 1972-73 sales, the United States appeared to be a source of last resort for the Soviets: Soviet buyers went into the U.S. market only after their traditional sources were exhausted. In 1963 the Soviets had already purchased large amounts of wheat from Australia and Canada.¹¹⁴ In 1972, France had exported to the Soviet Union, while Canada and Australia had been unable to supply large amounts to the Soviets. Moreover, in the period between the large U.S.-Soviet transactions of 1963-64 and 1972-73, the Soviet Union had chosen to buy from traditional trade partners rather than the United States.¹¹⁴ (See Table 9, p. 43.)

¹¹² For a discussion of Soviet agricultural purchases, see Humphrey and Bellmon, *op. cit.*

¹¹³ For details of the 1963-64 grain sales, see Leon M. Herman, *The 1963-64 Wheat Sales to Russia: A Summary of Major Developments*. (Washington, D.C.: The Library of Congress, Legislative Reference Service, Apr. 7, 1964.)

¹¹⁴ Correspondence made public by Congressman John Melcher reveals that both the Australian and Canadian Wheat Boards had advised the U.S. Department of Agriculture as early as July 1972 to reduce U.S. export subsidies and allow world prices to rise. The reduction came in September 1972, after most of the Soviet orders were placed. See the *Congressional Record*, Apr. 9, 1973, H2501-2502.

Thus, the United States was in a monopoly position, apparently selling to a buyer with inelastic demand (quantity not sensitive to price), and there was little historical evidence that the purchases could be tied to future, continual sales. The 1972-73 situation was probably an ideal one for extracting high profits. Instead, U.S. grain exporters provided a consumer's or purchaser's surplus to the U.S.S.R. A reassessment of the exchange may give insights into the criteria to be employed in future U.S.-Soviet commercial transactions involving high-technology products.

Grain exporters and Agriculture Department officials claimed that Soviet buyers were offered low prices because no one knew the extent of Soviet needs. Soviet agents kept their buying intentions a closely guarded secret. It is interesting to note that the 1963 U.S.-Soviet grain sale was also criticized because Soviet agents, by dealing secretly, were able to buy at low prices. Certainly, a seller can never know precisely the shape of the buyer's demand curve, i.e., the quantity demanded at different price levels. However, he should try to improve his knowledge of the buyer's situation and of world supply and demand conditions. He should also attempt to maximize his return from the sale or, if not, carefully weigh the benefits of a non-profit-maximizing policy.

The grain sales point up the need for the Government's active and impartial participation in trade with centrally planned economies. The role of Government agencies in East-West commercial transactions should be to safeguard the interests of U.S. producers, consumers, and taxpayers. From the standpoint of some exporters and producers, the 1972-73 grain deal may have provided maximum benefits. However, its impact on some farmers, on the U.S. consumer, and on the Federal budget was certainly less than maximally beneficial. Soviet purchases contributed to a sharp rise in U.S. domestic food prices and resulted in high Government subsidy payments to exporters and shippers. Some U.S. farmers, who sold their grain before Soviet needs became known, suffered substantial losses of income. A study conducted by the General Accounting Office faulted the Department of Agriculture for some of these problems.¹¹⁵ The study found that the Department had not properly used and disseminated available information on Soviet needs for U.S. grain.

Despite these shortcomings, grain exporters and Government officials rightfully claimed that the 1972-73 grain sales brought considerable benefits to the U.S. economy. The balance-of-payments benefits were estimated to exceed \$700 million.¹¹⁶ Many farmers benefited from higher prices and increased sales, and employment and earnings in transportation industries and agribusinesses were stimulated. Moreover, Government expenditures for farm subsidies and grain storage were greatly reduced. Finally, American grain exporters may have established close commercial ties with Soviet importers which could facilitate future sales.

The outcome of the grain sales suggests that the United States can benefit economically by trading with the Soviet Union. However, some

¹¹⁵ Elmer R Staats, "The Russian Wheat Sales and Agriculture's Role in Expanding U.S. Wheat Exports," in Remarks of Hubert H. Humphrey, *Congressional Record*, vol. 119, Mar. 8, 1973, S4124-S4127.

¹¹⁶ *Ibid.*, S4124.

Government policies and institutions should be reexamined. The grain sales raise questions as to the appropriate role for the U.S. Government in future commercial transactions. What should U.S. pricing policy be? Pricing policy may differ depending on whether the U.S. Government considers the Soviet Union a preferred customer and on what the elasticity of Soviet demand is assumed to be. If credit is necessary, but not commercially available, what Governmental risks and costs are justified? Are there other ways in which the U.S. Government can assist American businesses dealing with Soviet trading monopolies? Each of these questions is relevant to future U.S.-Soviet commercial relations, not only in grain sales but in advanced technology transfers.

JOINT DEVELOPMENT OF SIBERIAN NATURAL GAS RESOURCES

In assessing potential Soviet exports to the United States, there are also important questions on investment, pricing, and supply policy. The proposal for joint development of Soviet Siberian natural gas resources, for example, raises the question, *How good an investment is Soviet energy exploitation?* The two natural gas projects might require a U.S. investment of about \$10-12 billion, largely for pipeline and tankers. Upon completion of the projects, gas would flow from Urengoy, in West Siberia, to Murmansk by pipeline; from there it would be shipped to the U.S. East Coast. A second pipeline would carry gas from Yakutsk, in East Siberia, to Nakhodka, where it would be loaded for shipment to Japan and the U.S. West Coast. (See map, Figure 3.)

Figure 3. Proposed Joint Ventures in Natural Gas



Of the two projects, the West Siberian development appears closest to realization. Negotiations are currently underway between Soviet officials and a consortium of three American companies—Tenneco, Texas Eastern Transmission Corporation, and a Halliburton Company subsidiary. While all of the details of the transaction are not completed or agreed to and have not been officially announced, some tentative figures have been published, which appear to be the basis of current negotiations.¹¹⁷ The entire West Siberian development would cost about \$7.6 billion. Of that sum, the Soviet Union would invest about \$1.5 billion for drilling, gas-gathering, and cleaning equipment. The remainder would be invested by the U.S. consortium for building 20 liquefied natural gas tankers (costing about \$2 billion) and for construction of a 1,500-mile pipeline, compressors, a gas liquefaction plant, and loading facilities.

The contract would run for 25 years, with gas deliveries to the United States valued at \$450 million per year to begin in 1980. The U.S. credit would be repaid over a 12-year period with seventy-five percent of the gas deliveries used to pay off the principal and interest on the loan, and the remaining twenty-five percent used to buy other U.S. capital goods. After the U.S. loan was repaid, the gas deliveries to the United States would continue for the duration of the contract with the proceeds convertible to purchases in the United States.

The U.S. Export-Import Bank and a consortium of private U.S. banks could be expected to finance the deal. Under the terms currently being discussed, the Soviet Union would receive somewhat better treatment than other U.S. trade partners. No "progress payments" (i.e. payments made while the project was under construction) would be required. Payments would begin only after construction was completed and the project was in operation. The Soviets might also be granted a longer-than-usual repayment period. Mr. Kearns, chairman of the Eximbank, reported after lengthy discussions with Soviet officials in Moscow that the Eximbank's normal terms and rules of disclosure were posing problems for Soviet officials.¹¹⁸ Either a U.S. decision to compromise and give the U.S.S.R. preferred status or an unprecedented disclosure of information and acceptance of commercial terms by the Soviets will be required if the transaction is to be financed by Eximbank.

Moreover, the projected cost of Soviet natural gas would be considerably higher than the present U.S. price. The U.S. companies would buy the gas in Murmansk for 60 cents per thousand cubic feet and spend an additional 65 cents to deliver it to an East Coast port.

The total figure, \$1.25, compares with a \$0.45 delivered price for U.S.-produced natural gas in 1972. Although most U.S. energy specialists appear to agree that the current price is too low, few seem to argue that the U.S. price should be raised to \$1.25. U.S.-produced gas will be more expensive in the 1980s: a recent estimate which allows for inflation puts the price of U.S. gas in 1985 at about 93 cents.¹¹⁹ Moreover,

¹¹⁷ See James Flanigan, "Farewell to Adam Smith," *Forbes*, vol. 110, No. 11 (Dec. 1, 1972), pp. 25-26.

¹¹⁸ *New York Times*, Apr. 4, 1973, p. 67.

¹¹⁹ Edward W. Erickson and Robert M. Spann, "Balancing the Supply and Demand for Natural Gas," in *Balancing Supply and Demand for Energy in the United States*. (Denver: Rocky Mountain Petroleum Economics Institute, 1972), p. 105.

U.S. negotiators claim that the price impact on U.S. consumers would be minimal because cheaper U.S. sources would still provide most of the domestic supply and fixed costs make up most of the price. A provision for "rolling in" the foreign gas into domestic supply would prevent large price increases for U.S. consumers.

The large-scale and the long-term nature of the projected natural gas transaction make it especially important that U.S. Governmental and private interests carefully study the terms of the arrangement to insure that the United States receives maximum benefits. The following are some of the important questions which should be examined:

1. What economic benefits will the United States receive? The gas project involves a huge outlay of U.S. investment funds. Will the imports of natural gas and the stimulus to U.S. shipbuilding and other capital goods industries provide an adequate economic return?

2. What are the alternative costs of obtaining the same energy supplies from other sources? Mr. Thornton F. Bradshaw, President of Atlantic Richfield Company, suggested that, at the currently projected price of Soviet gas, the same supply could be obtained from domestic natural gas reserves, gasification of coal, and other domestic sources.¹²⁰ Alternative foreign sources also warrant consideration.

3. What are the appropriate roles for the U.S. Government and private industry? How much of the American investment should be financed or guaranteed by the Eximbank? What should the Government's policies be with regard to other aspects of the arrangement, such as shipbuilding subsidies and import regulation?

4. What kinds of commercial arrangements are needed for U.S.-Soviet cooperation in this area? Business facilities in the Soviet Union are inadequate for an operation of this scale. Although private ownership is not likely or necessary, some clear assurances of authority and managerial responsibility will be needed.

5. What are the indirect economic costs of the project? How much would be added to fuel prices for U.S. consumers? Would financing for the Soviet project saturate the U.S. capital market and drive up interest rates for long-term capital?

6. Is the Soviet project a preferred investment, eligible for lower rates, more favorable terms, and higher risks than other investments? If preferential treatment for the natural gas project is warranted by political factors, what are the net political benefits?

POLITICAL BENEFITS FROM EXPANDED U.S.-SOVIET COMMERCIAL RELATIONS

Dr. Kissinger, Mr. Peterson, and other U.S. officials have attached great political significance to expanded commercial relations with the Soviet Union. Both the grain sales and the natural gas negotiations may test the assumption that increased economic ties lead to improved diplomatic relations. The commercial relationships established by U.S. agribusinesses and by the U.S. oil and gas industry with their Soviet counterparts may be long term. The potential gas project would be based on a 25-year contract. While grain sales are unlikely to recur on the 1972-73 scale, considerable sales of feed grains and agricultural technology are likely in the future.

U.S. exports of grain, technical assistance, and capital investment would be balanced in part, on an economic balance sheet, by U.S. im-

¹²⁰ Panel Discussion at the National Association of Manufacturers' "U.S.-Soviet Trade Conference," Feb. 28, 1973, Washington, D.C.

ports of raw materials. But technology transfer on a long-term basis must also be assessed in terms of political costs and benefits. An interesting aspect of both the grain sales and the natural gas negotiations is the suggestion that the Soviet Union may now be receiving preferential treatment in U.S. foreign trade policy. The Soviets purchased U.S. grain at a price that was lower than warranted by the world market situation, and the price which has been mentioned for U.S. purchases of Soviet natural gas seems high. Is preferential treatment for the Soviet Union justified by potential diplomatic gains for the United States?

The following are among the political costs of the new commercial relationships:

1. The risks involved in the unreliability of the Soviet Union as a supplier of important raw materials. Reliance on the Soviet Union as a source for vitally needed energy resources appears to be a particularly risky undertaking.

2. Contributions to the Soviet fund of technical knowledge that could be translated into security programs or which could result in the release of resources for military programs.

3. Potential leverage to the Soviet Union that could result from Soviet control over U.S. investments and personnel—a possible source of economic blackmail, or an economic hostage system.

The following are some of the political benefits:

1. Soviet reliance on the United States as a source of supply and expertise. Soviet dependence on U.S. agricultural products and advanced technology, for example, is a potential source of U.S. political leverage.

2. Encouragement to the Soviet Union to reorder priorities between military and civilian programs. Expanded commercial relations may serve as an economic reinforcement of the arms control and other agreements between the two countries.

3. Encouragement of domestic change in the Soviet Union. The presence of many American citizens in the Soviet Union with some decisionmaking power and a wider exchange of ideas may in the long run contribute to a moderation of the Soviet political control system and command economy.

In summary, expanded economic relations which facilitate massive technology transfer from the United States to the U.S.S.R. may create new, potentially dangerous dimensions in U.S. diplomacy. On the other hand there is at least a possibility that the process of integrating the centrally planned Soviet economy into the market economy of the United States and the rest of the non-Communist world might unleash irreversible forces of constructive change which could, in turn, contribute to international interdependence and stability.

Concluding Observations

POLITICAL GAINS LIKELY TO OUTWEIGH ECONOMIC BENEFITS TO UNITED STATES

The volume of Soviet trade with the United States by any projection is not likely to represent a large share of U.S. trade or GNP. Economic advantages to the United States are likely to be centered on such specific sectors as imports of petroleum and natural gas, and

exports of soybeans, feed and cereal grain, and computers, and other high-technology products. The balance of payments deficit of the United States and our program for expanding the export of high technology may receive benefits which are, at best, only marginal compared to those which may derive from potential changes in economic relations with non-Communist countries.

At the same time, if the Soviet Union should reorder its priorities and permit more foreign decisionmaking involvement in domestic cooperative ventures, significant long-run benefits of a predominantly political nature might accrue to the United States such as: a) the potential reduction of the Soviet threat to our security from reordered Soviet priorities; b) a degree of Soviet acceptance of the international system, implied by the U.S.S.R.'s permitting domestic involvement of foreign corporations as partners; and c) political advantages inherent in increasing international commercial and financial intercourse. Overall, such political gains might far outweigh the relatively modest economic returns.

RELATIVE INCREASE IN U.S.-SOVIET TRADE MAY BE IMPRESSIVE BY 1980

Still, the relative increase in trade may be impressive. From a level of about \$200 million (exports plus imports) before the commercial agreement, the exchange may rise by the end of the decade to between \$800 million and \$5 billion if the presently favorable environment for expanding commercial relations continues. Three alternative dollar-volume levels seem possible, depending on key variables in trade.

a. *Projection of Current Trends.*—Up to \$800 million average annual turnover through expansion of Soviet raw material exports, including diversion of oil and gas sales from other developed economies to the United States, additional Commodity Credit Corporation credits for agricultural imports (feed grains and soybeans), and expansion of tourism.

b. *Changed Credit and Export Structure.*—Up to \$2-3 billion if MFN status is granted to the Soviets and if Soviet foreign trade organizations give priority to exporting industrial products. U.S.-Soviet joint ventures in energy and raw material extraction, industrial production, shipping, and development of tourism and increases in Soviet gold exports could also push U.S.-Soviet trade turnover to this level.

c. *Major Joint Venture Development.*—Up to \$4-5 billion if (in addition to the activities cited above) the several massive Siberian liquefied gas projects in West and East Siberia are consummated. These would probably bring about a very extensive American involvement in Soviet exploration, construction, and production activity and an equally unprecedented acceptance of risk by the U.S. Government and private banks.

FUTURE U.S.-SOVIET ECONOMIC TIES DEPENDENT ON CONTINUED RELAXATION OF INSTITUTIONAL AND LEGAL BARRIERS

The degree of Soviet flexibility in permitting cooperative ventures to go beyond agreement on U.S. financing and sharing in output, toward managerial and investment decision participation, will determine how broad or narrow are the limits on change. The U.S. relaxation of barriers to East-West trade is symptomatic of a new willing-

ness to provide the same trade and credit arrangements other industrial nations have had with the U.S.S.R. for some years. Revision of export controls, restrictive tariffs, and credit constraints will raise the potential for hard-currency earnings (i.e., dollars), and credit arrangements in the joint ventures will influence Soviet decisions to import and ability to expand commercial relations.

NEW SOVIET EMPHASIS ON TECHNOLOGICAL CHANGE AND MATERIAL INCENTIVES STIMULATES TRADE PROSPECTS

The increased Soviet interest in improved economic relations with the United States results from an apparent reordering of Soviet priorities. Reordered priorities appear to favor technological change and an improvement in the availability of desirable consumer goods to the Soviet workers and peasants.

In bringing about technological improvement, energy, especially as supplied by oil and gas, plays a central role. In the development of the rich Siberian resources, Soviet trade with the United States can be expected to expand as to both imports and exports: imports of technologically advanced petroleum and gas extraction, transmission, and processing facilities, and exports of the natural gas and oil produced. Likewise, imports of products such as breeder stock and feed lots which permit Soviet animal husbandry to borrow from U.S. agribusiness are singularly designed to increase meat output, which in turn may facilitate improvement in labor productivity. Few products represent as clear a means of absorbing increased money wages as meat.

DEFENSE AND CONTROL VERSUS ECONOMIC GROWTH AND PROFESSIONAL PERFORMANCE ARE SOVIET CHOICES

The extent to which priorities have been or will be reordered turns, in large part, on how much of the Soviet output goes to defense and on the volume of Soviet trade with other nations. If the Soviet leaders view new strategic systems as characterized by rapidly rising costs and very modest benefits—a post-summit view expressed by Dr. Henry Kissinger—then civilian claimants will probably do better in receiving shares of Soviet economic growth. If, in contrast, the Soviets appear to follow the view expressed by others that the arms race will continue and accelerate in those areas not specifically limited by the SALT agreements, then the reordering of priorities may further strengthen the priority of defense outlays, as in the 1960s. Without change in the traditional defense priority, increases in Soviet-U.S. economic relations may be largely dependent on modest shifts of trade and other activities from other industrial nations to the United States. Only upgraded civilian requirements will generate significant new import needs and provide a basis for releasing resources for export.

COST TO SOVIETS OF SUPPLYING RAW MATERIALS TO EASTERN EUROPE IS HIGH AND RISING

A potential for significant improvement in Soviet export capabilities to the West, especially in petroleum and natural gas, lies in a possible shift away from the current and projected supply to Eastern

Europe and Cuba—i.e., member nations of COMECON. The Soviets might also find it advantageous to reduce a drain on hard currency by limiting transshipment of grain to Eastern Europe and Cuba on Soviet account. The 1972 Soviet purchase financed by gold sales or dollars of U.S. wheat to meet delivery requirements to Poland is a case in point. This kind of reappraisal, although increasing potential trade with the United States in the short run, poses serious longer-range political and strategic problems of control for the Soviet Union in the Communist world.

STATE TRADING POSES PROBLEMS FOR A COUNTRY WITH A MARKET ECONOMY SUCH AS THE UNITED STATES

Commercial relations between a market economy and a centrally-planned economy with a state trading monopoly pose problems of effective administration and may place the United States at a disadvantage.

Most Soviet-Japanese trade transactions are on a Soviet trading agency—Japanese Corporation basis and are effectively resolved in kind. This Soviet pattern of bilateral trade, accepted not only by Japan but also by European countries, will inhibit a shift of balance-of-payment surpluses from those industrial nations' accounts which could otherwise help to balance possible Soviet deficits on the U.S. account. U.S. trade too is thus likely to be tied to bilateral relations with the Soviet Union. Similarly, these bilateral criteria, in cooperative ventures with other industrial nations like Japan, may in turn restrict the volume of hard-currency earnings available to support a negative Soviet trade balance with the United States.

One approach to trading with the Soviet Union might be the establishment of a governmental trading agency like the Canadian Grain Board. There might also be other agencies, such as a Computer Board. It is of mutual interest to have the most knowledgeable technical people on each side working directly with each other. But there is a possibility that all suppliers would not have equal access to the Soviet market. The Occidental Petroleum Corporation made a commercial agreement without Government help or knowledge. Is this to be discouraged? Government participation runs the risk of Government favoritism, whereby one or more companies might become "chosen instruments." Although such a restraint of trade, under special circumstances where the national interest is involved, might perhaps be permitted by U.S. law, there might also be serious reservations about it in the Congress and in the country as a whole.

The U.S. Government might provide improved information services for U.S. business interests to keep them informed on economic conditions and market prospects in the Soviet Union. It is also important to take measures to protect U.S. citizens and their investments in the Soviet Union. Even formal treaty negotiations on the status of U.S. citizens in the Soviet Union, similar to "Status of Forces" agreements on U.S. troops abroad, might be considered. For example, the U.S. grain exporters and computer corporations should have specific governmental connections with whom they may share information.

Other industrial nations such as France and Japan have developed counterparts of Soviet institutions in order to accommodate the Soviet state trading monopoly. U.S. leaders may prefer to encourage more institutional changes on the part of the Soviet Union.

IMPROVEMENTS ARE NEEDED IN U.S. PROCEDURES AND INSTITUTIONS FOR
ADMINISTRATION AND NEGOTIATION

To maximize the net economic and political benefits to the United States, the negotiating process and the mechanism for commercial relations (i.e., U.S. membership in the Joint Commercial Commission), should be reevaluated. In order to link the broadest security and diplomatic interests with the commercial arrangements, the involvement of high-level policymakers is essential. Specialists on the Soviet Union, foreign trade specialists, and private businessmen are also indispensable to provide guidance in their areas of expertise.

The long-term process of negotiation, its specialized character, and the broad national interests inherent in U.S.-Soviet relations require a permanent working blend of experienced people with the following characteristics:

- a. Top politicians from both executive and legislative branches, authorized to speak for the White House and Congress as a whole;
- b. Governmental trade specialists from the Departments of Commerce, Treasury, State, and other agencies.
- c. Specialists on Soviet political-economic affairs from governmental or academic positions; and
- d. Representatives of private business and banking.

The Strategic Arms Limitation Talks team in SALT I was apparently successful in combining the appropriate elements of authority and expertise. The Soviet SALT team was roughly representative of opposite numbers. In negotiations between different systems it is not easy to make such comparisons. For example, the Supreme Soviet, the Soviet legislature, need not be represented, as it does not have the power or responsibility of the U.S. Congress. In the U.S. system of checks and balances, on the other hand, it would be particularly beneficial to include Members of Congress in the commercial negotiations.

Congressional involvement would permit a broader representation of U.S. public opinion and facilitate passage of legislative measures needed to improve U.S.-Soviet commercial relations. Without continuous involvement of the Congress and private interests, it could be difficult to have an informed debate on important issues. The establishment of a special congressional committee or subcommittee to deal with East-West trade, roughly paralleling the Jackson Subcommittee on SALT,¹²¹ might be appropriate. The creation of the Jackson Subcommittee gave evidence of congressional interest, involvement, and authority.

Direct congressional involvement would seem especially desirable in view of the complex, significant, and long-term nature of the U.S.-U.S.S.R. Commercial Commission deliberations. Such involvement on a continuing basis could facilitate effective treatment of issues concerning statutory authority, such as Most-Favored-Nation Agree-

¹²¹ Subcommittee to Strategic Arms Limitation Talks, the Senate Committee on Armed Services, Chaired by Senator Henry M. Jackson.

ments, and in general those in which congressional interest is high, e.g., export-import credits.

It would also appear desirable that the Joint U.S.-U.S.S.R. Commercial Commission include a blend of political leaders (from both executive and legislative branches), technical trade specialists, and Soviet area specialists. As the effective protection of U.S. interests requires a continued high-level political and lower-level technical involvement, institutional means should be sought for keeping attention at all levels high. Moreover, the principle of professional continuity at the working level should be adhered to in order to meet the level of Soviet competence in negotiations and administration in the Commission.

**THE CURRENT OPPORTUNITY FOR IMPROVED SOVIET-U.S. RELATIONS
IS CRUCIAL**

The present period appears to be a critical one in U.S.-Soviet relations. If the two countries move ahead in developing commercial relations, progress in political, cultural, and other areas may be facilitated. The failure to do so may engender disappointments, frustrations, and suspicions which could ultimately result in a return to the pre-Summit atmosphere. In short, an opportunity is now available to the United States which might conceivably lead to either substantially expanded relations over a 10- to 20-year period or, if the opportunity is not seized and U.S.-U.S.S.R. trade is not now expanded, to continued diversion of the Soviet market to Western European and Japanese suppliers and to a sharp deterioration in Soviet-U.S. relations.

**RISKS AND UNCERTAINTIES OF THE NEW RELATIONSHIP CAN BE REDUCED
BUT NOT ELIMINATED**

Because political benefits are the main measure of net gain to the United States from any pattern of increased U.S.-Soviet trade, careful calibration of the risks and uncertainties is in order.

If the Soviet Union is indeed in the process of reordering priorities and accepting greater involvement in the international political and economic system—i.e., accepting the rules of behavior of that system—a significant reduction of impediments to trade may result; this would be much more beneficial to the United States than would the modest economic gains to be derived from expanding markets.

If, however, Soviet trade overtures do not extend further than a willingness to settle old accounts, such as Lend Lease, and purchase of more grain and technologically advanced equipment, in exchange for relaxation of trade and credit restrictions, U.S. policymakers may be well advised to limit concessions and engage in hard bargaining, with expectation of only modest political and economic benefits.

The policies followed by the United States and the Soviet Union will greatly influence the probabilities of alternative outcomes. As the policy objectives of the Soviet leaders are especially crucial to such a projection, it cannot be known for some time with any certainty which different alternative courses, or what compromise between them, is being followed.

Thus, as knowledge of which of the alternatives will prevail may not be evident for several years, very careful official and public scrutiny of each step in the progress of the Joint U.S.-U.S.S.R. Commercial Commission discussions would appear to be in order for *both* the executive and legislative branches.

APPENDIX

1. Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics. [May 29, 1972]
 2. Maritime Agreement. [October 14, 1972]
 3. Agreement on Trade. [October 18, 1972]
 4. Agreement on Settlement of Lend Lease, Reciprocal Aid and Claims [October 18, 1972]
-
-

APPENDIX 1.—BASIC PRINCIPLES OF RELATIONS

*Text of the "Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics."
May 29, 1972*

The United States of America and the Union of Soviet Socialist Republics,

Guided by their obligations under the Charter of the United Nations and by a desire to strengthen peaceful relations with each other and to place these relations on the firmest possible basis,

Aware of the need to make every effort to remove the threat of war and to create conditions which promote the reduction of tensions in the world and the strengthening of universal security and international cooperation,

Believing that the improvement of US-Soviet relations and their mutually advantageous development in such areas as economics, science and culture, will meet these objectives and contribute to better mutual understanding and business-like cooperation, without in any way prejudicing the interests of third countries,

Conscious that these objectives reflect the interests of the peoples of both countries,

Have agreed as follows:

First. They will proceed from the common determination that in the nuclear age there is no alternative to conducting their mutual relations on the basis of peaceful coexistence. Differences in ideology and in the social systems of the USA and the USSR are not obstacles to the bilateral development of normal relations based on the principles of sovereignty, equality, non-interference in internal affairs and mutual advantage.

Second. The USA and the USSR attach major importance to preventing the development of situations capable of causing a dangerous exacerbation of their relations. Therefore, they will do their utmost to avoid military confrontations and to prevent the outbreak of nuclear war. They will always exercise restraint in their mutual relations, and will be prepared to negotiate and settle differences by peaceful means. Discussions and negotiations on outstanding issues will be conducted in a spirit of reciprocity, mutual accommodation and mutual benefit.

Both sides recognize that efforts to obtain unilateral advantage at the expense of the other, directly or indirectly, are inconsistent with these objectives. The prerequisites for maintaining and strengthening peaceful relations between the USA and the USSR are the recognition of the security interests of the Parties based on the principle of equality and the renunciation of the use or threat of force.

Third. The USA and the USSR have a special responsibility, as do other countries which are permanent members of the United Nations

Security Council, to do everything in their power so that conflicts or situations will not arise which would serve to increase international tensions. Accordingly, they will seek to promote conditions in which all countries will live in peace and security and will not be subject to outside interference in their internal affairs.

Fourth. The USA and the USSR intend to widen the juridical basis of their mutual relations and to exert the necessary efforts so that bilateral agreements which they have concluded and multilateral treaties and agreements to which they are jointly parties are faithfully implemented.

Fifth. The USA and the USSR reaffirm their readiness to continue the practice of exchanging views on problems of mutual interest and, when necessary, to conduct such exchanges at the highest level, including meetings between leaders of the two countries.

The two governments welcome and will facilitate an increase in productive contacts between representatives of the legislative bodies of the two countries.

Sixth. The Parties will continue their efforts to limit armaments on a bilateral as well as on a multilateral basis. They will continue to make special efforts to limit strategic armaments. Whenever possible, they will conclude concrete agreements aimed at achieving these purposes.

The USA and the USSR regard as the ultimate objective of their efforts the achievement of general and complete disarmament and the establishment of an effective system of international security in accordance with the purposes and principles of the United Nations.

Seventh. The USA and the USSR regard commercial and economic ties as an important and necessary element in the strengthening of their bilateral relations and thus will actively promote the growth of such ties. They will facilitate cooperation between the relevant organizations and enterprises of the two countries and the conclusion of appropriate agreements and contracts, including long-term ones.

The two countries will contribute to the improvement of maritime and air communications between them.

Eighth. The two sides consider it timely and useful to develop mutual contacts and cooperation in the fields of science and technology. Where suitable, the USA and the USSR will conclude appropriate agreements dealing with concrete cooperation in these fields.

Ninth. The two sides reaffirm their intention to deepen cultural ties with one another and to encourage fuller familiarization with each other's cultural values. They will promote improved conditions for cultural exchanges and tourism.

Tenth. The USA and the USSR will seek to ensure that their ties and cooperation in all the above-mentioned fields and in any others in their mutual interest are built on a firm and long-term basis. To give a permanent character to these efforts, they will establish in all fields where this is feasible joint commissions or other joint bodies.

Eleventh. The USA and the USSR make no claim for themselves and would not recognize the claims of anyone else to any special rights or advantages in world affairs. They recognize the sovereign equality of all states.

The development of U.S.-Soviet relations is not directed against third

countries and their interests.

Twelfth. The basic principles set forth in this document do not affect any obligations with respect to other countries earlier assumed by the USA and the USSR.

Moscow, May 29, 1972

FOR THE UNITED STATES OF AMERICA

RICHARD NIXON

President of the United States of America

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS

LEONID I. BREZHNEV

General Secretary of the Central Committee, CPSU

APPENDIX 2.—AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS REGARDING CERTAIN MARITIME MATTERS

The Government of the United States of America and the Government of the Union of Soviet Socialist Republics;

Being desirous of improving maritime relations between the United States and the Soviet Union, particularly through arrangements regarding port access and cargo carriage by sea; and

Acting in accordance with Article Seven of the Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics, signed in Moscow on May 29, 1972,

Have agreed as follows:

Article 1

For purposes of this Agreement:

a. "Vessel" means a vessel sailing under the flag of a Party, registered in the territory of that Party, or which is an unregistered vessel belonging to the Government of such Party, and which is used for:

- (i) Commercial maritime shipping, or
- (ii) Merchant marine training purposes, or
- (iii) Hydrographic, oceanographic, meteorological, or terrestrial magnetic field research for civil application.

b. "Vessel" does not include:

- (i) Warships as defined in the 1958 Geneva Convention on the High Seas;
- (ii) Vessels carrying out any form of state function except for those mentioned under paragraph a of this Article.

Article 2

This Agreement does not apply to or affect the rights of fishing vessels, fishery research vessels, or fishery support vessels. This Agreement does not affect existing arrangements with respect to such vessels.

Article 3

The ports on the attached list of ports of each Party (Annexes I and II, which are a part of this Agreement) are open to access by all vessels of the other Party.

Article 4

Entry of all vessels of one Party into such ports of the other Party shall be permitted subject to four days' advance notice of the planned entry to the appropriate authority.

Article 5

Entry of all vessels referred to in subparagraphs a(ii) and a(iii) of Article 1 into the ports referred to in Article 3 will be to replenish ships' stores or fresh water, obtain bunkers, provide rest for or make changes in the personnel of such vessels, and obtain minor repairs and other services normally provided in such ports, all in accordance with applicable rules and regulations.

Article 6

Each Party undertakes to ensure that tonnage duties upon vessels of the other Party will not exceed the charges imposed in like situations with respect to vessels of any other country.

Article 7

While recognizing the policy of each Party concerning participation of third flags in its trade, each Party also recognizes the interest of the other in carrying a substantial part of its foreign trade in vessels of its own registry, and thus both Parties intend that their national flag vessels will each carry equal and substantial shares of the trade between the two nations in accordance with Annex III which is a part of this Agreement.

Article 8

Each Party agrees that, where it controls the selection of the carrier of its export and import cargoes, it will provide to vessels under the flag of the other Party participation equal to that of vessels under its own flag in accordance with the agreement in Annex III.

Article 9

The Parties shall enter into consultations within fourteen days from the date a request for consultation is received from either Party regarding any matter involving the application, interpretation, implementation, amendment, or renewal of this Agreement.

Article 10

This Agreement shall enter into force on January 1, 1973; provided that this date may be accelerated by mutual agreement of the Parties. The Agreement will remain in force for the period ending December 31, 1975, provided that the Agreement may be terminated by either Party. The termination shall be effective ninety days after the date on which written notice of termination has been received.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE at Washington this 14th day of October 1972, in duplicate in the English and Russian languages, both equally authentic.

**FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:**

**FOR THE GOVERNMENT OF THE UNION
OF SOVIET SOCIALIST REPUBLICS:**

/s/
Peter G. Peterson
Secretary of Commerce

/s/
Timofey B. Guzhenko
Minister of Merchant Marine

ANNEX I**Ports of the United States of America
Open to Calls Upon Notice**

- | | |
|---|--|
| 1. Skagway, Alaska | 21. New Orleans, Louisiana |
| 2. Seattle, Washington | 22. Baton Rouge, Louisiana |
| 3. Longview, Washington | 23. Mobile, Alabama |
| 4. Corpus Christi, Texas | 24. Tampa, Florida |
| 5. Port Arthur, Texas | 25. Houston, Texas |
| 6. Bellingham, Washington | 26. Beaumont, Texas |
| 7. Everett, Washington | 27. Brownsville, Texas |
| 8. Olympia, Washington | 28. Ponce, Puerto Rico |
| 9. Tacoma, Washington | 29. New York (New York and New Jersey
parts of the Port of New York Authority),
New York |
| 10. Coos Bay (including North Bend), Oregon | 30. Philadelphia, Pennsylvania (including Cam-
den, New Jersey) |
| 11. Portland (including Vancouver, Washing-
ton), Oregon | 31. Baltimore, Maryland |
| 12. Astoria, Oregon | 32. Savannah, Georgia |
| 13. Sacramento, California | 33. Erie, Pennsylvania |
| 14. San Francisco (including Alameda, Oak-
land, Berkeley, Richmond), California | 34. Duluth, Minnesota/Superior, Wisconsin |
| 15. Long Beach, California | 35. Chicago, Illinois |
| 16. Los Angeles (including San Pedro, Wil-
mington, Terminal Island), California | 36. Milwaukee, Wisconsin |
| 17. Eureka, California | 37. Kenosha, Wisconsin |
| 18. Honolulu, Hawaii | 38. Cleveland, Ohio |
| 19. Galveston/Texas City, Texas | 39. Toledo, Ohio |
| 20. Burnside, Louisiana | 40. Bay City, Michigan |

ANNEX II***Ports of the Union of Soviet Socialist Republics
Open to Calls Upon Notice***

- | | |
|---------------------------|--|
| 1. Murmansk | 21. Kherson |
| 2. Onega | 22. Novorossiysk |
| 3. Arkhangel'sk | 23. Tuapse |
| 4. Mezen' | 24. Poti |
| 5. Nar'yan-Mar | 25. Batumi |
| 6. Igarka | 26. Sochi |
| 7. Leningrad | 27. Sukhumi |
| 8. Vyborg | 28. Yalta |
| 9. Pyarnu | 29. Zhdanov |
| 10. Riga | 30. Berdyansk |
| 11. Ventspils | 31. Nakhodka |
| 12. Klaipeda | 32. Aleksandrovsk-Sakhalinskiy |
| 13. Tallinn | 33. Makarevskiy Roadstead (Roadstead Doue) |
| 14. Vysotsk | 34. Oktyabr'skiy |
| 15. Reni | 35. Shakhtersk |
| 16. Izmail | 36. Ulegorsk |
| 17. Kiliya | 37. Kholmsk |
| 18. Belgorod-Dnestrovskiy | 38. Nevel'sk |
| 19. Il'ichevsk | 39. Makarov Roadstead |
| 20. Odessa | 40. Poronaysk |

ANNEX III

Supplemental Agreement on National Flag Cargo Carriage

WHEREAS, each Party recognizes the policy of the other concerning the participation of third flags in its trade, each Party also recognizes the interest of the other in carrying a substantial part of its foreign trade in vessels of its own registry and thus both Parties intend that their national flag vessels will each carry equal and substantial shares of the trade between the two nations in accordance with this Annex, and

WHEREAS, each Party has agreed that, where it controls the selection of the carrier for its export and import cargoes, it will provide to vessels under the flag of the other Party participation equal to that of vessels under its own flag, it is agreed as follows:

1. DEFINITIONS

For the purpose of this Annex and the Agreement of which this Annex is a part:

a. "Substantial share of the trade between the two nations" means not less than one-third of bilateral cargoes.

b. "Bilateral cargo" means any cargo, the shipment of which originates in the territory of one Party and moves in whole or in part by sea to a destination in the territory of the other Party, whether by direct movement or by transshipment through third countries.

c. "Controlled cargo" means any bilateral cargo with respect to which a public authority or public entity of either Party or their agents has the power of designating the carrier or the flag of carriage at any time prior to such designation, and includes:

(i) on the United States side all bilateral cargo which a public authority or public entity of the United States has or could have the power at any time to designate the flag of carriage pursuant to cargo preference legislation, and

(ii) on the Soviet side all bilateral cargo imported into or exported from the territory of the U.S.S.R. where a commercial body or

other authority or entity of the U.S.S.R. has or could have the power at any time to designate the carrier.

d. "Accountable liner share" means the U.S. dollar freight value of liner carryings of controlled cargo by vessels under the flag of each Party, computed for accounting purposes using the conference rates in effect at the time of carriage or, in the absence of such rates, using other rates to be agreed between the two Parties.

e. "Accountable charter share" means the U.S. dollar freight value of carryings under contracts or arrangements covering the carriage of controlled cargo by vessels under the flag of each Party, which are not in liner service, computed for accounting purposes at rates to be agreed between the Parties. Accountable charter share will not include movements of any bulk cargoes in shipload lots of 8,000 long tons or more from the Union of Soviet Socialist Republics to the United States that are carried by the national flag vessels of either Party provided the conditions stated in subparagraph b of paragraph 3 of this Annex have been complied with.

f. "Accounting period" means a calendar year or any portion of an incomplete calendar year during which this Agreement is in effect.

2. GENERAL OPERATING RULES

a. Each Party undertakes to ensure that its controlled cargo is directed in a manner which

(i) provides to vessels under the flag of the other Party an accountable liner share and an accountable charter share equal in each category to those of vessels under its flag, and which continually maintains parity during each accounting period, and

(ii) is consistent with the intention of the Parties that their national flag vessels will each carry not less than one-third of bilateral cargoes.

b. To the extent that bilateral cargo that is not controlled cargo is carried in a manner

which does not maintain parity between national flag vessels, computed in accordance with the principles specified in subparagraphs d and e of paragraph 1 of this Annex, the excess of such carriage will be added to the accountable liner share or accountable charter share, as the case may be, of the overcarrier and will be offset to the extent possible by an entitlement of a compensating share of controlled cargo in the appropriate category to the undercarrier.

c. Whenever vessels under the flag of one Party are not available to carry controlled cargo offered for carriage between ports served by such vessels with reasonable notice and upon reasonable terms and conditions of carriage, the offering Party shall be free to direct such cargo to its national flag or to third flag vessels. Cargo so directed to the offering Party's national flag vessels will not be included in its accountable liner share or accountable charter share for purposes of subparagraph a(i) of paragraph 2 of this Annex, if the designated representative of the other Party certifies that its national flag vessels were in fact unavailable at the time of the offer.

d. Cargo not carried in the vessels of a Party because of nonavailability of a vessel shall nonetheless be included in bilateral cargo for purposes of subparagraph a(ii) of paragraph 2 of this Annex, and controlled cargo shall continue to be directed to meet the undertakings of said subparagraph. To the extent that deficiencies in meeting the undertakings in such subparagraph exist at the end of an accounting period because of unavailability of vessels of a Party which the representative of that Party has certified were unavailable as provided above in subparagraph c of paragraph 2, the other Party shall not be required to make up such deficiency in the following accounting period.

e. To the extent consistent with the foregoing provisions of this paragraph 2, each Party is free to utilize the services of third flag shipping for the carriage of controlled cargo.

3. SPECIAL BULK CARGO RULES

a. When controlled bulk cargo is carried from the United States to the Union of Soviet Socialist Republics by U.S.-flag vessels, such

cargo shall be carried at a mutually acceptable rate, provided that this shall not prevent the offering and fixing of a lower rate if such lower rate is accepted by a U.S.-flag carrier at the time of offering.

b. It is recognized that movements of any bulk cargoes in shipload lots of 8,000 long tons or more from the Union of Soviet Socialist Republics to the United States shall be carried at the then current market rates. In furtherance of this objective, an equivalent quantity of such controlled cargoes as are offered to Soviet-flag vessels will be offered to U.S.-flag vessels at the current charter market rate and with reasonable notice. Any offerings of such cargoes that are not accepted by U.S.-flag vessels may be carried by Soviet-flag vessels or other vessels.

4. IMPLEMENTATION

a. Each Party shall designate a representative for implementation of the principles and rules of this Annex, the representative of the United States being the Maritime Administration, Department of Commerce, and the representative of the Union of Soviet Socialist Republics being the Ministry of Merchant Marine. Each Party shall authorize its representative to take action under its laws and procedures, and in consultation with the designated representative of the other Party, to implement this Annex, as well as to remedy any departure from the agreed operating rules.

b. The Parties further agree that the designated representatives shall:

(i) meet annually for a comprehensive review of the movement of bilateral cargo and for such other purposes related to the Agreement as may be desirable;

(ii) engage in such consultations, exchange such information and take such action as may be necessary to insure effective operation of this Annex and the Agreement of which this Annex is a part;

(iii) make mutually satisfactory arrangements or adjustments, including adjustments between accounting shares and accounting periods, to carry out at all times the objectives of this Annex and the Agreement of which this Annex is a part. Any departures

from such objectives shall be accommodated on a calendar quarterly basis to the extent possible and in no event shall departures be permitted to continue beyond the first three months of the next accounting period; and

(iv) resolve any other problems in the implementation of this Annex and the Agreement of which this Annex is a part.

5. COMMERCIAL ARRANGEMENTS

a. The Parties recognize that, pursuant to

their respective laws or policies, carriers under their flags may enter into commercial arrangements for the service and stabilization of the trade between them which shall not unduly prejudice the rights of third-flag carriers to compete for the carriage of controlled cargo between the territories of the Parties.

b. Such commercial arrangements shall not relieve the Parties of their obligations under this Annex and the Agreement of which this Annex is a part.

APPENDIX 3. — AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS REGARDING TRADE

The Government of the United States of America and the Government of the Union of Soviet Socialist Republics,

Considering that the peoples of the United States of America and of the Union of Soviet Socialist Republics seek a new era of commercial friendship, an era in which the resources of both countries will contribute to the well-being of the peoples of each and an era in which common commercial interest can point the way to better and lasting understanding,

Having agreed at the Moscow Summit that commercial and economic ties are an important and necessary element in the strengthening of their bilateral relations,

Noting that favorable conditions exist for the development of trade and economic relations between the two countries to their mutual advantage,

Desiring to make the maximum progress for the benefit of both countries in accordance with the tenets of the Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics signed in Moscow on May 29, 1972,

Believing that agreement on basic questions of economic trade relations between the two countries will best serve the interests of both their peoples,

Have agreed as follows:

Article 1

1. Each Government shall accord unconditionally to products originating in or exported to the other country treatment no less favorable than that accorded to like products originating in or exported to any third country in all matters relating to:

(a) customs duties and charges of any kind imposed on or in connection with importation or exportation including the method of levying such duties and charges;

(b) internal taxation, sale, distribution, storage and use;

(c) charges imposed upon the international transfer of payments for importation or exportation; and

(d) rules and formalities in connection with importation or exportation.

2. In the event either Government applies quantitative restrictions to products originating in or exported to third countries, it shall afford to like products originating in or exported to the other country equitable treatment vis-a-vis that applied in respect of such third countries.

3. Paragraphs 1 and 2 of this Article 1 shall not apply to (i) any privileges which are granted by either Government to neighboring countries with a view toward facilitating frontier traffic, or (ii) any preferences granted by either Government in recognition of Resolution 21 (II) adopted on March 26, 1968 at the Second UNCTAD, or (iii) any action by either Government which is permitted under any multilateral trade agreement to which such Government is a party on the date of signature of this Agreement, if such agreement would permit such action in similar circumstances with respect to like products originating in or exported to a country which is a signatory thereof, or (iv) the exercise by either Government of its rights under Articles 3 or 8 of this Agreement.

Article 2

1. Both Governments will take appropriate measures, in accordance with the laws and regulations then current in each country, to encourage and facilitate the exchange of goods and services between the two countries on the basis of mutual advantage and in accordance with the provisions of this Agreement. In expectation of such joint efforts, both Governments envision that total bilateral trade in comparison with the period 1969-1971 will at least triple over the three-year period contemplated by this Agreement.

2. Commercial transactions between the United States of America and the Union of Soviet Republics shall be effected in accordance with the laws and regulations then current in each country with respect to import and export control and financing, as well as on the basis of contracts to be concluded between natural and legal persons of the United States of America and foreign trade organizations of the Union of Soviet Socialist Republics. Both Governments shall facilitate, in accordance with the laws and regulations then current in each country, the conclusion of such contracts, including those on a long-term basis, between natural and legal persons of the United States of America and foreign trade organizations of the Union of Soviet Socialist Republics. It is understood that such contracts will generally be concluded on terms customary in international commercial practice.

3. Both Governments, by mutual agreement, will examine various fields, in which the expansion of commercial and industrial cooperation is desirable, with regard for, in particular, the long-term requirements and resources of each country in raw materials, equipment and technology and, on the basis of such examination, will promote cooperation between interested organizations and enterprises of the two countries with a view toward the realization of projects for the development of natural resources and projects in the manufacturing industries.

4. The Government of the Union of Soviet Socialist Republics expects that, during the period of effectiveness of this Agreement, foreign trade organizations of the Union of Soviet Socialist Republics will place substantial orders in the United States of America for machinery, plant and equipment, agricultural products, industrial products and consumer goods produced in the United States of America.

Article 3

Each Government may take such measures as it deems appropriate to ensure that the importation of products originating in the other country does not take place in such quantities or under such conditions as to cause, threaten or contribute to disruption of its domestic market. The procedures under which both Governments shall cooperate in carrying out the objectives of this Article are set forth in Annex 1, which constitutes an integral part of this Agreement.

Article 4

All currency payments between natural and legal persons of the United States of America and foreign trade and other appropriate organizations of the Union of Soviet Socialist Republics shall be made in United States dollars or any other freely convertible currency mutually agreed upon by such persons and organizations.

Article 5

1. The Government of the United States of America may establish in Moscow a Commercial Office of the United States of America and the Government of the Union of Soviet Socialist Republics may establish in Washington a Trade Representation of the Union of Soviet Socialist Republics. The Commercial Office and the Trade Representation shall be opened simultaneously on a date and at locations to be agreed upon.

2. The status concerning the functions, privileges, immunities and organization of the Commercial Office and the Trade Representation is set forth in Annexes 2 and 3, respectively, attached to this Agreement, of which they constitute an integral part.

3. The establishment of the Commercial Office and the Trade Representation shall in no way affect the rights of natural or legal persons of the United States of America and of foreign trade organizations of the Union of Soviet Socialist Republics, either in the United States of America or in the Union of Soviet Socialist Republics, to maintain direct relations with each other with a view to the negotiation, execution and fulfillment of trade transactions. To facilitate the maintenance of such direct relations the Commercial Office may provide office facilities at its location to employees or representatives of natural and legal persons of the United States of America, and the Trade Representation may provide office facilities at its location to employees or representatives of foreign trade organizations of the Union of Soviet Socialist Republics, which employees and representatives shall not be officers or members of the administrative, technical or service staff of the Commercial Office or the Trade Representation. Accordingly, the Commercial Office and the Trade Representation, and their respective officers and staff members, shall not participate directly in the negotiation, execution or fulfillment of trade transactions or otherwise carry on trade.

Article 6

1. In accordance with the laws and regulations then current in each country, natural and legal persons of the United States of America and foreign trade organizations of the Union of Soviet Socialist Republics may open their representations in the Union of Soviet Socialist Republics and the United States of America, respectively. Information concerning the opening of such representations and provision of facilities in connection therewith shall be provided by each Government upon the request of the other Government.

2. Foreign trade organizations of the Union of Soviet Socialist Republics shall not claim or enjoy in the United States of America, and private natural and legal persons of the United States of America shall not claim or enjoy in the Union of Soviet Socialist Republics, immunities from suit or execution of judgment or other liability with respect to commercial transactions.

3. Corporations, stock companies and other industrial or financial commercial organizations, including foreign trade organizations, domiciled and regularly organized in conformity to the laws in force in one of the two countries shall be recognized as having a legal existence in the other country.

Article 7

1. Both Governments encourage the adoption of arbitration for the settlement of disputes arising out of international commercial transactions concluded between natural and legal persons of the United States of America and foreign trade organizations of the Union of Soviet Socialist Republics, such arbitration to be provided for by agreements in contracts between such persons and organizations, or, if it has not been so provided, to be provided for in separate agreements between them in writing executed in the form required for the contract itself, such agreements:

(a) to provide for arbitration under the Arbitration Rules of the Economic Commission for Europe of January 20, 1966, in which case such agreements should also designate an Appointing Authority in a country other than the United States of America or the Union of Soviet Socialist Republics for the appointment of an arbitrator or arbitrators in accordance with those Rules; and

(b) to specify as the place of arbitration a place in a country other than the United States of America or the Union of Soviet Socialist Republics that is a party to the 1958 Conven-

tion on the Recognition and Enforcement of Foreign Arbitral Awards.

Such persons and organizations, however, may decide upon any other form of arbitration which they mutually prefer and agree best suits their particular needs.

2. Each Government shall ensure that corporations, stock companies, and other industrial or financial commercial organizations including foreign trade organizations, domiciled and regularly organized in conformity to the laws in force in the other country shall have the right to appear before courts of the former, whether for the purpose of bringing an action or of defending themselves against one, including but not limited to, cases arising out of or relating to transactions contemplated by this Agreement. In all such cases the said corporations, companies and organizations shall enjoy in the other country the same rights which are or may be granted to similar companies of any third country.

Article 8

The provisions of this Agreement shall not limit the right of either Government to take any action for the protection of its security interests.

Article 9

1. This Agreement shall enter into force upon the exchange of written notices of acceptance. This Agreement shall remain in force for three years, unless extended by mutual agreement.

2. Both Governments will work through the Joint U.S.-U.S.S.R. Commercial Commission established in accordance with the Communiqué issued in Moscow on May 26, 1972, in overseeing and facilitating the implementation of this Agreement in accordance with the terms of reference and rules of procedure of the Commission.

3. Prior to the expiration of this Agreement, the Joint U.S.-U.S.S.R. Commercial Commission shall begin consultations regarding extension of this Agreement or preparation of a new agreement to replace this Agreement.

IN WITNESS WHEREOF, the undersigned, duly authorized, have signed this Agreement on behalf of their respective Governments.

DONE at Washington in duplicate this 18th day of October, 1972, in the English and Russian languages, each language being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

FOR THE GOVERNMENT OF THE UNION
OF SOVIET SOCIALIST REPUBLICS:

/s/

Peter G. Peterson
Secretary of Commerce

/s/

N. S. Patolichev
Minister of Foreign Trade

ANNEX I

Procedure For The Implementation of Article 3

1. Both Governments agree to consult promptly at the request of either Government whenever such Government determines that actual or prospective imports of a product originating in the other country under certain conditions or in certain quantities could cause, threaten or contribute to disruption of the market of the requesting country.

2. (a) Consultations shall include a review of the market and trade situation for the product involved and shall be concluded within sixty days of the request unless otherwise agreed during the course of such consultations. Both Governments, in carrying out these consultations, shall take due account of any contracts concluded prior to the request for consultations between natural and legal persons of the United States of America and foreign trade organizations of the Union of Soviet Socialist Republics engaged in trade between the two countries.

(b) Unless a different solution is agreed upon during the consultations, the quantitative import limitations or other conditions stated by the importing country to be necessary to prevent or remedy the market disruption situation

in question shall be deemed agreed as between the two Governments.

(c) At the request of the Government of the importing country, if it determines that an emergency situation exists, the limitations or other conditions referred to in its request for consultations shall be put into effect prior to the conclusion of such consultations.

3. (a) In accordance with the laws and regulations then current in each country, each Government shall take appropriate measures to ensure that exports from its country of the products concerned do not exceed the quantities or vary from the conditions established for imports of such products into the other country pursuant to paragraphs 1 and 2 of this Annex 1.

(b) Each Government may take appropriate measures with respect to imports into its country to ensure that imports of products originating in the other country comply with such quantitative limitations or conditions as may be established in accordance with paragraphs 1 and 2 of this Annex 1.

ANNEX II

The Status of the Commercial Office of the United States of America in the Union of Soviet Socialist Republics

ARTICLE 1

The Commercial Office of the United States of America may perform the following functions:

1. Promote the development of trade and economic relations between the United States of America and the Union of Soviet Socialist Republics; and

2. Provide assistance to natural and legal persons of the United States of America in facilitating purchases, sales and other commercial transactions.

ARTICLE 2

1. The Commercial Office shall consist of one principal officer and no more than three deputy

officers and a mutually agreed number of staff personnel, provided, however, that the number of officers and staff personnel permitted may be changed by mutual agreement of the two Governments.

2. The Commercial Office, wherever located, shall be an integral part of the Embassy of the United States of America in Moscow. The Government of the Union of Soviet Socialist Republics shall facilitate in accordance with its laws and regulations the acquisition or lease by the Government of the United States of America of suitable premises for the Commercial Office.

3. (a) The Commercial Office, including all of its premises and property, shall enjoy all of

the privileges and immunities which are enjoyed by the Embassy of the United States of America in Moscow. The Commercial Office shall have the right to use cipher.

(b) The principal officer of the Commercial Office and his deputies shall enjoy all of the privileges and immunities which are enjoyed by members of the diplomatic staff of the Embassy of the United States of America in Moscow.

(c) Members of the administrative, technical, and service staffs of the Commercial Office who are not nationals of the Union of Soviet Socialist Republics shall enjoy all of the privileges and immunities which are enjoyed by corresponding categories of personnel of the Embassy of the United States of America in Moscow.

ANNEX III

THE STATUS OF THE TRADE REPRESENTATION OF THE UNION OF SOVIET SOCIALIST REPUBLICS IN THE UNITED STATES OF AMERICA

ARTICLE 1

The Trade Representation of the Union of Soviet Socialist Republics may perform the following functions:

1. Promote the development of trade and economic relations between the Union of Soviet Socialist Republics and the United States of America; and

2. Represent the interests of the Union of Soviet Socialist Republics in all matters relating to the foreign trade of the Union of Soviet Socialist Republics with the United States of America and provide assistance to foreign trade organizations of the Union of Soviet Socialist Republics in facilitating purchases, sales and other commercial transactions.

ARTICLE 2

1. The Trade Representation shall consist of one principal officer, designated as Trade Representative, and no more than three deputy officers and a mutually agreed number of staff personnel, provided, however, that the number of officers and staff personnel permitted may be changed by mutual agreement of the two Governments.

2. The Trade Representation, wherever located, shall be an integral part of the Embassy

of the Union of Soviet Socialist Republics in Washington. The Government of the United States of America shall facilitate in accordance with its laws and regulations the acquisition or lease by the Government of the Union of Soviet Socialist Republics of suitable premises for the Trade Representation.

3. (a) The Trade Representation, including all of its premises and property, shall enjoy all of the privileges and immunities which are enjoyed by the Embassy of the Union of Soviet Socialist Republics in Washington. The Trade Representation shall have the right to use cipher.

(b) The Trade Representative and his deputies shall enjoy all of the privileges and immunities which are enjoyed by members of the diplomatic staff of the Embassy of the Union of Soviet Socialist Republics in Washington.

(c) Members of the administrative, technical and service staffs of the Trade Representation who are not nationals of the United States of America shall enjoy all of the privileges and immunities which are enjoyed by corresponding categories of personnel of the Embassy of the Union of Soviet Socialist Republics in Washington.

APPENDIX 4.—AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS REGARDING SETTLEMENT OF LEND LEASE, RECIPROCAL AID AND CLAIMS

The Government of the United States of America and the Government of the Union of Soviet Socialist Republics,

Considering the need to settle obligations arising out of the prosecution of the war against aggression in order to foster mutual confidence and the development of trade and economic relations between the two countries,

Desiring to further the spirit of friendship and mutual understanding achieved by the leaders of both countries at the Moscow Summit,

Recognizing the benefits of cooperation already received by them in the defeat of their common enemies, and of the aid furnished by each Government to the other in the course of the war, and

Desiring to settle all rights and obligations of either Government from or to the other arising out of lend lease and reciprocal aid or otherwise arising out of the prosecution of the war against aggression,

Have agreed as follows:

1. This Agreement represents a full and final settlement of all rights, claims, benefits and obligations of either Government from or to the other arising out of or relating to:

(a) the Agreement of June 11, 1942, between the Governments of the United States of America and the Union of Soviet Socialist Republics on principles applying to mutual aid in the prosecution of the war against aggression, including the arrangements between the two Governments preliminary to and replaced by said Agreement,

(b) the Agreement of October 15, 1945, between the Governments of the United States of America and the Union of Soviet Socialist Republics concerning the disposition of lend-lease supplies in inventory or procurement in the United States of America, and

(c) any other matter in respect of the conduct of the war against aggression during the period June 22, 1941 through September 2, 1945.

2. In making this Agreement both Governments have taken full cognizance of the benefits and payments already received by them under the arrangements referred to in Paragraph 1 above. Accordingly, both Governments have agreed that no further benefits will be sought by either Government for any obligation to it arising out of or relating to any matter referred to in said Paragraph 1.

3. (a) The Government of the Union of Soviet Socialist Republics hereby acquires, and shall be deemed to have acquired on September 20, 1945, all such right, title and interest as the Government of the United States of America may have in all lend lease materials transferred by the Government of the United States of America to the Government of the Union of Soviet Socialist Republics, including any article (i) transferred under the Agreement of June 11, 1942, referred to above, (ii) transferred to the Government of the Union of Soviet Socialist Republics under Public Law II of the United States of America of March 11, 1941, or transferred under that Public Law to any other government and retransferred prior to September 20, 1945 to the Government of the Union of Soviet Socialist Republics, (iii) transferred under the Agreement of October 15, 1945, referred to above, or (iv) otherwise transferred during the period June 22, 1941 through September 20, 1945 in connection with the conduct of the war against aggression.

(b) The Government of the United States of America hereby acquires, and shall be deemed to have acquired on September 20, 1945, all such right, title and interest as the Government of the Union of Soviet Socialist Republics may have in all reciprocal aid materials transferred by the Government of the Union of Soviet Socialist Republics to the Government of the United States of America during the period June 22, 1941 through September 20, 1945.

4. (a) The total net sum due from the Government of the Union of Soviet Socialist Republics to the Government of the United States of America for the settlement of all matters set forth in Paragraph 1 of this Agreement shall be U.S. \$722,000,000 payable as provided in subparagraphs (b), (c), and (d) of this Paragraph 4.

(b) (i) Three installments shall be due and payable as follows: \$12,000,000 on October 18, 1972, \$24,000,000 on July 1, 1973 and \$12,000,000 on July 1, 1975.

(ii) Subject to subparagraph (c) of this Paragraph 4, after the date ("Notice Date") on which a note from the Government of the United States of America is delivered to the Government of the Union of Soviet Socialist Republics stating that the Government of the United States of America has made available most-favored-nation treatment for the Union of Soviet Socialist Republics no less favorable than that provided in an Agreement Between the Governments of the United States of America and the Union of Soviet Socialist Republics Regarding Trade signed on the date hereof, the balance of \$674,00,000 in payment of lend lease accounts shall be paid in equal installments ("Regular Installments") as follows:

(1) If the Notice Date falls on or before May 31, 1974, the first Regular Installment shall be due and payable on July 1, 1974, and subsequent Regular Installments shall be due and payable annually on July 1 of each year thereafter through July 1, 2001, or (2) If the Notice Date falls on or after June 1, 1974, and (A) If the Notice Date occurs in the period of June 1 through December 1 of any year, the first Regular Installment, shall be due and payable not more than 30 days following the Notice Date and subsequent Regular Installments shall be due and payable annually on July 1 of each year thereafter through July 1, 2001; or (B) If the Notice Date occurs in the period of December 2 of any year through May 31 of the following year, the first Regular Installment shall be due and payable on the July 1 next following the Notice Date and subsequent Regular Installments shall be due and payable annually on July 1 of each year thereafter through July 1, 2001.

(c) In any year, upon written notice to the Government of the United States of America that a deferment of a Regular Installment (except the first and last Regular Installment) next due is necessary in view of its then current and prospective economic conditions, the Government of the Union of Soviet Socialist Republics shall have the right to defer payment of such Regular Installment ("Deferred Regular Installment"). Such right of deferment may be exercised on no more than four occasions. On each such occasion, without regard to whether the Government of the Union of Soviet Socialist Republics defers any subsequent Regular Installments, the Deferred Regular Installment shall be due and payable in equal annual installments on July 1 of each year commencing on the July 1 next following the date the Deferred Regular Installment would have been paid if the Government of the Union of Soviet Socialist Republics had not exercised its right of deferment as to such Regular Installment with the final payment on the Deferred Regular Installment on July 1, 2001, together with interest on the unpaid amount of the Deferred Regular Installment from time to time outstanding at three percent per annum, payable at the same time as the Deferred Regular Installments is due and payable.

(d) The Government of the Union of Soviet Socialist Republics shall have the right to prepay at any time all or any part of its total settlement obligation, provided that no such prepayment may be made at any time when any payment required to be made under this Paragraph 4 has not been paid as of the date on which it became due and payable.

5. Both Governments have agreed that this Agreement covers only rights, claims, benefits and obligations of the two Governments. Further, nothing in this Agreement shall be deemed to terminate the provisions of Article III of the Agreement of June 11, 1942, referred to above.

Done at Washington in duplicate this 18th day of October, 1972, in the English and Russian languages, both texts being equally authentic.

/s/
William P. Rogers
Secretary of State
For the Government of the United
States of America

/s/
N. Patolichev
Minister of Foreign Trade
For the Government of the
Union of Soviet Socialist
Republics

BIBLIOGRAPHY

The following is a selected bibliography on economic relations between the United States and the Soviet Union, with particular attention to problems of technological transfer. This listing is intended to supplement the more comprehensive bibliography which initiated the series on "Science, Technology, and American Diplomacy." (See, U.S. *Congress. House Committee on Foreign Affairs. Science, Technology, and American Diplomacy: A Selected, Annotated Bibliography of Articles, Books, Documents, Periodicals and Reference Guides. Compiled by Genevieve Knezo. Washington, D.C., U.S. Government Printing Office, 1970.*)

- Athay, Robert E. *The Economics of Soviet Merchant-Shipping Policy.* Chapel Hill, The University of North Carolina Press, 1971.
- Baibakov, N.K. *Gosudarstvennyi piatiletnyi plan razvitiia narodnogo khoziaistva SSSR na 1971-1975 gody.* (State Five-Year Plan for Development of the U.S.S.R. National Economy for the period 1971-1975). Moscow, Gosplan, 1972.
- Bar-Zakay, Samuel N. "Policymaking and Technology Transfer: the Need for National Thinking Laboratories." *Policy Sciences*, volume 2, Summer, 1971, pages 213-227.
- Baranson, Jack. *Industrial Technologies for Developing Economies.* New York, Praeger, 1969.
- Bohl, Douglas R. "Export Credit Subsidies and U.S. Exports: An Analysis of the U.S. Eximbank." In U.S. Congress. Joint Economic Committee. *The Economics of Federal Subsidy Programs.* 92d Congress, second session, 1972, pages 157-175.
- Boretzky, Michael. "Comparative Progress in Technology, Productivity, and Economic Efficiency: U.S.S.R. Versus U.S.A." In U.S. Congress. Joint Economic Committee. *New Directions in the Soviet Economy. Part II-A. Economic Performance.* 89th Congress, second session, 1966, pages 133-256.
- Borissoff, Erast and Stephen Sind. "Projections of U.S. Exports to U.S.S.R. and Eastern Europe." U.S. Department of Commerce. Bureau of East-West Trade. Research Note No. 3. May 1973.
- Brown, Alan A. and Paul Marer. "New Options for the United States in East-West Trade." *Studies in Comparative Communism*, volume 4, No. 2, April 1971, pages 119-143.
- Brown, Alan A. and Egon Neuberger, eds. *Trade and Central Planning: An Analysis of Interactions.* Berkeley, University of California Press, 1968.
- Business International S.A., Geneva. *Doing Business With the U.S.S.R.* Geneva, 1971.
- Butler, John. *The Soviet Union, Eastern Europe and the World Food Markets.* New York, Praeger, 1964.
- Chang, Y.S. *The Transfer of Technology: Economics of Offshore Assembly, the Case of Semiconductor Industry.* UNITAR research reports, No. 11. New York, United Nations Institute for Training and Research, 1971.
- Commission on International Trade and Investment Policy. (Albert T. Williams, Commission Chairman). *United States International Economic Policy in an Interdependent World.* Washington, U.S. Government Printing Office, July, 1971.
- Committee for Economic Development. *A New Trade Policy Toward Communist Countries.* New York, 1972.
- Council of Mutual Economic Assistance. *Statisticheskii ezhegodnik.* Moscow, 1970.

- Diamond, Douglas B. "Principal Targets and Central Themes of the Ninth Five-Year Plan." In Norton T. Dodge, ed., *Analysis of the U.S.S.R.'s 24th Party Congress and Ninth Five-Year Plan*. Mechanicsville, Maryland, Cremona Foundation, pages 47-53.
- Einzig, Paul. "Soviet Eurodollar Transactions." *International Currency Review*, volume 4, March-April 1972, pages 0-13.
- Erickson, Edward W. and Robert M. Spann, "Balancing the Supply and Demand for Natural Gas," In *Balancing Supply and Demand for Energy in the United States*. Denver, Rocky Mountain Petroleum Institute, 1972, pages 91-106.
- Feshbach, Murray. *Manpower Trends in the U.S.S.R.* Washington, Department of Commerce, Bureau of Economic Analysis, May 1971.
- Flalka, John. "The Big Soviet Wheat Deal." *Washington Evening Star Daily News*, October 29-November 1, 1972.
- Flanigan, James. "Farewell to Adam Smith." *Forbes*, volume 110, No. 11, December 1, 1972, pages 25-26.
- Frank, Richard S. "Trade Report." Part I. "Pact with Soviets Offers Economic, Political Gains Once U.S. Solves Policy Questions." Part II. "U.S. Sees Surplus, More Jobs in Early Years of Expanded Trade with Soviet Union." *National Journal*, volume 4, Nos. 47 and 48, November 18 and 25, 1972, pages 1763-1772 and 1799-1808.
- Fredrikson, E. Bruce and Eric W. Lawson. "The Role of Technology Transfer in Product Development and Marketing." *Research Management*, volume 13, July 1970, 265-272.
- Geier, Claire R. *The U.S.-Soviet Agreement in Science and Technology*. Washington, Congressional Research Service, Library of Congress, August 10, 1972. Report No. 72-179 SP.
- Giffen, James Henry. *The Legal and Practical Aspects of Trade with the Soviet Union*. Revised ed. New York, Praeger, 1971.
- Godalre, J. G. "The Claim of the Soviet Military Establishment." U.S. Congress. Joint Economic Committee. *Dimensions of Soviet Economic Power*. 87th Congress, second session, 1962, pages 33-46.
- Goldman, Marshall I. "The East Reaches for Markets." *Foreign Affairs*, volume 47, No. 4, July 1969, pages 721-734.
- Granick, David. *Soviet Metal-Fabricating and Economic Development*. Madison, University of Wisconsin Press, 1967.
- Gvishiani, Dzherman. Interview in *Der Spiegel*, May 1, 1972, pages 67-73. (Translated in *Foreign Broadcast Information Service*, May 3, 1972.)
- Hardt, John and Theodore Frankel. "The Industrial Managers." In *Interest Groups in Soviet Politics*. Edited by H. G. Skilling and Franklyn Griffith. Princeton, Princeton University Press, 1971.
- Hawthorne, Edward P. *The Transfer of Technology*. Paris, Organisation for Economic Co-operation and Development, 1972.
- Herman, Leon M. *East-West Trade: An Overview of Legislation, Policy Trends, and Issues Involved*. Washington, The Library of Congress, Legislative Reference Service, June 17, 1968. Report No. GGR-118.
- Herman, Leon M. *The 1963-64 Wheat Sale to Russia: A Summary of Major Developments*. Washington, Library of Congress, Legislative Reference Service, April 7, 1964.
- Heymann, Hans. *The U.S.S.R. in the Technological Race*. Santa Monica, California, Rand Corporation, 1959.
- Holden, Constance. "Soviet-U.S. Summit: Science Accords Open the Way to Joint Projects." *Science*, volume 176, June 9, 1972, pages 1106-1108.
- Holzman, Franklyn D. "East-West Trade and Investment Policy Issues." In *United States International Economic Policy In An Interdependent World*. Washington, Commission on International Trade and Investment Policy, July, 1971.
- Humphrey, Hubert H. and Henry Bellmon. *Observations on Soviet and Polish Agriculture*, November-December 1972. A trip report prepared for the U.S. Senate Committee on Agriculture and Forestry. Washington, U.S. Government Printing Office, 1973.
- Humphrey, Hubert H. and Henry S. Reuss. *Observations on East-West Economic Relations: U.S.S.R. and Poland*. A trip report prepared for the U.S. Congress Joint Economic Committee. Washington, U.S. Government Printing Office, 1973. Institute for Strategic Studies. *The Military Balance 1970-71*. London, 1972.

- Institute for Strategic Studies. *Soviet-American Relations and World Order: The Two and The Many*. Adelphi Papers No. 66. London, 1970.
- Judy, Richard. "The Economists." In *Interest Groups in Soviet Politics*. Edited by H. G. Skilling and Franklyn Griffith. Princeton, University Press, 1971.
- Kapellinskii, Iu. N. *Torgovlia S.S.S.R. s kapitalisticheskimi stranami posle vtoroi mirovoi volny*. (Trade of the U.S.S.R. with capitalist countries after World War II). Moscow, Mezhdunarodnye otnosheniia, 1970.
- Kapellinskii, Lu N. "Torgovo-ekonomicheskie otnosheniia SSSR s razvitymi kapitalisticheskimi stranami." (Commercial-Economic Relations of the U.S.S.R. with Developed Capitalist Countries.) *Vneshniaia torgovlia*, No. 12, 1972, pages 32-37.
- Kaser, Michael. "The Rouble and Soviet Gold." *International Currency Review*, volume 3, March-April 1971, pages 5-11.
- Khodov, L. "Ob odnom iz aspektov ekonomicheskikh sviazei mezhdu stranami dvukh mirovykh system." (One Aspect of Economic Relations Between Countries of the Two World Systems.) *Voprosy ekonomiki*, No. 12, December 1972, pages 122-127.
- Kissinger, Henry A. "Congressional Briefing: United States-Soviet Relations in the 1970's." In *Remarks of Senator Mike Mansfield*, Congressional Record, volume 118, June 19, 1972, pages S9590-S9608.
- Kosygin, Alexei and Leonid Brezhnev. *New Methods of Economic Management in the U.S.S.R.* Moscow, Novosti Press Agency Publishing House, 1965.
- Kretchmar, Robert S., Jr. and Robin Foor. *The Potential for Joint Ventures in Eastern Europe*. New York, Praeger, 1972.
- Mallsh, Anton F., Jr. *United States, East European Trade; Considerations Involved in Granting Most-Favored-Nation Treatment to the Countries of Eastern Europe*. (Staff Studies No. 3). Washington, U.S. Tariff Commission, 1972.
- Meyer Herbert E. "Why the Russians are Shopping in the U.S." *Fortune*, February 1973, pages 66-71, 146, 148.
- Moorsteen, Richard and Raymond P. Powell. *The Soviet Capital Stock, 1928-1962*. Homewood, Ill., Richard D. Irwin, Inc., 1966.
- Nove, Alec and Desmond Donnelly. *Trade with Communist Countries*. London, the Macmillan Company, 1960.
- Patolichev, Nikolai. *USSR Foreign Trade: Yesterday, Today, Tomorrow*. Moscow, Novosti Press Agency Publishing House, n.d.
- Pavitt, Keith. "Technology, International Competition, and Economic Growth. Some Lessons and Perspectives," *World Politics*, volume 5, January 1973, pages 183-205.
- Peterson, Peter G. *A Foreign Economic Perspective*. Washington, U.S. Government Printing Office, 1971.
- Peterson, Peter G. "U.S.-Soviet Commercial Relations in a New Era." Washington, U.S. Department of Commerce, August 1972.
- Peterson, Peter G. "What America Wants From Russia in Trade Deals," *Interview in U.S. News and World Report*, September 4, 1972, pages 40-44.
- Petrov, Fedor Pavlovich. *Mezhdunarodnoe nauchno-technicheskoe sotrudnichestvo*. (International Scientific Technological Cooperation.) Moscow, Mezhdunarodnye otnosheniia, 1971.
- Piquet, Howard S. *The Export-Import Bank of the United States: An Analysis of Some Current Problems*. Washington, National Planning Association, 1970.
- Pisar, Samuel. *Coexistence and Commerce*. New York, McGraw-Hill Book Company, 1970.
- Pisar, Samuel. "How We Will Do Business With Russia: Interview With an Authority on East-West Trade." *U.S. News and World Report*, volume 73, July 31, 1972, pages 27-29.
- Pozniakov, Vladimir S. *Gosudarstvennaia monopolia vneshnei torgovli v SSSR*. (The State Monopoly of Foreign Trade in the U.S.S.R.). Moscow, Mezhdunarodnye otnosheniia, 1969.
- Pregelj, Vladimir N. *Most-Favored-Nation Principle: Definition, Brief History, and Use by the United States*. Washington, The Library of Congress, Congressional Research Service, October 26, 1972. Report No. 72-226 E.
- President Nixon in Moscow, *A Summary of Major Statements and Agreements During President Richard Nixon's Visit to the Soviet Union*, May 22-30, 1972. Washington, D.C., United States Information Service, 1972.
- Pryor, Frederick T. *The Communist Foreign Trade System*. Cambridge, the MIT Press, 1963.

- Rush, Myron. "Brezhnev and the Succession Issue." *Problems of Communism*, volume 20, No. 4, July-August, 1971, pages 9-15.
- Saeki, Kiichi. "Toward Japanese Cooperation in Siberian Development," *Problems of Communism*, volume 21, No. 3, May-June, 1972, pages 1-11.
- Sakharov, A. D., V. F. Turchin, and R. A. Medvedev. "Appeal of Scientists A.D. Sakharov, V. F. Turchin and R. A. Medvedev to Soviet Party and Government Leaders." *Survey*, volume 16, No. 3, Summer, 1970, pages 160-170.
- "The Scent of Honey: A Survey of East-West Trade." *The Economist*, January 6, 1973.
- Schroeder, Gertrude E. "Soviet Technology: System vs. Progress," *Problems of Communism*, volume 19, No. 5, September-October, 1970, pages 19-30.
- Seleznyov, G. *Trade: A Key to Peace and Progress*. Moscow, Progress Publishers, 1966.
- Shmelev, N. "Novye gorizonty ekonomicheskikh svyazey" (New Horizons in Economic Relations). *Mirovaia ekonomika i mezhdunarodnye otnosheniia*. No. 1, January 1973, pages 4-15.
- Smith, Hedrick. "The Russian Auto Market: No Trade-ins, No Imports. No Options, and You Pay Now, Drive Later." *New York Times Magazine*, October 8, 1972, pages 18-20, 24, 30, 35-36, 38, 40, 42, 44-45, 50.
- Staats, Elmer B. "The Russian Wheat Sales and Agriculture's Role in Expanding U.S. Wheat Exports." In *Remarks of Senator Hubert H. Humphrey, Congressional Record*, volume 119, March, 1973, pages S4124-S4127.
- Stalin, Joseph. *The Foundations of Leninism*. Moscow, Foreign Languages Publishing House, 1950.
- Sutton, Antony C. *Western Technology and Soviet Economic Development*. Volume I: 1917-1930, volume II: 1930 to 1945. Stanford, Hoover Institution Press, 1968 and 1971.
- Sutulov, Alexander. *The Soviet Challenge in Base Metals*. Salt Lake City, University of Utah Printing Services, 1971.
- "Transfer of Technology: UNCTAD's Framework for Action." *Far East Trade and Development*, volume 26, July, 1971, pages 274-275.
- "UNCTAD: The Transfer of Technology." *Journal of World Trade Law*, volume 4, September-October, 1970, pages 692-718.
- U.S. Congress. House. Committee on Foreign Affairs. *Basic Documents on East-West Trade*. 90th Congress, second session. Washington, U.S. Government Printing Office, 1968.
- U.S. Congress. House. Committee on Government Operations. *Delinquent International Debts Owned to the United States*. Hearings before a subcommittee of the Committee on Government Operations, House of Representatives, 92d Congress, first and second sessions. Washington, U.S. Government Printing Office, 1972.
- U.S. Congress. House. Committee on Science and Astronautics. Subcommittee on International Cooperation in Science and Space. *U.S.-U.S.S.R. Cooperative Agreements*. Hearings before * * * June 13-15, 20-21, 1972. 92d Congress, second session. Washington, U.S. Government Printing Office, 1972.
- U.S. Congress. House. Committee on Science and Astronautics. Subcommittee on International Cooperation in Science and Space. *U.S.-U.S.S.R. Cooperative Agreements: Report*. Washington, Government Printing Office, 1972. 28 p.
- U.S. Congress. Joint Economic Committee. *Soviet Economic Prospects for the Seventies*, 93d Congress, first session. Washington, U.S. Government Printing Office, 1973.
- U.S. Congress. Senate. Committee on Aeronautical and Space Sciences. *Space Agreements with the Soviet Union*. Hearings before * * * June 23, 1972. 92d Congress, second session. Washington, U.S. Government Printing Office, 1972. 97 p.
- U.S. Congress. Senate. Committee on Banking and Currency. *East-West Trade*. Hearings. 90th Congress, second session, 1968.
- U.S. Congress. Senate. Committee on Foreign Relations. *A Background Study on East-West Trade*. 89th Congress, first session, 1965.
- U.S. Congress. Senate. Committee on the Judiciary. *Export of Strategic Materials to the U.S.S.R. and Other Soviet Bloc Countries*. Hearings before the Subcommittee to Investigate the Administration of the Internal Security Act and Other Internal Security Laws, October 23, 24, 26, 1961. 87th Congress, first session. Washington, U.S. Government Printing Office, 1962.

- U.S. Department of Commerce. Bureau of East-West Trade. U.S.-Soviet Commercial Agreements, 1972: Texts, Summaries, and Supporting Papers. Washington, January 1973.
- U.S. Department of Commerce. Export Control, Quarterly Reports, 1963-1972.
- U.S. Department of Interior. The Mineral Industry of the U.S.S.R. Bureau of Mines Minerals Yearbook. Washington, Government Printing Office, 1969.
- U.S. Department of State. The Battle Act Report. 1969-1971.
- U.S. Department of State. Bureau of Intelligence and Research. Trade of NATO Countries with Communist Countries. Washington, June 29, 1972.
- U.S. Trade with Eastern Europe—Status and Prospects. Morgan Guaranty Survey, September 1972, 6-12.
- Uren, Phillip E., ed. East-West Trade: A Symposium. Toronto, The Canadian Institute of International Affairs, 1966.
- Vaganov, B.S. Organizatsiia i tekhnika vneshnei torgovli SSSR i drugikh sotsialisticheskikh stran. (Organization and Techniques of the Foreign Trade of the U.S.S.R. and Other Socialist Countries.) Moscow, IMO, 1963.
- Wasowski, Stanislaw, ed. East-West Trade and the Technology Gap: A Political and Economic Approach. New York, Praeger, 1970.
- Wilczynski, Josef. The Economics and Politics of East-West Trade. New York, Praeger, 1969.
- Wiles, P. J. D. Communist International Economics. New York, Praeger, 1969.
- World Trade Club of Seattle. U.S.A.-U.S.S.R. Trade: Prospects, Procedures and Practical Suggestions. Seattle, 1972.
- Yudelman, Montague, Gavan Butler, and Ranadev Banerji. Technological Change in Agriculture and Employment in Developing Countries. Paris, Organisation for Economic Co-operation and Development, 1971.
- Zaleski, Eugene, et al. Science Policy in the U.S.S.R. Paris, Organisation for Economic Co-operation and Development, 1969.

