I. Introduction: Statement of the Problem

1. The basic objective of the economic defense program is to limit or impair the present and potential military strength of the Communist bloc without undue impairment of the military and economic strength and political unity of the free world, insofar as this can be accomplished through controls on the trade and other external economic relations of the bloc. The simplest and most obvious method of doing this would be to deny to the bloc all imports from the rest of the world. A complete stoppage of trade would ensure both a) the denial of imports particularly significant to the bloc military build-up and b) the maximum overall loss of trade advantage to the bloc.

2. However, in the present multilateral economic defense program, no attempt has been made by the US to get a complete stoppage of trade with the bloc, partly because this would be at variance with established US foreign economic policy which favors expanded trade and liberal trade policies, but mainly because it is fairly clear that a complete embargo on trade with the bloc would be diplomatically unattainable in a multilateral framework. An ostensible reason frequently stated and given its classical expression by Churchill is that trade provides "helpful contacts and associations," permits "friendly infiltration." In any case, the policy adopted was a policy of limited controls over exports to the bloc.

3. From the viewpoint of economic defense objectives alone, i.e., the maximum impairment of Soviet capabilities relative to those of the West, a complete embargo on East-West trade is preferable to a limited or "selective" control program. But given the necessity of a limited control program, the problem then is primarily one of means, rather than ends. How shall trade be limited and how far? Which imports of the Soviet bloc should be selected for denial? To what degree should the normal volume and pattern of imports be interfered with?

[redacted]

II. Brief Description of Present Policies

1. Objectives

The present multilateral economic defense (export control) program is essentially a selective control system, one which attempts to identify and deny those imports which would contribute most to bloc military capabilities. NSC 152/3 expresses one of the general objectives of the US in the control program as "to control selectively exports of commodities and supply of services from the free world which contribute significantly to the war potential of the Soviet bloc."

The first "general consideration" set forth in NSC 152/3 suggests that the purpose of trade controls is to reduce the "relative economic potential for war" of the Soviet bloc. Nothing is said about obtaining the maximum reduction in the bloc's relative economic potential, presumably because of an awareness of the difficulties and costs which such an attempt would entail for many friendly countries. Yet running through the record of official discussions of the control program is an implicit assumption that the objectives of the economic defense program can be fully achieved merely by selective trade controls. The fact that the Soviet gains from trade in other than "strategic" items appears to be overlooked.

Although US trade with the Soviet bloc and China has virtually ceased, the United States has never advocated a complete cessation of trade with the Communist countries. A selective control program, has been advocated not as "half a loaf better than none" expediency but rationalized as good in principle.

> "Assuming that the necessary security safeguards are present, the free-world countries take the view that there are positive advantages to their own economies to be had in East-West trade--as well as other trade--and they also are anxious to keep open all paths that might lead to a sounder basis for peace in the world.[1]
>
> "Therefore the free world does not consider East-West trade as bad in itself.

1. Statement prepared for Admiral Delany's use before House Subcommittee on Foreign Economic Policy, ED/EC D-86, April 15, 1955, p. 4, 6.

"I am frank to say to you that the United States Government shares this view with other friendly governments, and sees no cause for undue concern over non-strategic East-West trade."

On similar grounds the Randall Commission recommended to the President and Congress in January of 1954 "that so far as it can be done without jeopardizing military security, and subject to the embargo on Communist China and North Korea, the United States acquiesce in more trade in peaceful goods between Western Europe and the Soviet bloc."

This view of the desirability of a limited control system rests not only on the assumed ability to distinguish between "strategic" and "non-strategic" trade; NSC 152/3 suggests that the impact of denying particular goods or groups of commodities on bloc military or economic capabilities can be weighed against the advantages to the free world of the trade that would otherwise result :

"... interference in the trade between the free world and the Soviet bloc should take place only where a clear advantage to the free world would accrue from such interference" (Para. 3).

This is the concept of "the net security advantage." The Fourth Battle Act Report stated that the basic policy of the United States on East-West trade rested on four principles, of which number three read "The free world may derive a net security advantage out of some East-West trade." This concept was explained as follows on page 39 of the same report:

"To urge complete embargo in the present situation is to ignore the fact that the present trade situation offers opportunities to the free world. The free world, with its enormous production, can benefit from trade; the test is what goods are traded and on what terms. The free nations are stronger economically than they have ever been. Collectively they are far stronger than the Soviet bloc. They possess tremendous resources. On the whole they have solid and healthy competitive systems. Their businessmen have behind them centuries of experience in bargaining, merchandising, and servicing. With these factors creating for the free world a currently strong

This language more accurate.

p. 4

2. Criteria for Controls

Before the revision of the CoCom and Battle Act Lists in the summer of 1954, no formal criteria had been established by CoCom countries for determinging what items should be controlled. The basis of the pre-1954 CoCom lists IL/I and II (embargo and quantitative control) was the product of negotiations by the US, the UK and France; this Tripartite Agreement originally was based on the following criteria used for the US IA and IB Lists. ~~New criteria were drawn up for the exchange of the (IL/I/II) list. The Tripartite Agreement was submitted to the OG/CoCom and was adopted as criteria for control lists.~~

~~In drawing up their proposed lists, the following were the criteria employed by CoCom in selecting items for embargo:~~

a

b

c

trading position, the free-world nations should be able to take advantage of the needs of the Soviet bloc and by hard bargaining gain benefits from East-West trade."

Finally it should be noted that, especially since the reappraisal in 1954, the desirability of a limited control system is a corollary of certain assumptions regarding the imminence of war between the Soviet bloc and the free world, which were described as follows in the opening statement by the United States at the meeting of the Consultative Group in Paris in April 1954.[1]

"No one can assume that the possibility of war has disappeared altogether from view. The risk of war is ever present and must influence our thoughts and our actions in the period that lies ahead. Yet the balance of probability favors the prospect of there being a long period of tension, of watchfulness, of uneasiness in the world - tension short of war but including within it the ever present risk of war.

"Our system of security controls upon trade with the Soviet areas must be fashioned and adapted to the situation which confronts us. A system designed with the imminent prospect of war is not that which we would have devised had we made the assumption which now guides our policies in all related security fields, and has been generally confirmed by the outcome of the Berlin Conference."

2. Criteria for Controls

Before the revision of the COCOM and Battle Act lists in the summer of 1954, there were no officially agreed international criteria for determining what items should be controlled. The COCOM lists were the product of negotiations that began with proposals by the US, the UK and France. In drawing up their proposed lists, the following criteria were employed in selecting items for embargo:[2]

1. USRO, Paris POLTO A-649, April 14, 1954, Enclosure No. 1
2. Consultative Group Paper No. V, Annex A, reproduced from CG Doc. 213, 1950.

"(a) Items which are designed or used principally for the production and/or development of arms, ammunition, and implements of war.

"(b) Items which would contribute significantly to the war potential of the Soviet bloc where the items incorporate advanced technology or unique technological know-how. This applies only to goods sufficiently important to the war potential of the Soviet bloc that the absence of an embargo would permit a significant advance in Soviet bloc technology over its present level of development.

"(c) Items which would contribute significantly to the war potential of the Soviet bloc in that the items, if embargoed, would maintain or create a critical deficiency in the war potential of the Soviet bloc."

For List II (quantitative controls) goods had to be "highly important" in contributing to the war potential of the Soviet bloc in proportion to the quantities exported. Items for List III (the surveillance list) had to be of "potential strategic significance" but on which available information was insufficient to establish the need for embargo or quantitative control.

"War potential"[1] was interpreted as follows:

"War potential is to be viewed from both the short term and the long term aspects. It includes (a) items of direct military application. It may also include, amongst others, selected items which represent (b) sectors of industry in which strategic and industrial interests are very closely mingled and where the items concerned can easily and quickly be turned over from peaceful uses to the manufacture of war equipment or other direct military application and (c) other industrial fields which serve to support the basic economy of a country and which therefore support either a peacetime or a wartime economy."

1. Ibid.

The basis for deciding whether a specific commodity met these criteria varied but in general conventional concepts were used based on American experience to identify goods "of direct military application" and "sectors of industry in which strategic and industrial interests are very closely mingled." Available intelligence was consulted, but was relied upon more for material that could be used in COCOM discussions rather than for conclusive evidence that the criteria were or were not met. Intelligence often could supply information showing the degree of Soviet reliance on imports of particular items (i.e. the ratio of imports to domestic production) but invariably was unable to find that embargo of an item by itself "would maintain or create a critical deficiency in the war potential of the Soviet bloc." Consequently, if an item was regarded as "strategic" in US defense and mobilization planning circles, and if there was any evidence that it was in "short supply" in the bloc, it was likely to be proposed for embargo or quantitative control. Frequently the fact of Soviet bloc imports were taken as evidence of short supply, and while this may be an excellent reason for embargoing any commodity, it does not constitute a basis for selecting between different imports.

In 1954 a very substantial downward revision of the COCOM lists was effected. For this purpose formal criteria were proposed by the US and adopted by the Consultative Group as the basis for the COCOM review.[1] At first glance the new criteria, on the basis of which a substantial pruning of the lists took place, appear not greatly different from the old ones:

"(a) Materials and equipment (by types and grades) which are designed specially or used principally for the development, production or utilisation of arms, ammunition, implements of war and atomic energy materials.

"(b) Materials and equipment (by types and grades) which incorporate advanced technology or unique technological know-how (including production know-how), the acquisition of which may reasonably be expected to permit a significant advance in Soviet Bloc technology in military or atomic energy production over the level of development already achieved or expected to be achieved within a short period.

1. Consultative Group Paper No. XII, Annex B.

"(c) Materials and equipment (by types and grades) in which the Soviet Bloc has a deficiency which is critical in relation to its military capabilities and which it could not overcome within a short period."

The chief difference is the elimination of the references to "war potential" and in general the wording is much more precise. The connotations of the elimination of the war potential target are set forth in a statement by the UK delegation to the CG commenting on the proposed criteria:[1]

"In the United Kingdom view there was no doubt that a substantial reduction in the International Lists was desirable and strategically justifiable in the new circumstances. For example, they believed that the following considerations which were entirely consistent with the criteria proposed in the United States paper (COCOM Document 1563) should be taken into account when deciding on the removal of items for the Lists:

"(a) That the Bloc was, or was becoming, self-sufficient, or produced enough of a particular commodity to be able to satisfy its military needs without difficulty.

"(b) That though an item made some contribution to military potential it was of a general-purpose character and was used for military purposes on a small scale in proportion to its civilian uses.

"(c) That an item served the basic economy of a country and was not closely enough related to military production to justify embargo."

The effect of the 1954 list revision by COCOM was to limit the control system to only those items (1) that make a direct and measurable contribution to the production of military goods and related technology, or (2) in which the Soviet bloc has a critical deficiency in relation to its military capabilities. Since the British interpretation of (1) has been to exclude "multiple use" commodities, i.e., goods which are useful in civilian production

1. Ibid. p. 10-11.

as well as military, relatively few imports qualify under the first criterion (Listing guide (a)). Likewise there were very few cases where (b) advanced technology was cited. The burden of proof for most of the commodities retained therefore rested under (c) -- critical deficiency in relation to military capabilities. Most of the difficult questions and disagreements that have arisen have had to do with listing guide (c). With regard to this criterion the US delegation made the following statement in the Consultative Group:[1]

"The first two listing guides were quite self-explanatory and, at this stage, did not seem to need clarification. With respect to the third listing guide, which would establish the yardstick of a "deficiency which is critical in relation to its Soviet Bloc military capabilities" the term "military capabilities" was intended to include both present and future capabilities. So far as application of these guides was concerned, his Government would expect that, generally and subject to variations in relation to the facts in individual cases, items found to meet either of the first two guides would be considered eligible for embargo and items found to meet the third guide would be considered eligible for embargo, quantitative control, or "surveillance," depending on the facts in the individual case."

This interpretation of military capabilities as comprehending both present and future, was not written into the listing guides. It comes closest to approximating the old criteria with their emphasis on war potential but any such interpretation would have come into conflict with the British interpretation given above which clearly excluded citing a contribution to the "basic economy" as a justification for denial. This conflict, it should be noted, is the locus of a basic contradiction between the criteria as they were applied, and the underlying assumption, referred to above, of "a long period of tension - short of war," the so-called long-haul assumption. Such an assumption implies a set of controls directed not at short-run military capabilities but at the secular expansion

1. CG XII, page 8, iii.

of overall Soviet economic capabilities. For in the long-haul, presumably, the impact of denial of materials and equipment entering into military production can be shifted to other sectors of the economy, whereas controls that impose a cost on the bloc which in effect reduces the overall growth of output may be presumed very broadly to limit military capabilities as the size of the parts are limited by the size of the whole.

If the British interpretation of military capabilities had been rejected it might have been possible instead to interpret listing guide "c" as covering goods which contributed to the long-run growth of overall Soviet economic capabilities. Since it was not, the United States has attempted to justify embargo of some commodities (e.g. rolling mills and copper) under this criterion by construing future military capabilities as referring to military requirements for the commodity in time of actual war rather than as relating to the future growth of economic capabilities in general.

Since none of the pertinent elements of such a hypothetical situation (e.g. when, where, for how long, etc.) have been agreed upon, and since the estimation of military requirements for a commodity even in a war situation is extremely difficult and uncertain this approach has not been very persuasive. In any case there is a flat contradiction between the US and the British interpretations.

3. Effects of Revision

Strictly interpreted the new criteria were bound to produce a radical pruning of the lists. The burden of proof now rested on the supporting justification for each item proposed for retention. It was a heavy burden, too, because the British interpretation not only excluded multiple use items from control--but also precluded controls over basic and heavy investment goods which would contribute to the expansion of bloc industry. Not a great deal is left.

Moreover, each item was considered on its individual merits without any systematic attempt to calculate the aggregate effects on bloc capabilities of the list revision as a whole. The aggregate effect of the list revision

thus had an indeterminate relationship to the decisions in each individual case. When the list review was over it was recognized that in the aggregate the revision went farther than the United States Government had anticipated.

In the field of machine tools and metal working equipment a number of specialized items such as certain types of boring mills and lathes were retained on the embargo list because they met criteria (a) or (c). In the first case the technicians were able to agree that such equipment was designed to be used principally in the production of ordnance, aircraft, or other military items. In many cases the items were more precisely defined and delimited. The items for which critical deficiency was claimed are more subject to question; in many cases the intelligence data did not clearly meet the criterion but the item was retained on an ad hoc basis. General purpose machine tools such as turret lathes were removed from the list and rolling mills were retained on the embargo list only provisionally. The subsequent dispute over rolling mills has demonstrated that the controls erected on the present criteria are extremely limited since many types of rolling mills although basic to heavy industry expansion do not qualify under the criteria. Heavy power generating equipment was kept under embargo but subject to continuing dispute. Rail transportation equipment including flat cars, tank cars and rails were removed from control although the USSR is engaged in a major expansion of its rail transportation system. Copper metal was kept under embargo only under strong protest and bare copper wire was put on List III. Columbium, molybdenum, cobalt, tantalum, titanium and germanium, were kept on the embargo list; the USSR clearly has a deficiency in these metals in relation to the expansion of the Soviet economy, but it would be difficult to prove the existence of a deficiency in relation to military capabilities .

The above description does not purport to be anything but illustrative of the difficulty of meeting the criteria. While a number of special purpose equipment items met the criteria, some items remain under embargo without clearly meeting them, and many items are no longer controlled which must contribute to the expansion of the Soviet bloc's industrial war potential in proportion to the quantities which will in the future be imported.

III. Evaluation of the Present Controls

NSC 152/3 concludes that:

"Over the long term, trade controls though withholding a contribution to the overall Soviet bloc economy, cannot seriously impair that economy. Over the short term and in selected areas, however, there probably is a retardation of the growth of Soviet war potential."

It is not certain that the existing controls actually limit the total volume of East-West trade. Other factors may be equally or more limiting, such as Soviet reluctance to depend on outside sources of supply, and the available supplies of exportable commodities. Most Western European trading partners of the bloc have experienced chronic surpluses in their clearing accounts with the bloc and some have had to restrict exports when their credit balances reached certain limits or to charge interest on amounts in excess of the limits. The bloc has occasionally had to sell gold as in 1953 because of a shortage of sterling. The evidence suggests that the actual levels of imports of the past two or three years have been all the bloc has been willing or able to pay for without using gold and that they have not wanted to use gold on a large scale. It is, of course, true that their willingness to use gold or other commodities would have been greater in the absence of controls. On balance, however, it seems justified to say that the controls have changed the commodity pattern of imports more than they have limited the overall volume of trade. While one cannot know what the level of trade would be in the absence of controls, it is interesting to note that European East-West trade (i.e. trade between European COCOM countries and the European Soviet bloc) was higher in 1954 than in any previous postwar year.

Even if one admits that the controls actually depress the volume of trade, the effect of the present controls is probably slight. The bloc economy is large, highly though not uniformly industrialized, and diversified, whereas the total volume and value of its imports by comparison is very small. NIE-59 concluded in April of 1953 that a complete stoppage of trade from then existing levels would not have a significant effect on the general level of

economic activity of either the bloc or the West and that while some bottlenecks would be created which would reduce production of specific military end-items, most of these would be eliminated and the imports replaced by domestic production within a period of four years. Again NIE 100-3-54 estimated in March of 1954 that a substantial relaxation of controls would increase bloc economic capabilities but not significantly and that the advantage to bloc military potential would almost certainly be small.

Any increase in restrictions on the export from the West of goods actually imported by the bloc is bound to cause some loss to the bloc, if only during a period of readjustment. It is probable that the present controls had their maximum impact during the Korean war period, when bloc demand for military goods rose sharply at the same time that controls were taking effect in actual enforcement by COCOM countries. By now, however, the bloc has had time to make its internal adjustments to these controls, and their long-run impact is certain to be less than it was in the short-run.

The problem, then, is to assess the long-run impact of a continuation of existing controls into a future period of indefinite duration. This impact may be discussed either as a specific loss in military potential, or as a general cost borne by the bloc economy as a whole taking into account substitutions of domestic production for imported items. In other words the most pertinent questions that can be asked about the impact of the controls are these: (1) Is the impact of denial actually concentrated on the intended target, i.e., production of military goods, or is it generalized throughout the economy? and (2) Is the aggregate impact of the present control system the maximum impact that can be obtained per value unit of goods denied to the bloc?

1. Incidence of Effects Within the Bloc

In general it is impossible to identify any goods imported by the bloc which the bloc could not in time and at some cost produce in requisite quantities. One commodity which so far as is known is not produced in the bloc and which has important military uses in the bloc is natural rubber. However, natural rubber has never been effectively controlled because important supplying

countries were outside the control machinery. In almost every other case the bloc has its own production of the commodity (or an adequate substitute) and wishes to supplement it by imports. In few, if any, cases has intelligence been able to demonstrate that the denial of an import would reduce the output of any particular military item in the Soviet bloc. It has been somewhat easier to demonstrate that certain commodities embody a contribution of advanced technology but even here the presumption must be that the technology in question is transferable -- though perhaps at greater cost and delay -- by other means than prototypes.

The present controls have been described as aimed at bloc military production capabilities.[1] However, aiming and firing at a target does not guarantee a hit; the target may move, and shortages may become surpluses. What is certain is that a number of goods remain under embargo which the Soviet bloc would like to acquire and which it would probably have used in its war production industries. There is no way of telling -- beyond mere presumption -- that the denial will limit or depress overall production of military end-items. In most cases it must be presumed that the denial of these goods means that the bloc will produce them itself -- probably at a higher cost -- but the burden may well be shifted and borne by the investment or consumption sectors of the bloc economy, or it may be partially overcome by expanded trade in non-controlled items. This may have a long-run although insignificant effect on the expansion of the bloc's overall economic capabilities but would not affect the industrial potential or military capabilities of the bloc at all in the short-run. In the process of aiming at this narrow military production-target--a number of imports that obviously contribute something to the growth of the Soviet economy have been removed from control. This may have been justified by diplomatic and political considerations but the overall effect on relative economic capabilities--though probably very slight--was surely favorable to the Soviet bloc.

2. Relative Productivity of Present Controls

Contrasted with the incidence of the impact of controls on particular sectors of the bloc economy, there is the question of the aggregate impact or

1. See NSC 152/3, Economic Defense, November 6, 1953 (SECRET), also EDAC D-101, February 8, 1955, p. 4.

cost -- wherever it falls within the economy -- of a given set of controls. If we cannot be sure where the cost is borne, can we at least be sure that, given the degree of multilateral controls politically obtainable, we are imposing the maximum cost on the bloc? At present, of course, we cannot be sure of this since the items selected for control were not selected on this basis. That the present program imposes a cost on the bloc economy follows if one accepts the proposition that the controls limit the total volume of bloc imports and alter their composition. But we have -- at present -- no way of knowing whether and to what extent the bloc will replace the denied goods and how much this would cost the bloc. Put another way, we have as yet no concrete statistical measure of the economic gain to the bloc from the obstructed trade if it were allowed to take place. The cost to the bloc -- the impairment of its overall economic capabilities -- is the loss of thisadvantage which in turn is related to the cost of replacing the imports from its own resources adjusted by the savings involved in not producing the exports to pay for the imports.

In general therefore we cannot distinguish among bloc imports on the basis of their unique contribution to the production of a specific military end-item, and we do not distinguish among imports on the basis of the relative cost to the bloc of replacing different imports. Thus all we can now say about the impact of the present program is that it is a function of the amount of trade cut off and that the greater the volume of trade interfered with, the greater the impairment of bloc economic capabilities.

3. Net Security Advantage

Since the impact of the present program can only be considered in terms of the amount of trade cut off, the denial (or vice-versa) of a single commodity can almost never be justified solely in relation to that commodity but only as a part of a bundle or list of commodities selected to cut down the volume of East-West trade. Thus in terms of our present program it is dubious to speak of a particular transaction or bilateral trade arrangement as involving a net security advantage for the West, insofar as this advantage is conceived of in terms of altered relative economic capabilities. The effect of trade controls on relative economic capabilities can be analyzed, if at all, only in terms of the aggregates involved.

In aggregate terms, the economic advantage of East-West trade is probably greater for the Soviet bloc than for the West. Studies conducted by the Economic Intelligence Committee in connection with NIE-59 provided good evidence that the cost to the bloc of eliminating all East-West trade then (1950-51) being carried on would be considerably greater than the cost to the West. Moreover, considering the bloc's lower level of production and income, the gain to the bloc is relatively greater than the comparison of absolute gains would suggest. Even more important, because consumption is held to a minimum in the bloc in any case, the advantage of trade to the bloc, or conversely the cost of cessation of trade, was thought to be much more directly related to bloc production of both military and investment goods whereas in the West military capabilities could not be said to depend on East-West trade at all. There is no reason to believe that the same is not true with respect to the present level of trade and within fairly wide limits of additions to or decreases from that level.

As far as the economic analysis of East-West trade can be carried, therefore, the net advantage clearly lies with the bloc. In the absence of evidence to the contrary, anything that increases trade between the bloc and the rest of the world increases the bloc's economic capabilities relative to those of the West and vice versa. A particular transaction or set of transactions can only be said to involve a net advantage to the West when political or other non-economic factors are introduced into the analysis; since these are usually non-quantifiable it is only a figure of speech to say there is a net advantage for the United States. What is meant is merely that in a particular case political or other security considerations are overriding.

4. Implications for Policy

The foregoing discussion may be summarized briefly as follows:

1. Trade controls interfere with the composition and probably to some extent with the volume of East-West trade.
2. Trade controls thus impose an economic cost to both the Soviet bloc and the West.

3. This cost is relatively small on both sides but greater for the bloc both absolutely and relatively. In other words, trade controls hurt the bloc more than they hurt the West.

4. We do not know how the impact of trade controls within the bloc is distributed between various sectors of the bloc economy, but it is presumed that the cost falls on both the military and investment sectors.

What this implies for economic defense policy is nothing less than a complete embargo on East-West trade. However, as we have seen such an extreme policy would not be acceptable to other participating countries, and in respect of a number of commodities would probably not be feasible. Political and diplomatic expediency and other practical considerations therefore dictate a limited flexible control program.

The criteria employed in selecting goods for denial under the present control program are unsatisfactory because on the one hand they exclude from control not only basic commodities (raw materials and heavy primary capital equipment) essential to economic and industrial growth, but also many things that enter into military production but also have civilian uses. It attempts to be more selective than our knowledge of the Soviet economy permits; it relies too little on presumption (frequently compelling) and too exclusively on proof (usually non-existent).

Thus we need a new set of criteria more closely aligned with the state of our knowledge of the Soviet bloc economy, more pragmatic, more flexible, more inductive, and where necessary more arbitrary. We need a set of criteria aimed at (1) getting the maximum reduction in the overall volume of East-West trade obtainable in the multilateral framework and (2) imposing the maximum overall cost burden on the Soviet economy for any given reduction in trade volume. We need an approach which is concerned with the overall impact and does not quibble over individual items, which does not argue that this item is hard core and that one is not. Finally, we should recognize that in practically no case where there is disagreement is the effect on the bloc one way or the

other significant enough to justify the loss of good will of any of our allies or the expenditure of high level diplomatic energies that should be devoted to more important issues provided the controls are such as on balance to materially interfere with and reduce the volume of trade.

The following section explores the availability of alternative conceptual approaches to, and criteria for, a limited control program. In the end it may turn out on purely pragmatic grounds that the best limited control system is, with modifications in the direction just outlined, the one we have now. But, to repeat, this judgment is possible only on pragmatic grounds; not on the continued acceptance of an objective distinction between "strategic" and "non-strategic."

IV. Alternative Possibilities in Trade Control Policy

The basic problem in the selection of criteria for trade control is to limit east-west trade to such a degree (and, preferably, in such directions) as to maximize the cost of the Soviet bloc. Limitation of trade could be affected through the control either of exports or of imports.

1. Techniques and Administration

Techniques for limitation of trade may be either non-selective or selective.

a. Non-Selective Techniques

A non-selective technique of export control requires no assessment of the economic impact on the Soviet bloc of the denial of specific commodities or commodity groups, and hence is by far the simplest to administer. Its justification lies in the fact that it is difficult to distinguish the impact of an embargo of one class of commodities from that of another class and that an important consideration is the volume of trade cut off as well its composition. In its ultimate form, namely complete embargo against all sales or shipments of goods and services to the bloc, it would obviously impose the maximum economic injury to the bloc. The advantage of a complete embargo would be its lack of ambiguity, which would make it easy to administer. As pointed out above, however, at the present stage of east-west relations there would be little possibility of making a complete embargo acceptable to other free world nations who would be inclined to regard it as a hostile act.

Furthermore, a complete embargo would provide excellent ammunition for bloc propagandists.

An alternative to complete embargo would be a system of value-quota for free world exports to the bloc presumably using some historical period. Such a device would not offer any formula for maximizing costs to the bloc and would very likely arouse opposition in the free world exporting community because of its arbitrary aspect. The freezing of export relationships on the basis of some historical, base-period, pattern probably would be especially distasteful to countries whose trade relations with the bloc have undegone considerable change.

Another non-selective system of controls would be the limitation of Western imports from the bloc. Since Bloc commodities are sold to the West primarily for the purpose of earning foreign exchange to finance imports, a limitation on bloc foreign exchange earning would achieve the broad purpose of control by limiting total bloc imports. This type of control is currently being applied by the United States against Communist China's exports. Control over western imports would only serve to limit the total supply of western currencies at the bloc's disposal but would not deny it any specific western commodities. Such a program short of a complete embargo of bloc imports also would be very difficult to apply. It would entail most of the difficulties of the value-quota system described above as well as a number of additional ones. It would also probably have to be coupled with an extensive foreign funds control program to be effective.

It should be emphasized that all such non-selective techniques would require an enlargement of the control framework to include countries not now participating in the selective program for otherwise there would be nothing to prevent these countries from acting as entrepots for bloc trade. The present ICDW system would no longer be useful for preventing transshipments.

b. Selective Techniques

Any system based on selective denial of exports to the bloc entails greater administrative costs than a complete embargo because of the necessity for research and negotiation, the processing of export licenses and such. There are also the difficulties of developing dependable criteria for selectivity, arising principally from deficiencies in intelligence concerning conditions within the Soviet Bloc. Some form of selective controls, however, is dictated by the unwillingness of other free world countries to adopt the simplest form of control -- a complete embargo; and by the desirability of maximizing, if possible, within a control system short of a complete embargo, the cost of import denial to the bloc.

Selective controls may apply to refined and detailed lists of specific commodities or narrow bands of commodities, as in the present system, or they may be built around much broader categories.

Controls based on broadly-defined categories are, in most cases, more efficient instruments of an export control program than a system based on narrowly defined commodity items, for a number of reasons: a) they are easier for nontechnical customs officials to enforce; b) a more defensible economic justification can generally be made for such controls than those based on specific commodities; and c) intelligence concerning bloc supplies and

requirements can often be helpful as regards broad categories but is usually not sufficiently complete to permit fine distinctions. Broad categories, on the other hand, are more likely to be considered an "unreasonable" restriction of trade by private commercial interests, who would therefore be inclined to oppose and attempt to circumvent the controls.

A system of selective export controls may be selective, not only of the commodity groups to be controlled, but also of the degree to which each controlled commodity is to be made available to the Bloc. Those subject to control could be either embargoed or subject to quantitative controls with only limited amounts permitted to the Bloc. Quantitative controls, however, add to the expense of administration while at the same time decreasing the cost to the Bloc of import denial. Insofar as the Bloc is permitted to import some quantity of the controlled commodities, it would still be able to satisfy, at least in part, its own most important needs, and only the uses which it considers least urgent would be denied. Thus the cost imposed on the Bloc per dollar of imports denied would not be maximized under a selective system of quantitative controls.

Although any system of selective export control would require continuing study and occasional revision to adjust both to changed circumstances within the bloc and to advances in the state of intelligence regarding the bloc economies, a relatively constant system of control would probably be more advantageous than a system of shifting controls. The latter would probably create as much confusion and difficulty for the free world as for the bloc.

c. Regional Application

A free world embargo of shipments of any single item to the bloc will be successful only if every western country producing the item agrees to enforce the control. Thus a choice of any list of exports to be controlled must consider, in addition to the economic loss it would impose on the bloc, the feasibility of its being accepted by producing countries. Past experience has indicated that the more economically developed countries are more willing to participate in such a program, while the economically underdeveloped countries would be inclined to oppose it. The system most likely to succeed will therefore be one which concentrates on control of advanced industrial products.

If the same controls are not applied to the entire bloc, the least stringent list must be taken as the only appropriate basis for the calculation of the cost imposed on the bloc. This is true because that part of the bloc against which the more stringent controls are aimed can, at least to some extent, obtain western goods through their bloc trading partners who are permitted to import these goods.

IV. 2. Relative Cost Criterion for Selecting Specific Exports to be Controlled

Any system of export controls designed to prevent the bloc from achieving a given level of domestic availabilities of any particular commodity or list of commodities is bound to be frustrated in whole or in part. As earlier pages have demonstrated, bloc resources are sufficiently large and flexible so that it can produce at some cost nearly any item it wants. The impact of controls on the end uses of resources consequently cannot be determined. Thus the only burden of trade controls lies in the limitation they impose on the productivity of bloc resources by forcing the bloc to use larger amounts of land, labor and capital to replace imports. Since trade controls can be effective primarily in raising real costs, a necessary criterion for selecting goods to be controlled is one based on relative real costs. Market values could be used to represent these costs provided that relative prices in the country reflect relative scarcities of different goods, scarcities in relation to one another and in relation to the demand for them.

Calculation of the aggregate cost to the bloc from a loss of trade requires a computation of the difference between the total cost of producing domestically and the total cost of importing the particular quantities of each commodity which the bloc is or would be importing without controls. The difference between domestic and import unit costs, that is, would be multiplied by quantities imported to produce a list of commodity categories ranked according to the different economic burdens, or costs, which an embargo of these commodities would impose on the bloc.

The relative cost criterion by itself, of course, does not tell

where in this schedule the line should be drawn below which gains from trade would be permitted to the Bloc. The imposition of a maximum burden implies a complete embargo, but if something less than the maximum burden is to be inflicted via trade controls, the application of the relative cost criterion enables the imposition of a maximum burden per value unit of trade curtailment.

If ruble and dollar prices could be adjusted to represent real costs, a series of ruble-dollar cost ratios could be constructed which, when considered in conjunction with the ratios of exchange available in international trade, would reveal those commodities which it would be most advantageous to the USSR to import and the loss of imports of which would hence inflict maximum cost. Ruble and dollar costs would be taken as representative of real costs in the Bloc as a whole and in the free world respectively. Ruble-dollar ratios represent the most promising method for measuring relative costs for the purpose of controlling exports so as to impose the maximum economic impact on the bloc. Development and practical use of this technique, however, is greatly hampered by lack of information, particularly about cost factors in the bloc; the difficulty of determining meaningful ruble-dollar ratios for even a selected list of commodities is great. 1/

Less precise indications of relative cost can, however, be obtained to supplement such ruble-dollar ratios as may become available. The technique of interindustry (input-output) analysis can be used to test, and in some

1. See Appendix, "Use of Ruble-Dollar Ratios in Export Control Policy."

cases to add to, relative cost information from other sources. In addition, qualitative information can be adduced in the case of a number of commodities in support of certain levels of relative costs. Prototypes, for example, are not produced in the Bloc and therefore there is no relative cost information on which to measure the gain to the Bloc from importing such items. Because they are not produced, however, they can be assumed to be costly in terms of research and capital resources, and therefore the impact of losing such imports can be assumed to be large. By importing prototypes, the bloc's supply of research ability is enlarged and the necessity for building pilot plants is eliminated. Thus imports embodying advanced technology would be denied to the bloc on the basis of the relative cost criterion.

Similarly, any commodities in which the Bloc has a critical deficiency can be assumed to be subject to very high domestic production costs. If such were not the case, Bloc production would have been expanded to overcome part of the deficiency.

Thus trade controls based on a relative cost criterion would embargo those commodities presently controlled under listing guides (b) and (c), but would also broaden these.

Recommendations.

In the light of the above discussion, although it would be most desirable to be able to draw up a detailed list of upwards of 600 Soviet imports ranked according to the burden which the loss of each would have on the domestic economy, the construction of such a list would require far more price-cost or interindustry relationship information than we now have, or are likely to have in the near future.

Within the range of the feasible, however, two courses of action can be suggested, each of which would require the addition of a new attribute (or attributes) to the existing list. As the entire previous discussion indicates, the criterion of relative costs for determining which western products are to be denied to the Bloc is an economically sound and rationally defensible standard. It is therefore suggested that this new attribute be added to the existing list, either as an addition to existing attributes or as the addition of two new attributes to the present attribute (a) to replace and broaden existing attributes (b) and (c). Listing guide (a) should not be overthrown, not because it is a relatively clear-cut and unambiguous criterion, is relatively non-controversial, and has a considerable justification in conventional thinking. The effect of this would be that items now embargoed under listing guide (a) would be retained in addition to the commodities agreed for control under the new criterion.

In the first case the new attribute would state that, with any desired exceptions, those commodity groups the loss of which would impose the greatest real cost on the economy of the Bloc would be subject to export controls. As

earlier pages pointed out, the relative cost attribute includes all those kinds of items that would be embargoed under the present attributes (b) and (c), but also broadens these.

An alternative to the addition of one radically new attribute would be the rephrasing of present attributes (b) and (c), to include the embargo of all proto-types, on grounds of relative cost and to embargo all other commodities whose production is relatively scarce and therefore high cost, reformulating existing attributes (b) and (c) as follows:

(b) Materials and equipment (by types and grades) which incorporate advanced technology or unique technological know-how (including production know-how), the acquisition of which may reasonably be expected to permit a significant advance in Soviet bloc technology over the level of development already achieved or expected to be achieved within a short period both in military and atomic energy production and in civilian production of commodities basic to the long-run growth of the Soviet economy.

(c) Materials and equipment which are relatively scarce and costly in the Soviet bloc in relation to the expanding long-run requirements of the Soviet economy.

The addition of one new attribute, or the rephrasing of the two existing ones are of course alternative forms of presentation. The same commodity groups would be embargoed regardless of the form chosen.

Within these terms of reference the following two courses of action can be suggested:

1. A list could be constructed of 50 or 60 commodity groups covering nearly all of economic activity and ranked according to the cost which the loss of western imports would impose on the domestic economy of the Bloc. The examination of ruble-dollar price ratios adjusted for cost and aggregated to this degree, will be undertaken as part of intelligence projects already initiated.

At this stage it appears likely that these ratios, representing averages of a wide variety of items of high and low relative costs will be quite similar to one another. It also seems likely, however, on the basis of present knowledge, that certain broad categories will contain almost entirely commodities of high relative costs. For example, almost all non-ferrous metals are high cost items in the Bloc; it would consequently be expected that an average ruble-dollar ratio for such a category would be high. Studies already completed indicate a weighted average ruble-dollar price ratio for the total of Soviet production of approximately 10 to 1. On this basis it can be deduced that any price ratio over 12 to 15 is high, lower than 5 to 7 is low. The correlation between prices and costs for ratios within this range is ambiguous. Nonetheless, in the case of extremely high and extremely low price ratios a presumption exists that costs too may be extreme and therefore the Bloc would derive large gains from imports of those commodities bearing very high ratios.

Within the next twelve months new ruble price and cost studies will be completed. This additional information, together with price data we already have, permits us to examine, in terms of ruble-dollar ratios, important sub-categories of imports within the larger groups already investigated as an

aggregate. Thus ruble-dollar ratios, buttressed by interindustry analysis and the supplementary considerations discussed above may make possible the construction of a list of selected commodity categories, more or less broadly defined, ranked according to relative costs. Such a list of commodity categories and sub-categories must await the completion of studies already underway or planned. Approximately a year will be required.

2. A second course of action, which can be considered as either supplementary to that just discussed, or alternative to it, would lie in the undertaking by the intelligence community to provide ad hoc support upon request. Within the terms of reference of the suggested additional attribute, a limited number of studies could be undertaken of the relative costs of commodities being considered for embargo.

Thus for about 12 months while basic research into costs is being completed, intelligence support would be able to offer nothing systematic or comprehensive, but would only respond to ad hoc requests. After approximately 12 months, however, a systematic presentation could be made, but this would still not be comprehensive in its treatment of sub-categories.

It should be emphasized again that ease of administration and maximization of their impact require that export controls be based on commodity groups rather than on specific commodity items. The more narrowly defined the commodity item, the smaller would be the proportion of total Bloc imports for which it would be feasible to provide relative cost information.

Basing an export control program on commodity groups, however, requires some method for defining and delimiting the groups. Thus if the

Bloc could replace a lost import at little additional cost by the import of a commodity which is a good substitute for the former, the trade control is inflicting little injury. Thus cost information must be supplemented by technical knowledge of the degree to which substitutes can be effectively used to provide the basis for delineating various commodity groups.

In conclusion it seems worthwhile to emphasize again that Bloc imports from the West are such a small fraction of Bloc output that the cost that the West can inflict by trade controls is slight. Loss of the good will of any of our allies would in almost no case ever be justified by the effect on the Bloc of denying them any given item. Thus the negotiating efforts of the US will be much more effectively used if directed toward the breadth and scope of the program rather than toward the inclusion or exclusion of individual narrowly defined commodities.

Appendix

Bases for Choosing Specific Exports to be Controlled.

Trade controls are justified only if they hurt the Bloc more than they hurt the West, both politically and economically. Any program that limits the volume of exchange will impose some loss on the trading partners involved, for trade permits the acquisition of goods with a minimum expenditure of productive resources. The aim of any trade control program, therefore, must involve maximizing the injury or loss imposed on the Bloc with a minimum of loss to the West. In this section, we shall be concerned only with the various possibilities for measuring and defining the economic loss to the Bloc resulting from a curtailment of Bloc imports.

The economic loss, which the cessation of trade in certain items being embargoed would impose on a country, can be defined as the gain which the country had been receiving from trade. The gain from trade can, in turn, be defined as the difference in the amounts of productive resources required for the acquisition of the imported commodities in alternative ways: through domestic production or through the production of exports to be sold in foreign markets in trade for these commodities. The cost to the Bloc of its imports from the West is represented by the productive resources it must devote to producing exports sold to the West. If trade is curtailed, the volume of exports required to finance imports will be smaller and the decline in production for exports will release certain productive resources. The amount of resources required to expand the output of the import-replacing industries, however, will be greater than that released by export contraction, the difference in resource requirements representing the gains from trade. If on the other hand, trade has not been motivated by economic considerations, the resource requirements of expanding the

import-replacing industries may be less than the released resources of the export industries, the difference indicating the cost of the non-economic gains from trade. Here we shall assume that on the whole Elec trade has been economically motivated.

The gains from trade, or the burden involved in a loss of trade can thus be measured in terms of the different amounts of resources required before and after trade to make the same quantities of goods available to the domestic economy. It could also be defined in terms of the different amounts of goods available to the domestic economy from the same quantities of resources before and after trade. In the second case changes in the level of total output (e.g., Gross National Product in constant prices) before and after trade, would be measured rather than the quantities of resources required. Both definitions are essentially concerned with the effects of trade on the productivity of productive resources. Thus a definition of the economic loss resulting from trade controls in essence refers to the difference in the productivity of the economy's resources when used in isolation and when used in conjunction with an international division of labor.

Relative Costs

The measurement of the amounts of resources required to pay for imports and the amounts required for an equivalent domestic production must be in value terms. The proper values to be used are the domestic costs of production of imports and exports. Market values can be used to represent these costs provided that relative prices in the country reflect relative scarcities of different goods, scarcities in relation to one another and in relation to the demand for them. If the price of each input—labor, capital and materials—equals the opportunity cost of the input—that is, the market value of its contribution to output in its best (i.e., most productive) alternative opportunity for employment,

and if the price of each good equals the total cost of all inputs required to produce one unit of the good, then the use of market values would accurately reflect the differences in quantities of resource requirements in terms of their relative scarcities.

Let us assume such a pricing system in both the USSR and the US. Suppose that each country produces two commodities, X and Y under the following costs per unit.

	USSR (Rubles)	US ($)	Ruble/Dollar
X	10	2	5:1
Y	30	20	1½:1

In the USSR, Y costs three times as much to produce as X, or for every unit of Y given up, it could produce 3 units of X. In the US, Y is 10 times as expensive as X, or for every unit of Y given up 10 units of X could be obtained. Under these conditions it would be to the advantage of the USSR to produce Y and obtain X in exchange; similarly, it would be to the advantage of the US to produce X and obtain Y in exchange. If in trade Y will exchange for more than 3 X, the USSR would be better off. Since the US can get 10 X for every unit of Y given up in domestic production, if it could get more than $\frac{Y}{10}$ in exchange in X in trade, it would be better off. Thus an exchange ratio between Y = 3 X and Y = 10 X would benefit each country. These comparative cost relationships are summarized by the ruble-dollar cost ratios of the commodities, 5:1 for X and 1½:1 for Y. Thus the USSR can achieve the greatest gains by importing those commodities for which the ruble-dollar ratios of relative costs are the highest.

The distribution between the two countries of the potential gains from trade will be determined by the rate of exchange between their two currencies (the number of rubles required to purchase one dollar), or by the terms of the barter

agreement by which they trade X for Y. Thus a barter agreement in which Y is exchanged for 6 X would result in a fairly even distribution of the gains from trade, while an exchange of 3 X for Y would confer on the US all of the benefits from trade.

Relative Cost Criterion

Thus the basic effect of trade controls lies in the fact that in order to achieve possession of the same commodities if the opportunity for international trade is denied, the country involved must use larger amounts of land, labor and capital. Since trade controls are effective primarily in raising real costs, a criterion for choosing commodities according to relative real costs would permit the imposition on the Bloc of a maximum economic cost per value unit of goods denied. If, for example, the goal of a control program is the frustration of Bloc demand, the only effective way of accomplishing this goal lies in denying to the Bloc access to those goods which it can produce only at highest cost. Earlier pages have pointed out that if Bloc planners consider a commodity sufficiently important, they can produce it at some cost. Controls, therefore, cannot succeed in preventing the Bloc from acquiring certain commodities; they can only force the Bloc to use more resources to acquire them, i.e., raise the Bloc's real cost. Again, if it were considered desirable to attempt to retard Bloc economic development by means of export controls, this would be most effectively accomplished by denying the Bloc access to the goods which it can produce only at very high relative costs. Then, to achieve the same bill of goods, the Bloc would have to spend more resources on their production. Alternatively, if the Bloc's pattern of final demand is changed to purchase more of Western items which are not controlled, it can be deduced that it has been forced by controls to choose an inferior alternative.

Basing the choice of commodities whose export to the Bloc is to be embargoed on the criterion of relative costs of production requires a computation of the total cost of producing domestically the entire quantity which the Bloc is or would be importing without controls. Differences in unit costs, that is, would be multiplied by quantities imported in order to determine the total burden from trade embargo. If such cost and quantity information were available in detail for every commodity item actually or potentially entering into East-West trade, the increased cost imposed on the Bloc by trade controls over various commodity items would be found to vary smoothly from very high costs to moderately high and low costs for different items. Actually, however, cost and quantity information is frequently available only for commodity categories and industrial groups; consequently the burden imposed on the Bloc by successive commodity controls will be found to vary in steps, or jumps, rather than in smooth gradation.

In putting such a criterion into practice, then, a list of commodity categories can be envisaged ranked according to the economic burden, or cost, which a trade embargo would impose on the Bloc. The relative cost criterion by itself, however, offers no information to aid in determining where, in this ranked list of western exports, the line should be drawn below which the remaining gains from trade would be permitted to the Bloc. The imposition of a maximum burden implies a complete embargo, but is something less than the maximum burden is to be inflicted via trade controls, the application of the relative cost criterion enables the imposition of a maximum burden per dollar of trade curtailment.

As we shall see in the following pages the measurement of relative cost of commodities is severely limited by scarcity of data. It cannot, therefore, be an adequate and workable basis for trade controls by itself. Since there is a strong presumption that the Bloc gains more from trade than the West, the objective of limiting the total volume of trade should be pursued in addition to the

selective embargoing of commodities.

A relative cost criterion would include attributes (b) and (c) of the existing list, for, as is discussed below, prototypes almost by definition are of high relative costs and would therefore be embargoes, and items of critical deficiency are in short supply only because the expansion of their output, if possible, would require extraordinarily large inputs of labor and capital (i.e., relative costs would be high). Since it is desirable per se to embargo military and atomic energy items, the relative cost criterion would be supplementary to the present criterion (a).

Methods for Measuring Relative Cost.

In the section that follows we shall be concerned with various methods for measuring relative costs and the effects of East-West trade in various commodities on Bloc resource requirements.

1). Ruble-Dollar Ratios.

The costs to the Bloc resulting from a loss of trade with the rest of the world in particular commodities can best be judged by a comparison of the net resource requirements for producing these commodities in the two groups of countries, using the US and USSR as representative. If ruble and dollar prices could be adjusted to represent real costs, a series of ruble-dollar ratios could be constructed which, when considered in conjunction with the ratios of exchange available in international trade, would reveal those commodities which it would be most advantageous to the USSR to import and which hence would inflict the maximum cost if their imports were denied. If such adjusted prices could be obtained, and if trade were conducted at more or less predictable prices and rates of exchange, the rule would be quite simple: those commodities with the highest ruble-dollar ratios would be those whose replacement would be most difficult for the Bloc and would hence, if denied in trade, inflict the maximum cost on the Bloc per dollar of imports denied.

In terms of theoretical rationale and the probable results of research efforts, ruble-dollar ratios represent the most promising method for selecting exports to be controlled by the West in order to maximize economic impact. Development and practical use of this technique, however, is greatly hampered by lack of information, particularly about cost factors in the Bloc; the difficulty of determining meaningful ruble-dollar ratios for even a selected list of commodities is great. The use of the ruble-dollar ratio method would have to meet, inter alia, the following problems:

a. In order to be meaningful, ruble-dollar ratios would have to be applied to commodities which are clearly identical. In the case of most basic materials, this would not be a very difficult problem, although qualitative identification is sometimes hard to make. In the case of manufactured goods, particularly machinery, it would be more difficult.

b. Soviet Bloc market prices would have to be adjusted, in the first instance, for the inclusion of the turnover tax, which in these countries is the dominant source of internal revenue and which distorts greatly the price structure as between various groups of commodities. Subsidies should also be eliminated. Inadequate adjustments could entirely distort cost comparisons and thus frustrate the goal of the trade control program.

c. The Soviet Bloc system of fixing prices includes wages and profits in costs, but excludes consideration of rent, depletion and interest, (i.e., the returns to the state-owned factors of production.) Adjustments for these factors would necessarily be somewhat arbitrary, but are necessary in order that relative costs not be distorted.

d. Even with complete knowledge of current costs of production in the USSR and the US, the application of a ruble-dollar cost ratio in an estimate of the

gains from trade implies the assumption that domestic output can be expanded at constant costs. This assumption would, in many cases, require examination, especially where the necessary expansion of domestic output could only be achieved through an increase in existing plant capacity or by the use of marginal mines or lands.

e. Even relatively accurate ruble-dollar ratios would provide information only about comparative costs in the USSR and the US. Their use as guideposts in East-West trade would require analysis of the regional variations, which are considerable, both within the Bloc and among the Free World countries.

f. Relative costs of transportation and the geographic pattern of East-West trade would also have to be determined in order to determine whether the ruble-dollar ratios are meaningful as a guide to actual trade advantage.

g. Use of ruble-dollar cost ratios as a measure of the gains from trade further assumes that, if trade were cut off, the Bloc would react by attempting to replace through domestic production its lost imports. The Bloc will attempt to minimize the cost to itself of lost imports and will be able to do so in some cases by expanding the output of substitutes. The course chosen would depend partly on the level and nature of its own costs of replacing imports, as compared with the cost of expanding the output of substitutes. There will be cases, however, where the proper cost computation would lie in a comparison of the resources required to increase the output of the substitute rather than of the import-competing industry.

h. Most of the information available on Bloc prices and costs relates to the year 1951 and would therefore have to be adjusted for any changes that have occurred in the intervening years.

2). Interindustry analysis.

The technique of interindustry analysis, based on the structure of industrial interrelationships in the USSR, permits an examination of the nature of the

impact imposed on the Soviet economy by the cessation of imports. In indicating the degree and industrial location of both the direct and indirect effects of an expansion of the import-replacing industry, interindustry analysis would aid in locating those commodities, the expansion of output of which would have the largest impact on existing shortages. This technique can also be used to supplement and test estimates of ruble costs derived from other sources and to permit consideration of the production of substitutes for lost imports. Within the next six months there will be available for application an input-output table describing the interindustry relationships among 61 processing and producing sectors into which the total of Soviet economic activity has been classified. Grouping all of economic activity into only 61 industries implies a large amount of aggregation. This further means that very detailed and highly specific definitions of import items cannot be handled. Thus from this table it will not be possible to examine the impact on the USSR of a cessation of imports of copper wire: rather a cessation of imports of all insulated wire and cable would have to be examined, amuch broader category. Or again, the effects of an embargo against the movement of jig-borers to the USSR could not be examined; rather it would be necessary to consider the effects of controlling all imports of machine tools and metal working machinery.

3). Supplementary Considerations.

a. Economic Costs as they have been defined above, disregard the duration of the effect of trade controls. In the case of some controls, the USSR would be able to adjust quickly, either by expanding the output of a domestic industry or by a changed pattern of final demand. In the case of other controls, however, the adjustment period is likely to be of longer duration, and therefore more costly because of disorganizations which exist during any transition period. The results of applying either ruble-dollar ratios or interindustry analysis would have to be amended by time considerations.

b. Prototypes, by definition, are not domestically produced in the Bloc; there is, therefore, no relative costs or impact information existing on which to judge the gain to the Bloc from importing such items. Because they are not produced, however, they can be assumed to be costly in terms of research and capital resources, and therefore the impact of losing such imports can be assumed to be large. By importing prototypes, the Bloc's supply of research ability is enlarged and the necessity for building pilot plants is eliminated. Thus imports embodying advanced technology would be denied to the Bloc on the basis of the gains from trade criterion.

c. Among the more narrowly defined commodity categories for which we have no ruble price, cost or other quantitative data, certain commodities can be deduced to be high cost on the basis of qualitative information. For example, those commodities would be high cost which are produced according to a method of outdated technology, or which are produced on a small scale when US experience indicates the existence of sizeable economies of scale. Or again, any commodities known to be scarce in relation to the Soviet demand for them can be assumed to be the source of sizeable gains from trade. The loss of imports of such commodities would have a significant impact on the domestic economy.

Criticism of D/A paper (1)
7 June 63

The present draft of the D/A paper reflects to a surprising degree some of D/E's earlier comments, for example,

1. "The difficulty of determining meaningful ruble-dollar ratios for even a selected list of commodities is great" (p. 7 + 9) and within 12 mos. new ruble price + cost studies will be completed. (p. 11)
2. The feasibility of any suggested controls being accepted by producing countries must be considered. (p. 5)
3. There is no relative cost data for prototypes which are not produced in the Bloc, therefore no ruble-dollar ratio ~~exists~~ can be calculated. (p. 8 and p. 19 and 23)

The paper is much more realistic and now written suggests inclusion of this additional attribute, "relative cost to existing ones, with consequent strengthening of Premium Criteria."

(over)

Although the paper does not meet the need for objective it is too late to rewrite. In its present form I have no further strong objections considering deadline, except to register dissatisfaction with the approach as a whole