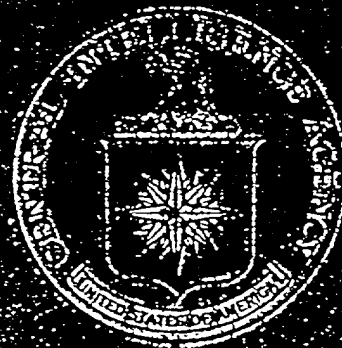


Jan 10 1953
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NATIONAL INTELLIGENCE ESTIMATE

PROBABLE ECONOMIC EFFECTS OF A SEVERANCE OF EAST WEST TRADE



NIE-59

Published 13 April 1953

The following member organizations of the Intelligence Advisory Committee participated with the Central Intelligence Agency in the preparation of this estimate: The intelligence organizations of the Departments of State, the Army, the Navy, the Air Force, and the Coast Guard. The intelligence advisory committee concurred in this estimate on 2 April 1953. The CIA managed the subject being subjects of its publication.

CENTRAL INTELLIGENCE AGENCY

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PROBABLE ECONOMIC EFFECTS OF A SEVERANCE OF EAST-WEST TRADE

THE PROBLEM

To estimate the importance of current East-West trade, and the capability of the Bloc and the West¹ to adjust to its severance.

SCOPE

This estimate relates exclusively to trade now being carried on between the Bloc and the West; it is not concerned with the effects of present trade controls, or with the effects of an increase in the current amount of East-West trade.

The analysis of economic consequences assumes a *complete* cessation of trade. However, it is virtually certain that some, if not many, non-bloc countries would

refuse to cooperate in a complete cessation of trade in any circumstances short of general war. The *over-all* effects of a severance of East-West trade could not be estimated without examining the political reactions to measures to achieve severance. Therefore, it should be emphasized that this estimate does not examine political questions connected with a severance of East-West trade.

CONCLUSIONS²

1. The amount of trade still carried on between the Bloc and the West is so small in relation to the total productive capability of either side that its severance could not have a significant effect upon the general level of economic activity of either the Bloc or the West.

2. Among the goods imported into the Bloc from the West, however, there are

certain items which are of substantial importance to current Bloc industrial and military production. These items include electron tubes and components, certain chemicals, certain types of machinery and equipment with their spare parts, and probably also tin, natural rubber, copper, zinc, and cork. If these items of import ceased to be available, bottlenecks would appear in the Bloc productive system and during a limited period of time adverse repercussions would spread through the economy.

3. A complete cessation of imports and withdrawal of Western shipping services would not bring about a significant re-

¹ The Soviet Bloc consists of the following countries: the Soviet Union, Poland, Eastern Germany, Czechoslovakia, Hungary, Bulgaria, Rumania, ~~and Communist China~~. Hereafter, the Soviet Bloc countries will be referred to as the Bloc. The West refers to all countries in the world other than those included in the Bloc.

² For note on the nature of the evidence available for this estimate, and the related footnote of the Director of Naval Intelligence, see page 13.

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Albania, Communist China & North Korea.

duction in the present gross national product of the Bloc. It would, however, significantly retard the planned increase of Bloc national product in the years immediately after trade severance. During these years, also, production of some specific military end-items would probably be reduced, but the amount of this reduction, and the particular items affected, would depend on Soviet production policies and on the size and rate of the use of Bloc stockpiles of strategic materials. We are unable to estimate these factors.

4. We believe that, with the possible exceptions of natural rubber and electronic tubes and components, the Bloc would be capable of replacing concurrently, within about four years, all goods presently imported from the West. Once this had been done, the effects of a stoppage of imports would become virtually negligible.

5. Within the Bloc, the European Satellites account for more than half the Bloc's trade with the West; the burden of readjustment would therefore fall very heavily on them, and might give rise to additional difficulties in their relations with the USSR. The demands of Com-

munist China upon the USSR for economic assistance would also become more insistent if all supplies from the West were cut off.

6. The physical availability of resources in the West is sufficient to make the economic effects of a severance of East-West trade virtually negligible. An added strain would be imposed on the dollar resources of some Western countries. Appropriate measures, possibly including international allocation machinery and international financial arrangements, would be necessary if those particular Western countries which now trade extensively with the Bloc were not to suffer serious economic dislocations.

7. It is impossible to estimate the strategic, as distinct from the economic, significance of a severance of East-West trade without examining all the political, economic, and other effects of such a severance in the light of the policies and objectives of the Bloc and the West respectively, and the probable nature, duration, and timing of a future war. For this reason we are unable to estimate the relative strategic effects upon the Bloc and the West of a severance of East-West trade.

DISCUSSION

The General Level and Pattern of East-West Trade

8. The value of officially reported merchandise trade between the Bloc and the West for 1952, based on official reports by Western governments, is estimated to be between \$1.6 and \$1.7 billion each way, in 1951 prices. This represents about 1 percent of the gross national product of the Bloc, and about one-fourth of 1 percent of that of the West. Western trade with the Bloc constitutes about 2.5

percent of the total international trade of all Western countries. Bloc trade with the West constitutes about one-third of the total international trade of all Bloc countries.

9. Over and above the officially reported trade summarized above there is a substantial traffic in goods smuggled out of the West into the Bloc, or transferred more or less openly but without being officially reported. The value of such traffic is not exactly known; it may be from 10 to 20 percent as great as the value of

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officially reported trade. So far as possible this irregular traffic has been taken into account in estimating the importance of specific items of current East-West trade. In estimating the capability of the Bloc to adjust to a severance of East-West trade it has been assumed that clandestine and unreported trade will cease together with officially reported trade. Some of the more important items imported into the Bloc, however, such as electron tube components and industrial diamonds, are high in value and small in bulk, and lend themselves readily to smuggling. We cannot estimate the probable amount of such smuggling after a severance of legitimate trade; insofar as smuggling took place it would decrease the effects of a cessation of legitimate trade.

10. East-West trade consists primarily of an exchange of Western capital goods, industrial raw materials and services, for coal and agricultural, forest and mineral products from the Bloc. The West sends to the Bloc not only raw materials but also items produced by advanced technology, labor-saving manufacturing facilities, and skilled labor, and receives in return mainly commodities requiring only limited capital equipment and unskilled labor. The composition of East-West trade is set forth in more detail in Annex A. From these tables it appears that machinery, transportation equipment, natural rubber, chemicals, metal ores and metal manufactures together account for about half of the value of Bloc imports from the West. Western imports from the Bloc consist primarily of coal, grains, fats and oils, and forest products.

11. The Bloc merchant fleet now comprises about 2,500,000 gross registered tons (grt.). Of this total, 518,000 grt. are lend-lease vessels (83 ships, from 3000 to 7000 grt. each) which have never been returned to the US. Seventy-two of these, including 38 Liberty ships, are virtually the backbone of the Bloc long-haul merchant fleet both in European waters and on the route to the Far East. In addition to these lend-lease ships (which in this estimate are accounted as Bloc vessels), an average of 1,500,000 grt. of Western ship-

ping are engaged in carrying cargo either between the West and Bloc or between various ports of the Bloc itself. Five hundred thousand tons of this shipping are engaged in trade with Communist China; of this about two-thirds are used between Communist China and the West, and one-third between Communist China and the European Bloc. Most Bloc vessels trading with Communist China are bunkered with Western fuel and use Western ports en route. Moreover, the Bloc receives other services from the West in connection with East-West trade, including ship repairing and rebuilding, insurance, and banking. During the past year 61 Bloc ships, totalling 300,000 grt. underwent 30 days or more of repair work each in Western shipyards.³

The Importance of Imports to the Bloc

12. It is clear from the figures presented in paragraph 7 that the value of goods annually imported into the Bloc from the West is insignificant in comparison with the Bloc's total economic activity. Considered in the aggregate, therefore, the effect on the Bloc economy of cutting off imports appears negligible. As might be expected, however, some imports are more important to the Bloc than others, and trade severance would naturally have different effects upon different sectors of the Bloc economy. In order to reach conclusions as to the importance of specific imports to the Bloc, it would be desirable to have detailed accounts of the utilization by the Bloc of each separate item imported from the West. We do not have enough data to give such accounts; hence the importance of specific imports to the Bloc will be indicated by a few examples, where information is available. The aggregate effect of cutting off these imports can be approximately assessed by a method of analysis which will be explained below. (See paragraph 29.)

13. A preliminary indication is given in Annex B, which shows the estimated proportion

³ There is evidence that a large number of additional ships are awaiting repair. These cannot be accommodated as long as Soviet yards are devoted almost 100 percent to naval construction.

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that imports of certain commodities and classes of commodities bear to total Bloc supplies (production plus net imports) of these items. It appears from these tables, and from other information, that the Bloc supply of natural rubber and of cork is virtually all imported. Imports of tin provide 29 percent of current supplies; zinc, 10 percent; copper, 10 percent; and lead, 7 percent. Imports of raw wool and rayon account for 9.3 percent and 5.6 percent, respectively, of Bloc supplies of those goods. In the various broad categories of capital goods and manufactured items, imports account for only small fractions of total supplies.

14. The significance of some of the figures in Annex B is limited, however, by the fact that they apply to broad classes of commodities; this is particularly true of the figures on capital goods and manufactures, imports of which form such a small proportion of Bloc supplies. Thus, for example, it can be shown that the Bloc depends upon imports for only about 4 percent of its total supply of machine tools, yet within that 4 percent may be certain types of tools which the Bloc does not make for itself. Thus some specific items of import, though representing a minor share of total imports and an insignificant fraction of the gross national product of the Bloc, may be of greater importance to the Bloc economy than their money values suggest. If these imports ceased to be available, bottlenecks would almost certainly appear in the Bloc productive system, and for this reason the real damage to the Bloc could easily become a multiple of the replacement cost of the import, as the indirect repercussions of its loss spread through the economy.

15. An example of such "bottleneck" import items is furnished by certain components of electron tubes. For its manufacture of electron tubes the Bloc is dependent on the West for various critical materials, such as refractory metals in refined and fabricated forms, and diamond dies for drawing fine wire. In addition, though the USSR has enough electronic mica for its own uses, the Satellites must rely on imports of this material. Roughly the same situation exists with regard to

nickel, especially radio-grade nickel for cathode sleeves. Tungsten wire, essential to the production of electric lamps, is largely obtained from the West. None of these materials represents an appreciable proportion of the total value of Bloc imports, yet an effective embargo on these critical materials would probably cause the Bloc output of electron tubes to drop by 50 percent as soon as existing inventories of these materials were used up. Such a drop would in turn heavily affect the production of radio and radar apparatus. Since the production of electron tubes in the Bloc has been weighted in favor of types for use in military applications, and will continue to be so weighted, a drop in their production would probably have an appreciable effect on military procurement.

16. Another example is that of heavy electrical machinery. Approximately one-quarter of the Bloc's annual increment of heavy electrical machinery is currently imported from the West. Many of the Bloc's industries require this machinery for military or military-supporting production. The submarine program, the steel industry, the atomic energy program, and the railroad equipment industry are examples of strategic sectors of the Soviet economy which would be likely to have difficulties in fulfilling planned output if either the supply of heavy electrical machinery or the output of other basic industries which in turn depend on this supply were curtailed. To a lesser extent the steam and hydraulic turbine industry may be placed in the same category. Denial of imports in this field would have an adverse effect on ship construction, and would limit the proposed expansion of the electric power supply.

17. These examples illustrate the fact that there are, among the comparatively small volume of imports still going from the West to the Bloc, a number of "bottleneck" items, loss of which would cause difficulties to the Soviet economy and to its production of military end-items. A "bottleneck" item of import must have the following characteristics: (a) it must be a commodity of which a substantial proportion of total Bloc supplies is imported, or the stoppage of imports will not be much

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felt; (b) it must have a small number of uses, all of which are important, or the loss of imports may be overcome by small reductions of output in a large number of industries; (c) it must be a commodity for which substitutes cannot easily and quickly be found; and (d) inventories of the item must be small in relation to the requirements for its use.

18. We do not have sufficiently detailed knowledge of the Bloc economy to identify directly all such bottleneck items of import. According to the standard described above, however, current Bloc imports of foodstuffs, textile fibers, iron and steel products, some non-ferrous metals, fertilizer, and a sizeable proportion of miscellaneous goods clearly do not constitute bottleneck items. These commodities together represent about half the value of Bloc imports from the West. We therefore estimate, for the purpose of cost calculations to be made later in this paper, that the remaining 50 percent of the value of Bloc imports represents bottleneck items.⁴

19. The most important bottleneck items of import into the Bloc from the West are almost certainly electron tubes and components, certain chemicals, and certain special types of machinery and equipment with their spare parts. In addition to these finished products certain raw materials — tin, copper, zinc, cork, and natural rubber — are imported to the Bloc in sufficient quantities to suggest that a cessation of imports would cause bottlenecks, if only to a limited extent.

20. To cut off the shipment to the Bloc of "bottleneck" items would obviously cause difficul-

⁴This estimate is probably over-generous, since the Bloc already has considerable production of many goods in the "bottleneck" categories here assumed. Moreover, there is evidence that the Bloc has lately been acquiring capital equipment to produce some of the goods which we now consider to be bottleneck items. For example, the Bloc has recently imported machines for making capacitor paper, diamond dies for wire drawing, and wire drawing machinery. Thus it may be that the Bloc's most critical deficiencies for the manufacture of electron tubes and components, as described in paragraph 15 above, have already been overcome.

ties to the Bloc economy. Yet we cannot estimate the exact impact of such a measure, and in particular we cannot estimate its impact upon the production of specific military end-items. Much of the effect of the embargo would depend upon the policy of the Bloc planners. If, for example, Bloc production of electron tubes were reduced by one-half because of a stoppage of imports, we may presume that the Bloc planners would cause as much of this setback as possible to fall upon the production of civilian radio sets rather than of military radar, but we cannot profitably speculate on the details of the planners' decisions. Likewise, we cannot predict in detail the consequences of a shortage of electric generators in the Bloc arising from a cessation of imports, even though we may presume that these consequences might be made to bear upon other things than the Soviet atomic energy program.

21. Finally, we cannot estimate the immediate effects of a stoppage of "bottleneck" imports because we do not know the size of Bloc stockpiles. Since the Soviet rulers must be aware of the vulnerabilities of their economy, it is a reasonable presumption that they have attempted to provide as far as possible against cessation of critical imports by building stockpiles of the commodities in question. This, as well as needs for current use, may account for the pressure which the Bloc uses in trade negotiations, the clandestine buying, the willingness to pay considerably more than market prices, and the general urgency with which the Bloc seeks to acquire critical materials. We believe it probable that Bloc stockpiles of all critical items would be sufficient to cushion the immediate impact of a stoppage of imports, but we are unable to estimate how long the stockpiles would last, or what the policy of Soviet planners might be with regard to the rate of using them.

Adjustment by the Bloc to Severance of Trade

22. It may be assumed that upon the severance of East-West trade the Bloc would take steps to adjust its economy to the new situation — to compensate as far as possible and as

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quickly as feasible for the loss of imports. We have therefore to estimate: (a) whether and how far such compensation is possible; (b) how long it would take; and (c) how much it would cost.

23. With respect to the first of these questions, we believe that the Bloc is capable of satisfactory adjustment to the loss of imports from the West, given sufficient time and effort applied to the task. During the last three decades the USSR has achieved a productive capacity second only to that of the United States. Its technical and scientific skills, particularly in strategically important fields, have ceased to be markedly inferior, and have proved themselves by the production of jet aircraft, atomic bombs, and many less conspicuous accomplishments, to be of a high order. The Bloc can draw on the diversified resources of an entire continent, and on the technical skills of Germans, Czechs, and others to supplement the Soviet capability. We therefore believe that the Bloc could, in time and at a cost, reallocate its resources, develop the new or expand the old facilities and techniques as required, and produce for itself the goods now imported from the West or acceptable substitutes. It is in this connection that the aggregate value of these imports becomes significant; it is so small in relation to the total of Bloc resources that the Bloc's ability to achieve ultimately a full economic adjustment to the loss of Western imports is almost self-evident.

24. The next question relates to the time required for the Bloc to replace lost imports,⁶ and to break the bottlenecks caused by a severance of trade. The answer to this question must of course be a matter of judgment; it cannot be demonstrated. We believe that within four years the Bloc could expand its production sufficiently to replace any single presently imported commodity except natural

⁶The phrase "to replace lost imports" is inexact. It is used for convenience in this estimate to mean the expansion within the Bloc (or the West) of existing production, and/or the building of new facilities, sufficient to produce goods of the type and in the amount formerly imported, or acceptable substitutes for such goods.

rubber. Most of these imports, considered individually, could be replaced in less than four years. We further believe that, with the possible exceptions of natural rubber and electronic tubes and components, the Bloc would be capable of replacing all of these imports concurrently within about four years.

25. Replacement by the Bloc of imports of natural rubber presents a special problem. We believe that the Bloc could, within three years, produce an amount of synthetic and reclaimed rubber equal to the amount of natural rubber now imported. For some essential uses, however, there is no presently known substitute for natural rubber. The Bloc stockpile of natural rubber is estimated sufficient to last five years at present rates of usage. If natural rubber were confined to the most essential uses, primarily airplane tires, the stockpile would probably last about ten years. We believe that the Bloc would be able, before the exhaustion of its stockpile of natural rubber, either to find a Bloc source of natural rubber or to develop substitutes which would be adequate for all essential uses.

26. The fact that a bottleneck was broken in a given period of time would not mean that the effects of that bottleneck, in their repercussions through the economy, would be instantly cancelled. In a sense the damage could never be made up, for Bloc production would permanently remain somewhat less than it would have been had the interruption not occurred. As the years passed, however, and Bloc production continued to increase, the proportion of this permanent shortfall to the total of production would diminish to a negligible quantity.

27. We believe that most of the indirect and multiplied effects of a stoppage of bottleneck imports could be overcome by the Bloc economy within about four years after the stoppage occurred. In other words, the significant effects of a severance of trade upon the Bloc could not be expected to last more than about four years. However, the actual duration of these effects might in specific instances be longer or shorter because it would depend to a great degree upon the decisions of Bloc

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planners. They might, for example, choose to replace certain imports at a slower rate in order to reduce the annual cost of doing so. Our estimate, therefore, is of what it would be possible for the Bloc to accomplish, not necessarily what it would in fact accomplish.

28. Finally, there is the question of the aggregate economic cost to the Bloc of a severance of trade, or, in other words, of the effect of a severance of trade on general Bloc economic capabilities. Calculation of this cost for the long-run period, i.e., the period after full adjustment to the loss of imports had been completed, can be made with fair confidence. In the process of replacing imports, resources would have to be transferred from other more productive uses, including those resources formerly used to produce goods for export to the West, to import-replacing industries. These resources would be used to increase output in existing plants, to expand productive capacity, and in some cases to develop new materials as substitutes. Having made these adjustments the Bloc would find itself with an allocation of resources different from what would have existed in the absence of trade severance. The gross national product would be lower than it otherwise would have been, and this reduction in gross national product would be the annual economic loss to the Bloc. We believe that the annual costs to the Bloc of a complete severance of trade, after adjustment to the severance was completed, would be about \$900 million, representing about 0.4 percent of Bloc gross national product in the early years after full internal adjustment. The percentage would thereafter decline as Bloc national product continued to increase.

29. It is more difficult to calculate the annual aggregate cost to the Bloc during the four years immediately following trade severance, when the adjustment would be taking place. Presently available data are inadequate for a confident estimate. To the gradually increasing cost of replacing lost imports must be added the gradually decreasing cost arising from the non-availability of previously imported commodities. In estimating the latter, moreover, allowance must be made for

"bottleneck" effects, by which the cost of an unreplaced import is multiplied because of the repercussions which its loss produces throughout the economy. On the basis of the limited data available, we believe that costs for each of the four years within the period of adjustment to a complete severance of trade would be roughly as follows: 1.3 percent of gross national product in the first year after trade severance; 0.8 percent in the second; 0.6 in the third; and 0.5 in the fourth.⁶ We consider that these percentages might vary from one-half to twice the figures here given. It has elsewhere been estimated that the increase of Bloc gross national product during the year 1953-1954 will be slightly less than 6 percent. It follows that an immediate and complete severance of East-West trade would probably reduce this increase to about 4.5 percent. The retardation of growth might remain appreciable for several years thereafter.

30. The nature of the principal Bloc imports, and of the resources required to build up capacity to replace them, indicates that the short-run impact of the adjustment would probably fall more heavily on the armaments and capital goods industries than on the civilian consumer goods sector of the economy. The combined production of armaments and capital goods might, in the first year after trade severance, be from 2 to 6 percent less than it would have been had the trade continued. In subsequent years the impact on these sectors of the economy, like that on the economy as a whole, would progressively diminish.

31. The foregoing discussion of Bloc adjustment to a severance of trade has not considered the strains which the adjustment might impose upon the Bloc planning and administrative system. For example, the European Satellites account for more than half the Bloc's trade with the West; the burden of readjustment would therefore fall very heavily on them, and might give rise to additional

⁶In making this calculation, it was assumed that 50 percent of the value of Bloc imported items represented "bottleneck" imports, and to allow for their bottleneck effect upon the economy the direct value of their loss was multiplied by three.

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difficulties in their relations with the USSR. The demands of Communist China upon the USSR for economic assistance would also become more insistent if all supplies from the West were cut off. To estimate the force and effect of these political and administrative difficulties is beyond the scope of this paper; their probable existence nevertheless needs to be pointed out.

Adjustment by the Bloc to Withdrawal of Western Shipping

32. A complete severance of East-West trade would terminate the present employment of all ships, both Bloc and Western, engaged in carrying goods between Western and Bloc ports. It would also presumably involve withdrawal from Bloc service of those Western ships now carrying goods under charter between ports of the Bloc, and denial of bunkering, repairing, and other shipping services now furnished by the West to the Bloc.

33. The Bloc would be faced with problems of adjustment in two distinct sectors: trade between European Bloc ports, and trade between the European Bloc and Far Eastern ports. These two sectors require separate consideration.

34. If all trade between the West and the Bloc were stopped, about 300,000 gross registered tons of Bloc shipping now carrying cargoes between European Bloc ports and the West would be freed from this employment. Including lend-lease ships, this tonnage would be more than enough to make up for Western shipping now carrying dry cargo between ports of the European Bloc. Even without lend-lease ships, Bloc tonnage freed by severance of East-West trade would probably still be equal to the amount withdrawn by the West.⁷ However, the Bloc would not in either case have enough tankers to replace those chartered from the West which are now

⁷The possibility that the USSR might decide under certain circumstances to limit the use of lend-lease ships is referred to in SE-37, "Probable Effects on the Soviet Bloc of Certain Courses of Action Directed at the Internal and External Commerce of Communist China," paragraph 31.

engaged in the oil trade between Black Sea ports and the Baltic and Arctic ports. We believe that the resulting additional load on Bloc railways could be handled.

35. Current seaborne imports into Communist China are estimated at about 1.4 million tons per year, of which perhaps 75 percent arrives in Western ships. We believe that an additional amount as great as this is within the present maximum capacity of the Trans-Siberian railroad and the connecting lines into North China. The transportation facilities of Communist China, including Bloc coastal shipping, would be adequate to distribute this tonnage, though some additional strain would be placed upon the Chinese railroads. Since some Bloc shipping would still be available for traffic to be carried between the European Bloc and Communist China, withdrawal of Western shipping would not in itself affect the Bloc's capability of maintaining the present volume of trade between Communist China and the rest of the Bloc. It is unlikely, however, that if East-West trade were severed all present imports into Communist China from the West would be replaced from Bloc sources. Thus the total volume of Communist Chinese imports might at least initially be less than at present.⁸

36. Withdrawal of bunkering and other services presently furnished by the West to the Bloc would reduce the efficiency of the Bloc merchant fleet and require adjustments in Bloc shipyard employment. Most Bloc vessels trading between Europe and the Far East would have to be fuelled from tankers at sea. This would have to be done at the expense of the Bloc's domestic petroleum lift. Additional fuel would have to be transported by the Bloc to the Far East, either over the Trans-Siberian railroad or by tankers. Bloc shipyards would be forced to convert certain facilities from naval construction to merchant ship repair and replacement.

⁸For more detailed discussion of this problem, see SE-37, "Probable Effects on the Soviet Bloc of Certain Courses of Action Directed at the Internal and External Commerce of Communist China."

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37. We cannot estimate in detail how Bloc planners would allocate available shipping to various routes if Western shipping and services were withdrawn. There would be a loss of efficiency due to an inadequate number of long-range ships and increased repair time on those available. Communist China's external trade would probably be reduced, and the planned expansion of the Communist Chinese economy delayed. We believe that the problems of adjustment presented to Bloc planners could in time be solved, but that during the period of adjustment additional strains would be placed on the Bloc's internal transport system and costs would increase because of the greater expense of land transportation.

Adjustment by the West to a Severance of East-West Trade

38. The physical availability of resources in the West is sufficient to make the economic effects of a cessation of East-West trade virtually negligible, if successful arrangements are made for reallocation of these resources among the countries concerned. It is estimated that Western European coal imports from the Bloc account for only 1.6 percent of total Western European coal consumption; bread grain imports for only 2.4 percent, and coarse grains for only 3.3 percent. Moreover, the West imports nothing from the Bloc which could not be replaced from Western sources, either in kind or by acceptable substitutes, if trade with the Bloc should cease. There would be no bottleneck problems worth mentioning. No appreciable curtailment of essential production would be necessary.

39. To some Western countries, however, current levels of trade with the Bloc are important. In 1952, about 20 percent of the foreign trade of Finland, and about 10 percent of that of Austria, was carried on with the Bloc. Finland relied on imports from Poland for two-thirds of its coal consumption, Sweden for 28 percent, Austria for 15 percent, and Denmark and Italy for 7-8 percent. In the crop year 1951-1952, Finland bought more than 30 percent of its supplies of food grain

from the Bloc, Norway 20 percent, and Egypt about 10 percent. The United Kingdom obtained 12 percent of its coarse grain supplies from the USSR. These imports are advantageous to the receiving countries primarily because alternative supplies of these commodities would have to be paid for mainly in dollars.

40. Some of the commodities now exported by Western countries to the Bloc are produced at relatively high cost, and the producers have been enabled to make these exports because the Bloc has paid premium prices or has made advantageous barter trade concessions. In such cases, special difficulties might be encountered in adjusting to the cessation of East-West trade. In 1951, Finland sold 69 percent of its commercial exports of machinery in Eastern Europe, Austria 40 percent, Sweden 22 percent, and Italy 16 percent. Soviet orders also proved attractive to some of the European shipyards. More recently, Ceylon sold one-third of its rubber output to Communist China, at a price which was only slightly higher than the world market price. In this case, Communist China's willingness to conclude a long-term agreement to supply rice in exchange for rubber was an important factor.

41. If the various Western countries thus affected were not to suffer serious dislocation of their domestic economies from a severance of East-West trade, they would have to be provided with imports in place of those they now receive from the Bloc and to be assured of markets in which to sell the products they now sell to the Bloc. In the long run these problems might be solved as Western trade naturally settled into new channels, so that imports were bought from, and exports sold to, Western countries rather than the Bloc. Such a development would have its difficulties, and would require adjustments such as lowering the prices of the exported goods, shifting production to other goods, and changing marketing practices. If the general level of Western trade remained high, these adjustments could probably be accomplished in about two years. There would be some permanent cost, because some commodi-

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ties would always be more expensive if procured in the West than if purchased from the Bloc. This cost would be low, however, and would scarcely be a perceptible proportion of the gross national product of the West.

42. In the short run, while this adjustment was being made, the United States would have to be the chief Western supplier of commodities such as coal and grains which are now procured from the Bloc. These commodities would have to be paid for in dollars. As an indication of the magnitude of this problem, we estimate that if current East-West trade were suddenly and completely severed, Western Europe alone would have to incur an additional dollar expenditure of about \$300 million in the first year after the severance, if its imports from the Bloc were to be fully replaced. This estimate makes allowance for the additional dollar earnings (or savings) which would result from the retention in the Free World of goods which are now exported to the Bloc.

43. The greatest problems of the West in adjusting to a severance of trade with the Bloc would be political and administrative rather than strictly economic. The willingness of Western governments and peoples to make the necessary adjustments—to give and to receive financial aid, to alter trade channels, to lower trade barriers, to seek new export markets, to use substitute materials, to set up and operate international machinery for the allocation of resources—would depend on many factors, including the circumstances under which East-West trade was severed. These problems, like the corresponding ones for the Bloc mentioned in paragraph 31 above, lie beyond the scope of this estimate, important though they would probably be to the success of the adjustment.

Relative Strategic Effects of a Severance of Trade upon the Bloc and the West

44. A decrease or cessation of East-West trade would be economically disadvantageous to both the Bloc and the West. The preceding discussion indicates that it would, from a purely economic point of view, almost certainly be more disadvantageous to the Bloc than to the West. It does not necessarily follow, however, that a decrease or cessation of East-West trade would afford a net strategic advantage to either side. Such calculations can be usefully made only in relation to given situations or policies: whether peace or war is contemplated; whether war is to be short or long; whether it is to be begun immediately or after a lapse of time; where it is to be fought; what weapons are to be used; what allies are to be cultivated.

45. For these reasons we are unable to estimate the relative strategic effects upon the Bloc and the West of a severance of trade. For example, we have not examined the political and social disturbances in the West that might under various circumstances attend a severance of trade with the Bloc. Even if we had done so, however, we could not weigh their strategic significance against such opposing factors as the retardation in the Bloc's economic growth that a severance of trade would produce. It is impossible to determine the strategic significance of a severance of East-West trade without examining all the political, economic, and other effects of such a severance in the light of the policies and objectives of the Bloc and the West respectively, and the probable nature, duration, and timing of a future war.

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ANNEX A

BLOC IMPORTS FROM THE WEST, JANUARY - DECEMBER 1951

	<i>Percent</i>
Foods, beverages and tobacco	6.8
Fats and oils	1.3
Crude rubber	12.8
Raw cotton	7.6
Raw wool	6.8
Other fibers and textile mfrs.	7.4
Iron ore, iron and steel and mfrs.	6.9
Non-ferrous ores, metals and mfrs.	2.4
Chemicals	8.6
Machinery	14.4
Transport equipment	6.7
Other exports	18.2
TOTAL	<u>100.0</u>

WESTERN IMPORTS FROM THE BLOC, JANUARY - DECEMBER 1951

	<i>Percent</i>
Foods, beverages and tobacco	29.8
Fats and oils	9.9
Forest products and mfrs.	6.8
Textile fibers and mfrs.	8.0
Coal	13.0
Non-metallic minerals (excl. coal) and mfrs.	3.6
Chemicals	3.3
Ferrous and non-ferrous metals and mfrs.	1.8
Machinery and transport equipment	2.9
Other imports	20.8
TOTAL	<u>100.0</u>

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ANNEX B

RATIO OF NET BLOC IMPORTS OF SELECTED COMMODITIES
TO ESTIMATED TOTAL SOVIET BLOC SUPPLIES¹ IN 1951

COMMODITY	UNIT OF QUANTITY	SOVIET BLOC NET IMPORTS 1951	SOVIET BLOC SUPPLIES 1951	RATIO OF NET IMPORTS TO SUPPLIES ² 1951
Cork	000 MT	28.300	28.300	approx. 100.00
Crude rubber (natural and synthetic)	000 MT	177.300	411.700	43.1
Tin	000 MT	6.115	21.115	28.96
Copper	000 MT	36.100	359.700	10.00
Zinc	000 MT	23.800	246.800	9.64
Wool	000 MT	24.910	269.110	9.26
Lead	000 MT	11.300	169.300	6.67
Storage and primary batteries	000 MT	3.000	49.270	6.09
Ball and roller bearings	000 bearings	6.978	114.978	6.07
Electrical & electronic test equipment	000,000 1950 rubles	11.156	190.156	5.87
Rayon	000 MT	11.800	209.400	5.65
Fish catch	000 MT	125.000	2,325.000	5.38
Cotton	000 MT	80.413	1,589.900	5.00
Mercury	000 flasks (76 lbs)	1.372	30.772	4.46
Telephone and telegraph	000,000 1950 rubles	20.000	479.000	4.18
Iron ore	000,000 MT	1.379	55.994	2.46
Timber	000,000 cu. meters	.188	12.158	1.54
Aluminum	000 MT	7.300	302.400	2.41
Radio and television receivers	000,000 1950 rubles	7.264	324.764	2.24
Naphthalene	000 MT	1.580	77.380	2.04
Crude petroleum and refined petroleum prod.	000 MT	700.000	48,868.000	1.43
Plates and sheets	000 MT	92.000	6,868.900	1.33
Caustic soda	000 MT	4.3555	521.255	0.83
Steel rails	000 MT	19.000	2,658.000	0.71
Tungsten	MT	71.000	10,211.000	0.70
Electric motors and generators	000,000 1950 rubles	30.100	4,507.000	0.66

¹ Production plus net imports.

² Reported net Soviet Bloc imports of steel structural shapes, animal fats and oils, steel wire and wire rods, cattle, pig iron, professional electronic equipment, vegetable oils, meat and meat products, power and distribution transformers, cotton yarn, sulfuric acid, cobalt, wool yarn, bauxite, chromite, cresols, and nitric acid accounted for less than one-half of one percent of total current Soviet Bloc supplies of these commodities in 1951.

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NOTE ON THE NATURE OF EVIDENCE
AVAILABLE FOR THIS ESTIMATE

This estimate rests mainly on an analysis by the Economic Intelligence Committee, based on evidence which in many respects is deficient. As is indicated more specifically at appropriate points in the Discussion, all estimates must be regarded as rough orders of magnitude, subject to considerable margins of error. These margins are wider for the short-run than for the long-run estimates.

With due allowance for these margins of error, however, we believe the conclusions¹ as stated are valid.

¹The Director of Naval Intelligence believes that the conclusions of NIE-59 should be viewed with caution. The evidence on which they are based is in many respects inadequate and tenuous. The subject of the Soviet Bloc economy embraces wide areas of information which are either withheld from our knowledge or are purposely distorted as a matter of Soviet policy. Available evidence in this field derives to a great extent from Soviet claims or published statistics where the possibility of substantial error and the likelihood of deliberate deception exist. It is further

believed that this estimate tends to emphasize Bloc economic strength and adaptability by stressing the relatively minor quantitative effects of denial of Western imports without sufficiently exploring the qualitative effects or the weaknesses and vulnerabilities of the Bloc economy. This tendency, together with our inability to estimate the strategic effects of trade severance creates an impression of Bloc economic invulnerability and self-sufficiency which is incompatible with past and present Bloc efforts to obtain imports and services from the West.

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