

CONSEIL DE L'ATLANTIQUE NORD  
NORTH ATLANTIC COUNCIL

EXEMPLAIRE

COPY

N° 191

ORIGINAL: ENGLISH  
15th February, 1960

NATO CONFIDENTIAL  
DOCUMENT  
AC/89-D/29(Revised)

SUB-COMMITTEE ON SOVIET ECONOMIC POLICY

LONG-TERM ECONOMIC TRENDS IN NATO COUNTRIES AND  
IN THE COMMUNIST BLOC AND THEIR IMPLICATIONS FOR  
THE ATLANTIC ALLIANCE (1)

Note by the International Secretariat

SUMMARY

The purpose of the present paper is to examine the prospects for future economic growth in NATO countries and in the Communist bloc. The data given in the paper are based on studies made by governments, international organizations and private economists and are considered a fair consensus of expert views on future long-term economic growth. In view of the vital importance to NATO of events in the underdeveloped areas of the world, the Sub-Committee found it advisable to supplement the comparative study with a brief section on possible economic developments in the underdeveloped countries during the period in question.

2. The main conclusions of the paper are as follows:

Relative position of NATO countries and the Eastern bloc

(a) The relative position of the Soviet bloc<sup>(2)</sup> economy as compared with that of NATO countries will further improve in the period ending in 1975.

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- (1) The present report brings up to date the previous studies on comparative economic trends in the NATO countries and in the Soviet bloc, (see C-M(54)99, C-M(55)119, C-M(56)131).
- (2) The Soviet bloc should be understood to include Russia and the European Satellites. References to China are made separately.

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- (b) The Soviet bloc growth will be especially rapid in the industrial sector which will expand substantially faster than that of NATO countries.
- (c) China will emerge as a major industrial power in the world and her heavy industry may even reach third rank among industrial countries.
- (d) By 1975 the national product of the Soviet bloc will exceed by about 18% that of European NATO countries; it will constitute 47% of the national product of all NATO countries.
- (e) The difference in standard of living between North America and most European NATO countries on the one hand and the Soviet bloc on the other will be reduced although the Western advantage will not disappear.
- (f) There seems to be no chance that the USSR will overtake the United States in living standards and per capita industrial output by 1970, as boasted by Khrushchev.
- (g) The present margin between the Soviet and United States rates of increase in output per head will probably be reduced; the Soviet rate of expansion will decline somewhat, while that of the United States is expected to rise.

Implications for the underdeveloped countries

- (h) In the underdeveloped countries the rapid growth of the Sino-Soviet bloc will provide a striking demonstration of the efficiency of communist methods and an effective propaganda argument for the communists. At the same time, the growing economic potential of the bloc will increase resources available for the Soviet economic offensive in these countries.
- (i) The growth of the NATO countries will provide increasing markets for the traditional exports of underdeveloped countries. It would be wrong to expect however that increased exports will go a long way towards satisfying the popular aspirations for improvement in the economic conditions of these countries.
- (j) The real test in the underdeveloped world will be the ability of these countries to achieve economic progress and industrialisation without adopting Communist methods. Unless the peoples of these areas become convinced that their own political systems are also capable of bringing about noticeable economic progress and especially industrialisation it will be difficult to avoid that some underdeveloped countries choose Communist methods.

- (k) Trade with and aid from the West is of paramount importance for the economic development of the less-developed countries. Future success or failure in their struggle against poverty will to a large extent depend upon policies adopted by Western countries.

3. Some implications for NATO (1)

- (a) Military: the Soviet economy will continue to be sufficiently strong to provide the economic base for the military strength which the USSR authorities decide to maintain in the light of political developments.
- (b) Propaganda effects in Western countries: the continued rapid growth of the Soviet economy will inspire respect for Soviet achievements. The propaganda effect in developed Western countries will probably be limited.
- (c) Foreign Trade: although Soviet trade, especially with selected countries will increase substantially, it will still in 1975 constitute a relatively small percentage of world trade.

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(1) Studies of these problems could be undertaken in NATO if so desired.

INTRODUCTION

4. A great deal of time and thought has been devoted in recent years by governments and international organizations, as well as by private economists, to the examination of the prospects for future economic growth of different countries of the world. In spite of inevitable divergence of views, there is on the whole fair agreement on what these prospects might be, given reasonable assumptions on possible future events.

5. The Sub-Committee on Soviet Economic Policy considers that the estimates presented in this paper are a fair consensus of expert views on future long-term economic growth. In view of the repercussions which changes in the relative position of the economies of NATO countries and of the Sino-Soviet bloc may have on the position of the Alliance, the Sub-Committee wishes to draw the attention of the Economic Committee to the estimates presented in this paper.

6. The estimates of future economic growth are based on the following assumptions:

- (a) that the present geographical boundaries of the Atlantic Alliance and of the Soviet bloc(1) will remain unchanged;
- (b) that there will be no major war;
- (c) so far as the NATO countries are concerned, it is assumed that there will be no deep and widespread economic recession and no disruption of raw material supplies;
- (d) the assumption is also made that overtaking the West will remain a primary goal of economic policy of the Soviet bloc.

7. Any attempt to compare levels of total output in different countries raises special difficulties, especially between countries whose economic structure differ widely, as do those of the NATO and Soviet countries. The composition of output varies between countries, reflecting, for example, differences in the techniques used, or in tastes; the prices paid for specific goods and services vary widely. Different methods of comparison are possible, which will give rise to somewhat different results.

8. Although estimates in this paper have been given as single figures and not as ranges, they should be interpreted allowing for the margin of uncertainty which is inevitable in forecasts of this kind. The Sub-Committee feels that the difficulties

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(1) The Soviet bloc should be understood to include Russia and the European satellites. References to China are made separately.

in comparing countries with different economic structures and the margin of uncertainty in forecasting do not affect the main conclusions of the paper.

9. The table below shows for NATO countries and the communist bloc rates of growth in recent years as well as the rates on which forecasts in this paper have been based.

NATO and communist bloc annual rates of expansion

	<u>1951 - 1958</u>	<u>1958 - 1975</u>
United States and Canada	3.3 <sup>(1)</sup> %	3.6%
NATO Europe	5.0 %	3.7%
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USSR	6.7 %	5.8%
Satellites	6.5 %	5.0%
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China	6-11(2)%	7.9%

Differences in NATO and Soviet bloc rates of expansion

10. The Russian economy has been expanding very fast in recent years. Western students generally estimate this rate of growth at 6.7% between 1951 and 1958; some estimates are even higher, ranging up to 8-9%. The Soviet rate of economic growth seems to have exceeded that of all NATO countries, with the single exception of Germany which, at the beginning of the period, was still effecting a very rapid but delayed post-war recovery.

11. The Russian economy's rapid progress has been made possible by the ability of the government to restrain the growth of standards of living, and to devote to investment a large share (about one quarter) of total resources. Investment has been concentrated on sectors most likely to contribute to increases in output, in particular on industry; investment in housing and other social investment has been kept very low. The large natural resources of the Soviet Union have facilitated industrial growth; this growth has also been assisted by a rapid increase in the labour force, and by large transfers of surplus labour from agriculture.

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- (1) The rate for the United States and Canada has been calculated for the years 1951-56; for 1951-58 the rate of growth, influenced by the 1957-58 recession, was 2.3%.
- (2) Estimates for the rate of economic growth of China vary widely; see, for example, Ta-Chung Liu in *American Economic Review*, May 1959 and Wilfred Malenbaum, *American Economic Review*, June 1959.

12. The growth of the Russian economy has been particularly rapid in the industrial sector; Western estimates give rates of 8-9% per year, and it is to be expected that industrial production in the USSR will expand by about 7% per year in the future. Although the growth rate is thus declining it will still be substantially above that of NATO countries.

13. It is to be expected, however, that the Soviet rate of economic growth will decline in future. New social forces are exerting themselves, which the present leaders are trying to direct and contain. The government has, however, been led to pay greater attention to the needs of the Russian people, notably by granting greater priority to housing and agriculture and by reducing working hours. The government is also faced with a sharp reduction in the rate of increase in the population of working age, reflecting the reduction in the birthrate during the war years; this problem is, however, temporary, and the situation will improve again around 1964. All these problems have been affecting the rate of growth of the economy and will continue to do so in future. However, the recently announced intention of demobilising 1.2 million men should help to improve the manpower situation during this period. Another factor to be kept in mind is the existence in the USSR of a large manpower reserve in the agricultural sector of the economy. Recent development suggest that the Soviet government has been coping fairly successfully with the question of increasing productivity; the educational reform may well pay substantial returns and the introduction of mass production methods of certain key products, such as machine tools, has been very successful according to some Western observers. It would, therefore, be imprudent to expect a sudden sharp decline in the Soviet rate of economic growth.

14. The economic prospects of the satellites seem less favourable than Russia's. Eastern Europe is not so rich in raw materials as the Soviet Union. The small satellite economies are vitally dependent on foreign trade, and have been unable to far to achieve the degree of international specialisation which is necessary to the achievement of a high level of productivity. They have, in particular, been unable to develop and to share their natural resources effectively. Unless they can in future develop effective methods of co-operation, including rational pricing methods in foreign trade, it is likely that their future economic growth will only with difficulty match that of Russia.

15. Some decline in the rate of expansion is also likely in the European NATO countries. Some of them will experience, like Russia, a decline in the rate of growth of their labour force, resulting from the reduction in the birthrate during the war years.

In most NATO countries resources are now fully used; a trend towards a reduction in working hours has begun in many countries. These developments will, however, be offset at least to some extent by the great increase in investment of recent years, and probably also by the progress in international specialisation of the European economies which current efforts at economic integration should make possible. For the Six it has thus been estimated that an additional increase of GNP of 0.5% per annum may result from the creation of the Common Market. These factors have been taken into account in the present report by estimating the future rate of growth at 3.7%, somewhat higher than the estimates published in April 1959 by the OEEC.

16. In the United States and Canada, it is expected that the rate of economic expansion will remain close to the level achieved since 1950. The rate of increase in the labour force in those countries will rise somewhat, and it is considered that this will offset to a large extent the influence of any factors, such as further reductions in working hours, which might slow down economic expansion in future.

17. Any forecast of economic growth in China is particularly difficult; for example, there is some possibility that the extremely harsh policies of the government will eventually lead to a strong popular reaction. There is no sign of this, however, and so far the Chinese Communist government has gradually established very complete control over the country. In view of the present underdeveloped status of the Chinese economy, it is extremely difficult to make meaningful forecasts for the growth of the GNP of China. If the Sub-Committee has included a figure of 7.9% per year in the table in paragraph 9 above this has been done fully knowing that little weight should be given to it. More meaningful in this context are indications of future industrial developments in China. It would be unrealistic to assume that the communist leaders will not be able to impose on their people the sacrifices required for achievement of their ambitious policy of industrialisation. On this assumption a rate of growth of industrial production as high as 15% might well be sustained over the greater part of the period considered.

#### Changes in the relative position of NATO countries and of the Soviet bloc

18. The main chance which is to be expected in future will be a further improvement in the relative position of the Soviet bloc as compared with NATO countries.

Projected Gross National Products

<u>Total NATO = 100</u>	<u>1958</u>	<u>1975</u>
1. Total NATO	100	100
United States and Canada	61	61
NATO Europe	39	39
2. Soviet Bloc	34	47
USSR	24	34
Eastern European Satellites	10	12
3. China	7	13

The total output of the Soviet bloc, which now represents about 34% of that of NATO countries, is likely to increase to about 47% of their output in 1975. The most striking change will be in the economic balance in Europe; it appears likely that by 1975 the national product of the Soviet bloc will exceed by 18% that of European NATO countries; at present the output of these countries still exceeds that of the Soviet bloc by about 15%.

19. There seems to be not the slightest chance, however, that Russia will fulfill the "basic economic task" assigned her by Khrushchev of overtaking United States levels of productivity and living standards by 1970 at the latest. The following table gives a comparison of GNP per head in NATO countries and in the Soviet bloc.

Gross National Product per Head  
(1958 dollars)

	<u>1958</u>	<u>1975</u>
Total NATO	1,698	2,687
United States and Canada	2,502	3,631
NATO Europe	1,131	1,922
Soviet Bloc	869	1,708
USSR	908	1,792
Eastern European Satellites	786	1,510
	<u>Total NATO = 100</u>	
Total NATO	100	100
United States and Canada	147	135
NATO Europe	67	72
Soviet Bloc	51	64
USSR	53	67
Eastern European Satellites	46	56

Output per head in the USSR in 1958 was little more than half the United States level, although 1958 was a recession year for that country. Over the long term, output per head in the United States has grown very regularly by about 2% per annum, and there is no apparent reason why this trend should change. To achieve her proclaimed "basic economic task", the rate of increase of productivity in the Soviet Union - now about 4-5% per annum - would nearly have to double - a quite impossible goal.

20. The Soviet Union is unlikely to match the United States, even in the output of industry, the sector to which she is likely to continue to give the highest priority. Her relative position will improve; Russian industry, which is at present a poor second to United States industry, will by 1975 have closed much of the gap.

21. Expected changes in standards of living merit special attention, since it is in terms of standards of living that many people, including those living in underdeveloped countries, will tend to judge the accomplishments of the Soviet and Western economic systems. A reduction in the advantage in standards of living now enjoyed by North America and most European members of NATO is indeed likely to take place, although this advantage will not disappear completely. It is possible that consumption per head in some of the more prosperous cities of the Soviet Union, and in such East European countries as East Germany and Czechoslovakia, will approach the level reached in North Western Europe. The difference in living standards in the West and in the Soviet bloc is, however, not only quantitative, but also in the range of choice offered to consumers; and it remains to be seen whether planning methods in the Soviet bloc will become sufficiently flexible to provide goods and services as varied as those sold in the West.

#### The position of Communist China(1)

22. It has already been mentioned that in this connection figures for Chinese GNP have little meaning since they can hardly be compared with similar figures for developed countries. Still the fact remains that a most striking change on the world economic scene is likely to be the enhanced world position of the Chinese economy and, in particular, of her industry. As a result of the policies of forced industrialisation followed by the communist leaders, China will by 1975 have emerged as a major industrial power; her heavy industry may by then be the third in the world and her total industrial output might approach the present industrial output of the USSR - though by 1975, Russia's industrial output will, of course, have risen considerably.

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(1) For a detailed description of recent economic trends in Communist China and of future prospects, see document AC/89-WP/56.

23. China's industry is at present not only rather small, but also technically weak. China produces little heavy equipment, precision machinery, complex electronics apparatus. She has few engineers, and these engineers often lack experience. China, therefore, remains even today closely dependent on Russia and the East European satellites for the technical aid and vital supplies of equipment which are required for her development programme. The vigorous efforts which she is making to remedy these weaknesses are, however, reducing this dependence rapidly; China's dependence on the Soviet bloc for technical aid and supplies of machinery will not disappear for a long time, but there is a good chance that by 1965 at the latest it will have become of secondary importance for the development of the economy.

24. Such achievements will require the accumulation of formidable quantities of capital; they will also require extreme concentration of investment resources on production capital, to the neglect of investment in housing and other social construction. Industry will have to continue to enjoy priority; agriculture will probably receive only the resources absolutely essential to provide for minimum food requirements and necessary exports. The estimates made in this paper of the possible future growth of the Chinese economy, therefore, seem consistent only with maintenance of standards of living at, or only slightly above, their present very low level.

The position of the underdeveloped countries of the Free World

25. No attempt to forecast the world economic situation in 1975 would be complete if it did not deal with the situation in the underdeveloped countries, the more so since NATO governments have to an increasing extent stressed the importance to NATO of developments in these countries. The very wide gap in living standards between developed and underdeveloped countries is one of the most serious problems facing Western countries. Since the war, the rate of economic growth in the underdeveloped areas as a whole has increased above the pre-war level. Population growth in these areas, however, has risen sharply and the gap in income per head in developed and underdeveloped countries has continued to widen.

26. For the underdeveloped countries the rapid rate of economic growth in the Sino-Soviet bloc is a striking demonstration of the efficiency of communist methods and an effective propaganda argument for the communists. As it seems that the Chinese and Soviet bloc economies will continue to expand faster in future than those of NATO countries this situation will not change. This will be particularly serious during periods of recession in the West, when the communists will be able to give the impression that Western free economies are rapidly losing ground as compared with those of the communist bloc. The growing economic strength of the Soviet bloc also makes it easier for the communists to find the resources required to expand their economic offensive in the underdeveloped world.

27. Whether the underdeveloped countries will eventually remain part of the Free World will depend to a large extent on their ability to increase their rate of economic growth without adopting Communist methods. Economic growth and industrialisation are increasingly being regarded by the peoples of these countries as among the chief tests of successful government. It is decisive for the political stability of these areas that noticeable progress be made in this direction in the next 15 to 20 years.

28. It has often been stated that steady growth of the NATO countries' economies with the resulting increasing demand for primary commodities will be an important contribution to economic progress in the underdeveloped areas. However, on the basis of past trends it seems that this demand will increase only by some 2-3% (maximum 4%) per annum, i.e. only slightly above the increase in population in the areas concerned. Prospects for countries producing different commodities vary widely. Oil producers, for example, will fare much better than producers of tropical foods. On the whole, however, it must be recognised that although increased trade in primary commodities resulting from a steady growth in the West will make development of underdeveloped countries easier to achieve, it would be wrong to expect that this increased trade would be sufficient to solve the basic problem of underdevelopment.

29. It has been suggested that the underdeveloped countries should try to increase their foreign exchange earnings by exporting light industrial goods to the West. If this solution is adopted its consequences for certain industries in the West must be faced in a realistic manner. Increased competition from newly established industries in developed countries will cause hardships to some industries in the West. There may be some doubts about the extent to which Western countries are at present willing to accept these consequences.

30. It seems unlikely that the Sino-Soviet bloc will become a really large market for underdeveloped countries, unless present policies change drastically. Communist countries now account for less than 3% of the trade of these countries; their economic policies, as reflected in current long-term plans, remain bent on autarchy. The imports of the bloc from underdeveloped countries will probably continue to increase, perhaps quite rapidly; but it seems very unlikely that they will amount to as much as 10% of the trade of these countries in 1975. Communist bloc trade with these countries may, however, continue to be concentrated on a fairly small number of countries, for whom the bloc would, therefore, be a major trading partner.

31. NATO countries are also contributing to the economic development of underdeveloped countries by providing large amounts of capital. Their total aid and loans to, and private investments in, underdeveloped countries have risen rapidly, and now represent around 5 to 6 billion dollars per annum. Aid from the Sino-Soviet bloc, which now represents about 5% of capital supplied by the West, will increase substantially in the next few years; but the Sino-Soviet bloc will almost certainly remain a much smaller source of capital for the underdeveloped countries than the West, although in individual countries Soviet aid may well exceed that of the West.

32. Western aid and capital exports now account for about 20% of the foreign exchange receipts of underdeveloped countries, and finance possibly as much as 30-40% of net investment in those countries. These supplies of capital are, therefore, playing a very large role in helping underdeveloped countries to increase the rate of expansion of their economies.

33. It is, of course, impossible to foresee how this flow of capital from NATO countries into the underdeveloped areas will develop in future. It should be noted that close to half of the total represents private capital, and does not represent a burden for the public finances of NATO countries; the flow of private capital is likely to prove very sensitive to the state of political relations between NATO and underdeveloped countries and to the economic climate in these countries. This flow will also slow down if a widespread recession affects the ability of underdeveloped countries to repay their debts and the profitability of those primary producing industries into which much of the private capital is invested.

34. Those capital supplies, however, absorb only a small fraction of the resources available to NATO countries - less than 1% at present, although the proportion varies substantially from country to country. At the same time, these supplies of capital are playing a considerable role in assisting the efforts of underdeveloped countries to achieve a higher rate of growth without adopting communist methods. In the long run, underdeveloped countries will have to provide most of the resources needed for their development, but this will take time. For many years to come - until 1970 at least - NATO countries will be required to provide a large fraction of the funds needed to speed up development of those areas.

OTAN/NATO  
Paris, XVIe.

METHODS AND SOURCES

I. PREPARATION OF FIGURES ON GROSS NATIONAL PRODUCT AT MARKET PRICES FOR 1958 IN DOLLARS

(a) Concepts

1. The definition of gross national product or expenditure (at market prices) used in the report conforms in essentials with that given in "A Standardised System of National Accounts"(1). For the purpose of real product comparison certain modifications are necessary (2) which affect mainly the expenditure classification. These may best be described by giving the expenditure components:

Consumption covers personal expenditures on goods and services, and government expenditures on health and education.

Gross Investment covers private as well as public gross fixed asset formation, change in inventories and the surplus or deficit on the current account of the balance of payments.

Military outlay comprises all defence expenditures covered by the NATO definition. The official Russian budget figures have been adjusted as far as is known to include the cost of military police, military instruction and research, military installations and special weapons.

Administration includes all government purchases of non-military goods and services except those for health and education.

(b) Conversion into a common currency

2. For conversion of estimates of national expenditure into a common currency, official exchange rates are unsuitable, and some method such as that used in the OEEC study - "An International Comparison of National Products" - must be followed. This involves securing appropriate quantities, prices and values for as detailed a breakdown of the gross national product as is possible for any two countries to be compared, and then weighing the quantity data of each country with the prices of first the one and then the other. This produces two indices of the real product relationship which will diverge the greater the dissimilarity of the national outputs and the price structures of the two countries (3). When more than

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(1) Published by the OEEC, 1952

(2) Comparative national products and price levels, Milton Gilbert and Associates.

(3) E.g., the GNP of Italy expressed as a percentage of the GNP of the United States is 10.3% when valuation is made at United States prices, and 6.9% when valuation is made at average European prices.

two countries are compared, the number of indices obtained increases and in fact rapidly becomes quite large.

3. It is difficult, therefore, to use this method of revaluation of gross national expenditures in a common currency to obtain straightforward, unambiguous results. The most attractive method - although it is not free from theoretical objections - is to use some method of averaging. This has been tried by the OEEC, which has for example used "average European prices" in comparing the economies of different European countries and of the United States. The OEEC has also proposed to use as the best index of the relative level of two countries' gross national products the geometric average of the ratios between these products, measured first at the first country's prices, and then at the second country's prices.

4. In the present paper, the figures for gross national products of the satellites, Western Europe and the USSR are based on methods of averaging which to some extent make it possible to avoid over-weighting of output of particular countries. These methods have the disadvantage, however, that the comparisons, which are not made in a single set of prices, are to some extent ambiguous.

(c) The NATO Countries

5. The data on gross national product and its sectors are based for most of NATO countries on a study prepared for OEEC by Milton Gilbert and Associates: "Comparative National Products and Price Levels" (countries included in that study are: Denmark, United Kingdom, Norway, Belgium, France, Netherlands, Germany, Italy and the United States). For countries not included, account has been taken of the similarities between their economies and those of countries included in the study and having similar economic structure. The ratio between the gross national product of North American and Western European NATO countries is equal to the geometric average of the ratios obtained by weighting output of the two groups of countries first in United States prices, and then in West European prices. Data in the OEEC study are expressed in United States \$ 1955; they have been converted to United States \$ 1958 by using appropriate price indices.

(d) The USSR

6. For the USSR, country contributions to this report were used which expressed output in 1957 prices. The ratio between the gross national products of the United States and of the USSR is equal to the geometric average of the ratios obtained by valuing the outputs of the two countries first at United States, and then at Soviet prices; to convert them into 1958 United States dollars, Soviet expenditures' figures were multiplied by a price index for United States national expenditures in 1958, 1957 = 100.

(e) The Satellites

7. The estimate of the satellite gross national products are based on country submissions. The ratio between satellite and United States gross national products were obtained by using Western European quantity weights for valuing satellite output. This gives an estimate intermediate between the estimates which would result from use of satellite and United States quantity weights. The figure thus obtained has been adjusted to make it, as far as possible, comparable to figures given for NATO Europe.

(f) China

8. Revaluation of China's output in United States prices, or of the United States output in Chinese prices, can have no real meaning, for the difference in levels of development between the two countries is too great. For this reason, China's gross national product has been converted into dollars by using the official exchange rate of 2.46 Yuan per dollar.

II. ASSUMPTIONS AND METHODS USED IN THE NATIONAL PRODUCT PROJECTIONS

(a) NATO countries

9. The assumptions underlying the projections are that there will be no major war and that there will be no severe and general economic depression.

10. Projections rest on assumptions about the character of the economic and political situation in the future. It is expected that development in future will generally be in line with growth since the end of the war.

11. For European NATO countries, it is expected that the current high rate of growth, which is much in excess of the long-term trend, will be more or less maintained; allowance has been made, however, for a slowdown in expansion of Germany, whose rate of growth in the recent past was exceptionally high. The present trend toward a reduction of working hours is expected to continue, and this will also reduce somewhat the increase in the gross national product.

12. The OEEC study: "Gross National Product and its composition in 1965 and 1975" Paris, 30th April, 1959 (DT/E/EN/58.107) prepared by the "Working Party of Energy Advisory Commission" proposes two rates of growth; one more optimistic and one less optimistic. It has been felt that even the optimistic projection for European countries (an average increase in gross national

product of 3.2% per year) is too low. In the present paper it has been assumed that European gross national products will increase by 3.7% per year on the average; this estimate takes into account the beneficial results which are likely to accrue from the present efforts towards European economic integration.

13. For the United States and Canada, the projections are largely the same as those in preceding studies by the International Secretariat dated 31st October, 1956 and entitled: "Committee on Soviet Economic Policy, Comparison of Economic Growth in the Soviet Bloc and in NATO Countries," (AC/89-D/11 and its Addendum 2 and Annex II, the latter dated 12th November, 1956). These projections assume that the total gross national product of the United States and Canada will increase in future by 3.6% per year on the average.

14. It has been considered that the slower growth of the United States economy during the years since the study was due to special short-term factors (1957-58 recession) rather than to a weakening in the basic dynamism of the American economy. Canada and the United States have been treated as an aggregate. While their economy differs in many aspects, their close economic relations justified such a procedure.

(b) The USSR

15. The projection of Soviet economic growth was based on an assessment of future prospects of the Soviet economy, contained in a recent National Planning Association study(1). This assessment is based on the following reasoning:

- (1) it is difficult to find in Soviet history any sustained period of "normal economic growth," on which projection of future trends might be based. The most relevant "normal period" seems to be the years 1951-58;
- (2) over this period, industrial production has risen swiftly, although at a declining rate, amounting to about 10.5% per annum over the years 1951-55, and 9.5% per annum for 1951-58 as a whole. Agricultural output at first stagnated, but began to rise quite rapidly about 1953-54. Estimates of the rate of growth of the national income vary, according to the weight given to agriculture and services; while most observers agree to a rate of 6.7%, some go as high as 8 to 8.5% per annum;
- (3) in future, official Soviet plans seem to imply a

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Communist Economic Strategy, prepared by A. Nove

further decline in the rate of growth of industrial output. For agriculture, faster growth seems called for;

- (4) the expectation of a further decline in the rate of industrial growth seems in fact justified by a number of factors which are likely to retard Soviet economic development:
- (i) reduction in the emphasis on the "growth inducing" heavy industry;
  - (ii) the impact of the low birthrate of the war years on the rate of increase of the labour force. This factor will affect the Soviet rate of growth for a few years only, however; after 1964 the population of working age will once again rise rapidly;
  - (iii) development of additional natural resources is becoming more difficult. There are practically no virgin lands left to be opened up for agricultural production without substantial investments; exploitation of the large natural resources of the East will require costly investment to create the necessary infrastructure;
  - (iv) there is less scope than previously for borrowing Western techniques, now that Soviet industrial efficiency has reached a fairly high level;
- (5) the study also lists a number of favourable factors:
- (i) the educational effort will pay dividends, both in improving the quality of the labour force and in facilitating technical development;
  - (ii) Soviet planning, with its great opportunities for standardisation and assured long runs, may prove very suitable for the development of automation. Automation will also be facilitated by the lack of strong workers' organizations;
  - (iii) the development of Siberian resources, although initially very costly, may eventually pay off handsomely;
  - (iv) there remains much surplus labour in agriculture; this represents a manpower reserve on which it

should prove possible to draw in future;  
provided the present trend towards a more  
rational organization of agricultural production  
is not reversed;

- (6) it would be absurd to pretend that these and other factors can be systematically weighted to obtain scientific predictions of growth rates. The assumptions underlying the study may not be completely fulfilled; unforeseen events may occur. An element of personal judgment must enter into any assessment;
- (7) on the whole, however, it seems warranted to expect that the Soviets will be able to sustain a rate of industrial growth approximately 8% per annum. For agricultural production, the growth rate is unlikely to exceed 4% per annum. The overall rate of increase of output may be around 6% per annum. (In the study, a rate of 5.8% per year has been used.)

(c) The Satellites

16. It was felt that the most realistic way of projecting the growth of the satellite economies would be to start from the rate of growth projected for the Soviet Union, and to assume that the rate for the satellites would be somewhat lower;

- (1) the satellites have been following, and are likely to continue to follow, policies closely following the Soviet pattern. Even Poland, which has departed from the Soviet models in some ways, continues to give priority to heavy industry, and followed the Soviet example when Russia decided to speed up the growth of her chemical industry;
- (2) these policies, however, cannot be expected to result in a rate of economic growth matching that achieved by Russia;
  - (i) methods of foreign trade in the satellites are inefficient. Progress made in furthering a rational division of labour between various satellite economies has been insufficient, and continues to encounter difficulties. This will slow down the introduction of automation, techniques of mass production, etc.;
  - (ii) natural resources in the satellites are limited; they are not shared as they should be between the

different countries, because of the inefficiency of foreign trade mechanisms. This will distort the pattern of development of these natural resources, by forcing some satellites to produce goods which might be produced more cheaply elsewhere;

(iii) there is almost no movement of capital and labour between the satellites. Thus East Germany, with a highly-developed industry, will suffer from a labour shortage at the same time as Bulgaria suffers from scarcity of capital. In Russia, on the other hand, large transfers of labour and capital across the country can be made freely if necessary to speed up economic growth;

(3) it has been assumed that the gross national product of the satellites would grow by 5% per year, i.e., less than the 5.8% rate projected for Russia.

(d) China

In appraising China's future economic strength, the main emphasis has been placed on an assessment of the possible growth in industrial production. It is considered that comparisons of gross national product between countries where levels of development are so different as are those of China and the developed countries of the West are not very meaningful.

The basis of the projections has been set out in the International Staff paper: The Chinese Great Forward Leap(1), which describes the current development policies of the Chinese authorities. This paper suggests that the Chinese Communists have found an effective way of using the vast manpower resources of the country, while conserving scarce resources of capital and skilled labour to the greatest possible extent. In favourable circumstances - and in particular if the pressure imposed on the people does not lead to a revolt - these policies seem capable of giving rise to very high rates of industrial growth.

It is, of course, difficult to predict what that rate of growth might be; but a guess has been made that the rate might amount to about 15% until 1970, and about 10% in the five following years. This rate of growth is less than that achieved between 1952 and the first half of 1958 - and, of course, far less than that achieved in the second half of 1959 and in 1960, at the height of the forward leap. It is, however, higher than that rate achieved by Russia in the

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(1)

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initial period of her five-year plans, until her growth was checked by the purges and by the rearmament effort. But, it can be argued, that China's leaders have far better control over the population than Stalin ever did, and that their present policies in overcoming the two main obstacles to rapid industrial growth: the capital and skilled labour shortages.

Assuming such a rate of growth, it seems that by 1975 China's industrial output will be of the same order of magnitude as those of the United Kingdom, West Germany and Japan (1), and might well exceed them in heavy industry.

The projections of industrial output can serve as a basis of a rough guess concerning the growth in China's total gross national product. This estimate is based on value added at Chinese prices, which may overweight industry as compared with agriculture and services; and, of course, use of different weights might have led to a lower estimate of the rate of increase of the gross national product. However, any conceivable system of weights would be to some extent unsatisfactory, because there is no really meaningful way of measuring output in constant prices when the composition of this output changes as rapidly as in China.

The table below assumes that:

- (a) value added in agriculture was roughly equal in 1958 to the value added by industry, transport, handicrafts and construction, and that value added by government and consumer services half the value added by either of these two sectors;
- (b) the output of the industry, transport, handicrafts and construction sector will grow somewhat less than output of industry alone (13% and 8% instead of 15% and 10%);
- (c) agricultural output will increase at the same rate of population, or possibly slightly faster;
- (d) urbanisation will require output of services to grow substantially faster than population.

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(1) See AC/89-WP/62, comparison of industrial output in China, Japan, the United Kingdom and West Germany.

	<u>Rough Estimate of value added in 1958</u> (weights)	<u>Average Yearly Increase in Output</u>		<u>Estimated 1975 Output</u>
		<u>1958-70</u>	<u>1970-5</u>	
Agriculture	40	3%	3%	66
Industry, trans- port, construction, handicrafts	40	13%	9%	252
Government and consumer services	20	5%	5%	45
	<u>100</u>			<u>363</u>
			(7.9% per year)	

### III. POPULATION PROJECTIONS

#### (a) Total Population

17.9 The statistics on population for the NATO European countries are from the OEEC report of 30th April, 1959, mentioned earlier. The 1958 figures have been obtained by interpolation.

18. For the United States, Canada, the USSR, the East European satellites and China, use was made of the statistics in the United Nations publication: "Accroissement della population mondiale dans l'avenir," New York, 1958. The 1958 figures for these countries were also obtained by interpolation.

#### (b) Population of Working Age (age group 15-64)

19. For NATO European countries, the population of working age was calculated on the bases of the OEEC report: "Demographic Trends in Western Europe," 1956. The ratio between this population and total population for 1951 has been applied to the total population for 1955 (OEEC report of 30th April, 1959) to estimate the population of working age for that year. The 1958 data have been obtained by interpolation. For 1965 and 1975, the changes envisaged by OEEC in its report of 30th April, 1959, have been used in projecting the figures.

20. For Canada and the United States, the statistics on the population of working age are from the OEEC Statistical Bulletin of March, 1959; for Canada, statistics have been extrapolated for 1958, 1965 and 1975, while those for the United States have been extrapolated for 1958 and 1975.

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IV. PHYSICAL PRODUCTION

21. The figures for 1957 for NATO countries have been taken from the OEEC General Statistical Bulletin, July 1959. For Russia and its East European satellites, the statistics are from the United Nations Statistical Year Book, 1958 and for certain products from the Soviet Plan Fulfilment Reports.

22. Projections of physical production have been based on the following sources:

- (a) Soviet bloc countries, physical output in 1965; estimates are based on available plans;
- (b) Soviet bloc countries, physical output in 1975; it has been assumed that the % increase in the 10 years 1965-75 would equal the increase planned for the 8 years 1957-65. This allows for some reduction in the rate of industrial expansion;
- (c) for European NATO countries, projections are based on OEEC estimates(1);
- (d) for North American NATO countries, the projections are basically identical with those in the previous study, AC/89-D/11, table 7.

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(1) EAC(58)3, Energy Advisory Commission, Provisional projections of fuel demand and imports in 1965 and 1975.

TABLE I  
POPULATION  
1958 - 1975

A r e a s	Projections		
	1958	1965	1975
(1)	(2)	(3)	(4)
		(millions)	
1. Total NATO	460.5	491.5	534.2
United States and Canada	190.4	210.3	239.3
Other NATO Countries	270.1	281.2	294.9
2. Soviet Bloc	306.1	339.6	391.9
USSR	208.1	234.0	275.0
Eastern European Satellites	98.0	105.6	116.9
3. Communist China	636.0	720.0	894.0
		<u>1958 = 100</u>	
4. Total NATO	100	107	116
United States and Canada	100	110	126
Other NATO Countries	100	104	109
5. Soviet Bloc	100	111	128
USSR	100	112	132
Eastern European Satellites	100	108	119
6. Communist China	100	113	140
		<u>Total NATO = 100</u>	
7. Total NATO	100	100	100
United States and Canada	41	43	45
Other NATO Countries	59	57	55
8. Soviet Bloc	66	69	73
USSR	45	47	51
Eastern European Satellites	21	21	22
9. Communist China	138	146	167

TABLE II  
POPULATION OF WORKING AGE  
1958 - 1975

A r e a s	Projections		
	1958	1965	1975
(1)	(2)	(3)	(4)
		(millions)	
1. Total NATO	299.1	315.8	340.2
United States and Canada	115.0	126.6	147.0
Other NATO Countries	184.0	189.2	193.2
2. Soviet Bloc	208.5	232.6	268.4
USSR	142.5	160.3	188.4
Eastern European Satellites	66.1	72.3	80.0
		<u>1958 = 100</u>	
3. Total NATO	100	105	114
United States and Canada	100	110	128
Other NATO Countries	100	103	105
4. Soviet Bloc	100	111	128
USSR	100	112	132
Eastern European Satellites	100	109	121
		<u>Total NATO = 100</u>	
5. Total NATO	100	100	100
United States and Canada	38	40	43
Other NATO Countries	61	60	57
6. Soviet Bloc	70	73	79
USSR	47	51	55
Eastern European Satellites	22	23	23

TABLE III

GROSS NATIONAL PRODUCT

A. PROJECTED GROWTH

A r e a s	Indexes 1958 = 100		
	1958	1965	1975
(1)	(2)	(3)	(4)
1. Total NATO	100	128	184
United States and Canada	100	128	182
NATO Europe	100	129	185
2. Soviet Bloc	100	146	252
USSR	100	148	261
Eastern European Satellites	100	141	229
3. Communist China	100	170	364

TABLE III (Cont'd)

B. PROJECTED NATIONAL PRODUCTS

A r e a s	1958	1965	1975
(1)	(2)	(3)	(4)
	<u>billion 1958 dollars</u>		
1. Total NATO	781.9	1,004.2	1,435.8
United States and Canada	476.3	610.1	869.0
NATO Europe	305.6	394.1	566.8
2. Soviet Bloc	266.0	388.8	669.4
USSR	189.0	280.5	492.9
Eastern European Satellites	77.0	108.3	176.5
3. Communist China	52.2	88.9	190.1
	<u>Total NATO = 100</u>		
4. Total NATO	100	100	100
United States and Canada	61	61	61
NATO Europe	39	39	39
5. Soviet Bloc	34	39	47
USSR	24	28	34
Eastern European Satellites	10	11	12
6. Communist China	7	9	13

The rates of growth used are as follows:

United States and Canada : 3.6  
 NATO Europe : 3.7  
 USSR : 5.8  
 Eastern European Satellites: 5.0  
 Communist China : 7.9

TABLE IV  
GROSS NATIONAL PRODUCT PER HEAD, 1958, 1965, 1975  
 (1958 dollars)

Areas	1958	1965	1975
(1)	(2)	(3)	(4)
1. Total NATO	1,698	2,043	2,687
United States and Canada	2,502	2,901	3,631
NATO Europe	1,131	1,401	1,922
2. Soviet Bloc	869	1,145	1,708
USSR	908	1,199	1,792
East European Satellites	786	1,025	1,510
		1958 = 100	
3. Total NATO	100	120	158
United States and Canada	100	116	145
NATO Europe	100	124	170
4. Soviet Bloc	100	132	196
USSR	100	132	197
East European Satellites	100	130	192
		Total NATO = 100	
5. Total NATO	100	100	100
United States and Canada	147	142	135
NATO Europe	67	69	72
6. Soviet Bloc	51	56	64
USSR	53	59	67
East European Satellites	46	50	56

TABLE V

## PHYSICAL PRODUCTION OF SELECTED BASIC PRODUCTS - 1957

Areas	Energy (million tons hard coal equiv- alent)	Electric Power (billion kwh)	Hard Coal (million metric tons)	Crude Petroleum (million metric tons)	Pig-Iron Ferro- Alloy (mill.met- ric tons)	Crude Steel (mill. metric tons)	Aluminium Primary (thou- sand met- ric tons)	Copper refined (thou- sand met- ric tons)	Lead refined (thousand metric tons)	Zinc refined (thou- sand met- ric tons)	Sulphuric Acid (thou- sand met- ric tons)	Cement (mil- lion metric tons)
Total NATO	2,204	1,158	956	787	337	190	2,506	2,424	1,203	1,972	26.8	128
USA and Canada	1,544	806	475	378	76	107	2,000	1,760	678	1,184	15.6	59
NATO Europe	587	352	481	9	61	83	506	664	525	788	11.2	69
Soviet Bloc	837	295	452	110	48	67	636	545	374	499	6.4	44
USSR	559	210	328	98	37	51	530	500	275	325	4.6	29
East. European Satellites	278	85	124	12	11	16	106	45	99	174	1.8	15
TOTAL NATO	100	100	100	100	NATO = 100 100	100	100	100	100	100	100	100
USA and Canada	70	70	50	98	55	56	80	73	56	60	58	46
NATO Europe	27	30	50	2	45	44	20	27	44	40	42	54
Soviet Bloc	38	25	47	28	35	35	25	22	31	25	24	34
USSR	25	18	34	25	27	27	21	20	23	16	17	23
East. European Satellites	13	7	13	3	8	8	4	1	8	9	7	12

Note: The data above were taken from various publications: OEEC and United Nations in particular.

TABLE VI  
ENERGY AND CRUDE STEEL PRODUCTION  
1957 - 1965 and 1975

Areas	ENERGY (1)			CRUDE STEEL		
	1957	1965 <sup>(2)</sup>	1975	1957	1965 <sup>(2)</sup>	1975
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			million	metric	tons	
1. Total NATO	2,204	2,590	3,590	190	275	390
United States and Canada	1,544	1,900	2,780	107	160	220
Other NATO countries	587	690	810	83	115	170
2. Soviet Bloc	837	1,380	2,312	67	122	222
USSR	559	1,002	1,790	51	93	169
Eastern European satellites	278	380	522	16	29	53
			<u>Index 1957 = 100</u>			
3. Total NATO	100	117	117	100	145	205
United States and Canada	100	123	118	100	149	205
Other NATO countries	100	117	138	100	138	205
4. Soviet Bloc	100	165	267	100	182	331
USSR	100	179	320	100	182	327
Eastern European satellites	100	136	188	100	181	331
			<u>Total NATO = 100</u>			
5. Total NATO	100	100	100	100	100	100
United States and Canada	70	73	77	56	58	56
Other NATO countries	27	26	31	44	41	43
6. Soviet Bloc	38	53	64	35	44	56
USSR	25	39	49	27	34	43
Eastern European satellites	13	15	14	8	10	13

(1) Production in terms of hard coal equivalent

(2) Plans

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