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Appendix C

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SURVEY OF ECONOMIC DEVELOPMENTS IN THE EUROPEAN SATELLITES UNDER THE FIRST LONG-TERM PLANS

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FOREWORD

This report consists of surveys of major economic developments in each of the European Satellites except Albania during the first long-term plans. East Germany and Rumania had Five Year Plans and Poland a Six Year Plan ending in 1955. Czechoslovakia's and Hungary's Five Year Plans ended, respectively, in 1953 and 1954. Bulgaria's Five Year Plan for the period 1949-53 was concluded one year ahead of schedule, in 1952; the Second Five Year Plan runs from 1953 through 1957. The discussion and statistical series ~~of~~ in these surveys generally have been extended through 1955 for Bulgaria, Czechoslovakia, and Hungary even though their first long-term plans ended earlier.

The survey for each Satellite contains a review of (1) economic policy and economic plans during the period, (2) the principal achievements and shortcomings in the performance of the economy, (3) the allocation of labor and investment expenditures by the state in ~~other~~ order to promote the growth of output, and (4) developments within industry, agriculture, and other major sectors of the economy. In addition to the surveys for the six countries, there is an introductory section dealing with the economic growth of the area as a whole since 1950. In order to limit the report to a reasonable length, it has of course been necessary to omit discussion of some relevant topics and to treat others very briefly.

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TABLES

SURVEY OF ECONOMIC DEVELOPMENTS IN THE EUROPEAN SATELLITES UNDER THE FIRST LONG-TERM PLANS

Summary

The economic development of the European Satellites under their first long-term plans, which covered from 4 to 6 years in the different countries during the 1949-55 period, was characterized by further Sovietization of institutions, increased industrialization, and comparatively high but declining rates of growth in their national products. These general trends during the period were, however, punctuated by some drastic changes in production goals, temporary relaxation of the agricultural collectivization effort, the emergence of serious imbalance within the economies, and a considerable degree of confusion and waste because of erratic economic planning and administration.

The most fundamental objectives of the Satellite regimes probably were maintenance of high rates of economic growth through preferential development of heavy industry, more complete socialization of agriculture, and greater interdependence and cooperation with other Bloc countries. Although these policies were generally adhered to, there were certain modifications in specific objectives during the period and significant shortcomings in the carrying out of the plans. The growth in the national products during the period was rapid, but with the end of the recovery from the effects of the war and the lessened opportunity to mobilize underutilized resources, the rates of increase declined in most Satellites. The original goals for the expansion of national income were not reached

in most cases, judging by the production data available for a sample of products, and even official reports did not claim that the revised, higher goals adopted in 1950-51 for the terminal years of the plans were reached or even approached except in East Germany.

Outside of agriculture, the Satellite economies were largely socialized at the start of the plans. The partial exception -- East German industry -- remained an exception at the end of the plan, since private firms still accounted for 15 percent of the gross industrial output in 1955. The campaign to socialize agriculture was characterized by substantial gains in the early years of the plans, a leveling off or reduction in the socialized area after the "new course" was announced in 1953, and a renewed campaign in 1955 and 1956 which ~~has~~ made up some of the losses of 1953-54 and, in certain countries, ~~has~~ raised the share of arable land under socialized ownership above earlier levels. Well over half of the land in the Satellites is still in private hands, however. Bulgaria, which had socialized 65 percent of its land by the end of 1955 and ~~is~~ nearly 80 percent by April 1956~~,~~ has come closest to the long-range goal of complete socialization of agriculture. The proportion of the land in the socialist sector at the end of 1955 ranged from 30 to 36 percent in Czechoslovakia, East Germany, and Hungary and approximated one-fourth of the total area in Poland and Rumania.

In the case of economic interdependence and regional specialization in the Bloc, as reflected in the relative importance of the foreign trade of the Satellites with each other and with other Bloc countries, there were

notable increases in the early years of the plans in each country which had not already considerably reduced the share of its trade carried on with Western countries. This swift redirection of Satellite trade was halted after the adoption of the "new course" policy calling for renewed trade with countries outside the Bloc, especially with underdeveloped areas which could provide needed raw materials.

Greatly increased attention has been given in the Satellites to coordination of their production and investment plans, greater specialization in production, organization of joint development projects, and sharing of technical "know-how." The Council for Economic Mutual Assistance and its specialized committees have held numerous meetings since 1953, as a result of which certain major goals for production and foreign trade under the Five Year Plans for 1956-60 have been coordinated. Insofar as the effect of these efforts on the interdependence of the Satellite economies can be measured quantitatively (in the geographic distribution of their trade), it appears that they were partially offset in 1954 and 1955 by the sizable increases which occurred in trade with non-Bloc countries. After the "new course", such trade increased more rapidly than trade within the Bloc, particularly in the case of the more developed Satellites. Intra-Bloc trade continued to make up a very substantial share of each Satellite's total foreign trade, on the other hand, and at any such level of intra-Bloc trade, the efforts of these countries to increase economic cooperation, specialization, and coordination of plans can be expected eventually to make a significant contribution to their economic development.

A prominent part of each long-term plan -- and the key to the attainment of the large planned increases in output -- was a program of intensified industrialization. Industry had the highest priority in the distribution of manpower and investment funds, and large gains in production were realized. Over-all production targets for industry were not reached in most of the countries, however, and the growth of output among the various industrial products was poorly balanced. The tendency of the production of capital equipment to outrun the supply of raw materials and to overwhelm the output of light industry not only held growth rates below what would have been possible with a more balanced expansion of industry but also severely limited improvements in living standards.

In addition to growing pressure on the raw materials base, there was a tightening up of supplies of manpower for industry and other non-agricultural employments. Transfers of labor to industry from agriculture became more difficult, and the more favorable policy adopted for agriculture after the "new course" required a halting or reversal of this movement in certain countries. By the end of the plans, the agricultural labor forces in Czechoslovakia, East Germany, and Hungary were comparatively small; only Poland, Rumania, and Bulgaria appeared to have much prospect of drawing sizable amounts of manpower from agriculture in the future.

The most distinctive feature in the distribution of the national products of the Satellites during this period was the large allocation to

investment. Except in East Germany, where there was a substantial drain on production through Soviet takings for reparations and occupation costs, gross investment evidently amounted to about one-fourth of the national product. This ratio apparently was reduced somewhat after the "new course" when the scheduled increases in investment were cut back and Soviet takings from certain countries were scaled down, but it remains high by Western standards.

Improvements in living standards up to 1953 were held down by the high level of investment, ~~the large volume of~~ Soviet takings (which were especially large in East Germany), the failure of agricultural output to increase materially, and the poor showing in housing construction. Some moderate gains in consumption have been achieved since 1953, but the disturbances in Poland and the revolt in Hungary show that there is still an intense and widespread popular dissatisfaction with living conditions in the Satellites.

I. Introduction: Satellite Economic Growth Since 1950. *

A. Trends in Gross National Product.

Despite shortages of raw materials and labor, general underfulfillment of investment plans, and the confusion and waste resulting from the abrupt changes in their principal economic goals, the European Satellites succeeded in substantially increasing their total output of goods and services during the period 1951-55. The gross national product (GNP) of the Satellites (excluding Albania) is estimated at $60 billion in 1955, or about two-fifths more than in 1950. This represents a relatively high average annual rate of growth of over 7 percent. The gains in GNP for the individual countries ranged from about 32 to 60 percent during the five year period, according to calculations based on output data for a sample of products (see Table A-1). For the area as a whole and for each of the countries except East Germany, GNP in 1955 was also much higher than in 1938. East Germany apparently has had a more rapid expansion in output than the other Satellites since 1950, but the starting point for this growth was so low that the prewar level was not reached until 1954.

The output of the Satellites is concentrated largely in Poland, East Germany, and Czechoslovakia, which together account for over four-fifths of the total. Because of the considerable delay which occurred in the economic recovery of East Germany, Poland has assumed the former's prewar position as the most productive area among what are now the European Satellites. Rumania's GNP, which ranks fourth in the group, is rather small, considering the size and population of the country. The outputs of the

* Estimates presented in this section for East Germany and Hungary were calculated prior to the publication of their official statistical yearbook for 1955 and should therefore be regarded as provisional.

Table A-1

Estimated Gross National Products of the European Satellites a/
1938 and 1948-55

	1938	1948	1949	1950	1951	1952	1953	1954	1955
	Billion 1955 U.S. Dollars								
Bulgaria	1.03	1.11	1.12	1.19	1.27	1.33	1.42	1.56	1.68
Czechoslovakia	7.30	6.71	7.18	7.93	8.34	9.10	9.79	10.3	11.1
East Germany	16.1	7.81	8.90	10.8	12.5	13.9	15.0	16.3	17.3
Hungary	2.45	1.98	2.29	2.67	2.94	3.15	3.40	3.42	3.62
Poland	14.5	11.9	14.6	16.7	17.1	17.9	19.2	20.7	22.1
Rumania	3.07	2.60	2.71	2.98	3.30	3.32	3.68	3.98	4.48
Total	44.4	32.1	36.8	42.3	45.4	48.7	52.5	56.3	60.3
	Indexes (1950 = 100)								
Bulgaria	87	93	94	100	107	112	119	131	141
Czechoslovakia	92	85	91	100	105	115	123	130	140
East Germany	149	72	82	100	116	129	139	151	160
Hungary	92	74	86	100	110	118	127	128	136
Poland	87	71	87	100	102	107	115	124	132
Rumania	103	87	91	100	111	111	123	134	150
European Satellites	105	76	87	100	107	115	124	133	143

a. Excluding Albania.

other countries reflect their small populations and comparatively low levels of productivity. The marked difference in productivity between East Germany, Czechoslovakia, and Poland, on the one hand, and Hungary, Rumania, and Bulgaria, on the other, is clearly shown in estimates of GNP per capita in the various countries. In the first three countries, output per capita ranged from about $800 to $1,000 in 1955, whereas in the latter three countries it evidently fell within the limits of $200 to $400 (see Table A-2).

The growth in Satellite GNP generally paralleled the rapid expansion of Soviet output during the 1951-55 period. In 1955 as in 1950, therefore, the GNP of the Satellites probably amounted to about ~~one-third~~ that of the USSR. The USSR has, however, greatly outdistanced the Satellites in economic growth since 1930, when the total output of the present-day Satellites is believed to have exceeded one-half that of the USSR. Although a substantial portion of the estimated Satellite GNP of $60 billion is needed to provide even a ~~minimal~~ low standard of living for the area's population of over 94 million, the Satellites nevertheless constitute a significant addition to the economic capability of the Bloc.

The Satellites, like the USSR, have achieved rates of economic growth since 1950 which are generally higher than those of the major countries of Western Europe, excluding West Germany. A comparison of outputs in 1938 and 1955 is less favorable to the Satellites, however, and is decidedly unfavorable in the case of East Germany (see Table A-3).

~~Appendix~~ Table ~~A~~ A-2

Estimated Gross National Product Per Capita in the European Satellites a/
1938 and 1948-55

1955 US Dollars

	1938	1948	1949	1950	1951	1952	1953	1954	1955
Bulgaria	150	160	160	160	180	180	190	210	220
Czechoslovakia	500	550	590	640	670	720	760	800	850
East Germany	970	420	480	590	680	770	840	920	990
Hungary	270	220	250	290	310	330	350	350	370
Poland	460	500	600	670	680	700	730	770	810
Rumania	200	160	170	180	200	200	220	230	260
European Satellites	470	370	420	480	510	540	580	610	650

a. Excluding Albania, whose product per capita probably is somewhat less than that of Bulgaria.

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Table A-3

Estimated Changes in the Gorss National Products of the European Satellites, a/ the USSR, and Selected Countries of Western Europe b/ 1938-55 and 1950-55

	Percent Increase	
	1950 to 1955	1938 to 1955
European Satellites	43	36
Bulgaria	41	~~52~~ 41
Czechoslovakia	40	52
East Germany	60	7
Hungary	36	48
Poland	32	52
Rumania	50	46
USSR	~~38~~ 70	~~189~~ 78
France	23	46
Italy	31	38
UK	13	38
West Germany	57	49

a. Excluding Albania.
b. Percentage changes for Western European countries are calculated from index numbers in source 1/ (France and West Germany in 1938, recalculated to a 1952 base) and source 2/ (all others).

B. Changing Pattern of Output.

The industrialization of the Satellite economies, which was well underway by 1950, was continued and even intensified during the succeeding five years. In each country, the resources at the disposal of the regime were focused on the development of industry. Large increases were correspondingly required in construction activity and in transportation services, although there was little provision for investment in transportation facilities. Estimated output in industry, construction, and transportation and communications grew substantially faster than output as a whole and by 1955

greatly surpassed the prewar accomplishment (see Table A-5). After several years of neglect, agricultural output rose moderately in 1955, but this probably was the first time since the war that the prewar level of output was closely approached. A rough indication of how these divergent growth rates have affected the distribution of total Satellite output among the major economic sectors is presented in Table A-4.

Table A-4

Estimated Gross National Product of the European Satellites, a/
by Sector of Origin
1938, 1950, and 1955

	Percent of Total		
	1938	1950	1955
Industry	32	35	41
Agriculture and forestry	32	30	23
Construction	5	5	6
Transportation and communications	4	6	6
Trade and services	27	24	24
Total	100	100	100

a. Excluding Albania.

Table A-5

Indexes of Estimated Production by Economic Sector in the European Satellites a/
1938 and 1948-55

1950 = 100

	1938	1948	1949	1950	1951	1952	1953	1954	1955
Gross national product	105	76	87	100	107	115	124	133	143
Industry	95	73	85	100	112	126	140	152	167
Agriculture and forestry	112	78	89	100	99	98	100	103	110
Construction	101	54	72	100	117	140	156	163	165
Transportation and communications	77	76	88	100	114	124	135	142	153
Trade and services	118	82	91	100	107	112	121	133	140

a. Excluding Albania.

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II. Bulgaria.

A. General Policy and Achievements.

The Communist government of Bulgaria has followed economic policies designed to transform the largely agricultural economy into one which may be characterized as industrial-agricultural. Whereas agricultural production predominated in the national product in prewar years, industry and agriculture have contributed about equal shares to the country's output in recent years. Beginning with 1955, the value of output in industry probably exceeded that in agriculture. Despite the change in the structure of the national output, almost three-fourths of the civilian labor force was still engaged in agriculture in 1955.

Bulgaria's program of industrialization has been promoted under two Five Year Plans, the first of which began in 1949 and the second in 1953. The First Five Year Plan was declared completed after four years, but of the major production goals, only that for industry was realized within that period. ~~The plan for farm collectivization was also fulfilled in four years.~~ By the end of 1952, over 55 percent of Bulgaria's arable land was collectivized -- a much larger proportion than in any other Satellite. Having begun its Second Five Year Plan in 1953, Bulgaria is out of step with the other Satellites, whose current Five Year Plans began in 1956.

Bulgaria offers a typical example of the implementation of Communist economic ideology, with its emphasis on the output of producer goods as the basis for economic growth. While producer goods output increased about 3½ times during the 1949-55 period, consumer goods output rose only

by about one-half, according to intelligence estimates based on sample production data. Machine-building became a new branch of Bulgarian industry, and the output of chemicals, which was negligible until 1951, was considerably expanded. Although rapid strides were made in industry, the prewar level of agricultural production probably was not exceeded until 1954.

It is estimated that the gross national product of Bulgaria increased by about one-half during the years 1949-55, or at an ~~annual~~ average annual rate of about 6 percent. This is a substantial rate of growth, but it is somewhat lower than the rates registered by the other European Satellites. Although indexes of estimated gross national product give an impression of the over-all economic growth, they do not indicate the unevenness of ~~the~~ development that has taken place within the various sectors of the economy. Over the 1949-55 period, industry increased by about 116 percent, for example, while agriculture increased by only 11 percent (see Table B-1).* [← Activity in the industry-supporting sectors of construction and transportation and communications more than doubled. Trade and services output is believed to have risen by about one-half, reflecting the increasing urbanization of the country and the associated advances in health, education, and other social services.

*[footnote on following page]

[footnote to previous page]

* The indexes of industrial production which are presented for the various Satellites in Tables B-1, C-1, D-1, E-4, F-1, and G-1 (and which are aggregated for all six countries in Table A-5, above) refer to estimates of net production. These indexes are based on production data for a sample of products; their accuracy varies with the representativeness of the sample and the accuracy of the production data and the weights used in aggregating the production data. The officially announced percentage increases in industrial production presented for purposes of information in Appendix Table 6, p. 137, refer to gross production. These statistics are useful in analyzing the degree of fulfillment of plan goals expressed in the same terms, but they are not in general comparable to the independently calculated indexes of net industrial production. Officially announced increases in gross production may differ from the actual increases in net production (which are only approximated in the calculated indexes) for several reasons, including (1) changes in the degree of double-counting in the gross index, (2) changes in the statistical coverage of the gross index, and (3) bias introduced into the gross index through the use of inappropriate prices for new products.

Table B-1

Indexes of Estimated Gross National Product and Production by Economic Sector in Bulgaria 1938 and 1948-55

1948 = 100

	1938	1948	1949	1950	1951	1952	1953	1954	1955
Gross national product	93	100	101	107	114	120	128	141	151
Industry	84	100	110	128	141	165	177	194	216
Agriculture and forestry	102	100	94	96	101	96	99	106	111
Construction	84	100	122	140	196	224	248	246	266
Transportation and communication	56	100	117	134	148	163	191	210	232
Trade and services	92	100	100	103	106	109	119	137	147

B. Phases in Postwar Economic Development.

Since the assumption of power by the Communists in Bulgaria, there have been three distinct phases of economic development. The first phase (1947-48) was a period of reconstruction, socialization of the economy, and beginning steps in industrial development. In the second phase (1949-53), the structure of the economy was changed markedly, especially in the direction of increased emphasis on heavy industry. The third phase began in 1954 following the "new course" announcements. No drastic changes occurred in this period, but adjustments were made in the rates of growth of various sectors of the economy through changes in the allocation of resources among the sectors.

1. 1947-48.

The goal of the Two Year Plan for 1947-48 was to restore, and in most sectors, exceed, prewar levels of production. Industrialization was stressed, particularly the production of fuels and electric power. Private as well as socialized agriculture was to be given incentives and encouragement. The

plan was completed successfully in industry but was underfulfilled in agriculture. It was claimed that industrial production rose about 80 percent over 1939, while agricultural production remained 2 percent below that level. 1/ The government gained a substantial degree of control over the economy during this period. Mining, banking, wholesale trade, and most manufacturing enterprises were nationalized, and almost 70 percent of retail trade was brought into the state sector.

2. 1949-53.

Bulgaria's First Five Year Plan emphasized industrialization, electrification, and the mechanization and collectivization of agriculture. Following the Soviet model of economic development, the plan gave priority to industry over agriculture and to heavy industry over light industry. Gross industrial production was to increase 119 percent over 1948, and agricultural production 57 percent; producer goods output was to rise 220 percent and consumer goods output 75 percent. 2/ In accordance with these priorities, industry was scheduled to receive about 40 percent of total investment, while agriculture was to receive less than 18 percent. 3/ Over four-fifths of industry's share of investment funds was to be used for the development of heavy industry.

The First Five Year Plan was concluded after only four years, although only the goal for gross industrial production was stated to have been fulfilled. It was claimed that the value of gross industrial production (at 1939 prices) reached 55 billion leva in 1952, whereas the plan called for an output of 50 billion leva in 1953. 4/ The validity of this claim is uncertain, since the statistical coverage of the two values may not be the

same. In any case, the pattern of ~~actual~~ output in 1952 was different from that contemplated in the plan. Official data indicate, for example, that the plan for metal-ore mining was overfulfilled by 100 percent and that the goals for coal and nonmetallic minerals were overfulfilled by 13 percent and 42 percent, respectively, while production of the metallurgical industry was 70 percent below the planned figure. 5/

While industrial production increased rapidly, agricultural output remained below the prewar level. Production of industrial crops was an estimated 115 percent above 1938, however. The rapid progress in the socialization of agriculture was by far the most notable development in this sector during the plan. The collectivization campaign of 1949-51 raised the number of collective farms from 1,100 to 2,740. By 1952, about ~~68~~ 57 percent of Bulgaria's arable land was held by collectives and an additional 4 percent by state farms. From 1952 to the end of 1955, on the other hand, collectivization was virtually at a standstill. Despite this lull, the extent of collectivization was much greater in Bulgaria in 1955 than in any other Satellite.

3. 1954-55.

Unlike some of the other Satellites, Bulgaria announced no drastic changes in economic policy for the years 1954-55, as a result of the introduction of the "new course" in 1953. Certain shortcomings in the economy were admitted, however, and minor reforms were ordered. There was to be ~~no further~~ a curtailment of diversification in industry, for example, and although heavy

industry would still receive major emphasis, more consumer goods were to be produced. The main effort of the program was to be directed toward intensive development of raw materials and power. This new policy was reflected particularly in sizable investment allocations for coal mining and electrification. 6/ Subsequent to outlining these modifications of policy, Bulgaria published the text of the previously announced Second Five Year Plan for the period 1953-57.

C. Survey of Major Sectors of the Economy.

1. Industry.

a. Production Trends.

Most of the country's output originated in agriculture in prewar years, but as a result of the Communist emphasis on industrial development, the value of industrial output probably now exceeds that of agriculture. It is estimated that industrial production in 1955 was about 116 percent above that of 1948. The greatest expansion took place in the manufacture of producers' equipment. The metalworking industry (including the new branch of machine-building) now ranks after food processing and textiles in importance. 7/

Production of basic materials such as chemicals, brown coal, crude oil, lead, zinc, pyrites, and uranium ores also increased substantially under Communist plans. The productive capacity for basic chemicals, which until 1951 consisted only of meager facilities for the production of calcium carbide, was extended to include sulfuric acid, synthetic ammonia, nitric acid,

nitrogen fertilizers, soda ash, and caustic soda . Production of soda products meets domestic needs and permits some exports. Bulgaria began commercial production of crude oil in 1954 and may become the third largest producer among the Satellites by 1957. If the planned expansion in the production and refining of crude oil is realized, the country's self-sufficiency in solid fuels (excluding metallurgical coke) will be extended to petroleum as well. Although production of electric power was almost four times as large in 1955 as in 1948, it continued to lag behind requirements.*

b. Allocation of Resources to Industry.

Industry has become one of the major sectors in the Bulgarian economy as the result of the priority which it has enjoyed in the allocation of resources under the Communist regime. While the agricultural labor force increased only slightly over the 1948-55 period, the labor force outside of agriculture increased by nearly one-half (see Table B-2). Most of the expansion in the nonagricultural sector took place in industry.

Table B-2

Estimated Population and Labor Force in Bulgaria
1948 and 1952-55

Thousands a/

	1948	1952	1953	1954	1955
Population	7,100	7,280	7,370	7,470	7,570
Civilian labor force	3,630	3,770	3,830	3,990	4,160
Agricultural	2,850	2,870	2,870	2,920	3,020
Nonagricultural	780	900	960	1,070	1,140

a. Averages of estimates for the beginning and end of the year.

The pattern of gross fixed investment expenditure did not change much in the years 1949-54. During the First Five Year

* Selected production data for Bulgaria and the other Satellites are presented in Appendix Tables 1-4, pp. 124-135.

Plan (1949-52), industry accounted for 38 percent of total investment; most of this went to heavy industry. In the first 2 years of the Second Five Year Plan, the pattern of investment was similar to that of the First Five Year Plan, although heavy industry and agriculture received slightly higher shares than previously (see Table B-3).

Table B-3

Gross Fixed Investment a/ in Bulgaria b/
1949-54

Million Post-reform Leva at 1952 Prices

	1949	1950	1951	1952	1953	1954
Industry	1,180	1,299	1,854	1,833	2,249	2,308
Heavy industry	931	1,162	1,616	1,603	1,943	2,014
Light industry	257	137	238	230	306	294
Agriculture	465	322	707	667	778	963
Housing	467	503	383	481	495	760
Schools and other cultural establishments	81	97	103	88	130	151
Health and social establishments	62	49	54	54	51	61
Other	1,228	1,251	1,239	1,899	1,894	1,702
Total	3,491	3,521	4,339	5,022	5,605	5,970

a. Including unplanned investment.

2. Agriculture.

a. Production Trends.

Agricultural output, which remains an important part of the national product despite the industrialization effort, continued at or below the 1948 level until 1954. This lag in agricultural development was the result primarily of inadequate investment allocations to this sector. Even the socialized sector received inadequate supplies of machinery, fertilizer, and breeding stock. Agricultural production increased moderately in both

1954 and 1955 in response to the changes in policy under the Second Five Year Plan. Nevertheless, production of food crops is estimated to have been still below the prewar level in 1955. Livestock numbers, except for hogs and goats, likewise remained below prewar levels in 1955. This lag in stockbreeding was partly due to an inadequate fodder base. 9/ The output of industrial crops, on the other hand, was already above the 1938 level in 1948.

b. Food Availabilities.

Neglect of agriculture in the allocation of resources and poor weather conditions generally held the per capita consumption of foodstuffs below the prewar level during the First Five Year Plan (see Appendix Table 5). Significant gains were made during the following three years, however. Preliminary estimates for the 1955/56 food consumption year indicate per capita caloric intake about 9 percent higher than the 1933-37 average. Because of the lag in animal husbandry, supplies of meat and milk products have been inadequate from a nutritional standpoint; supplies of cereals, fats, and oils have been somewhat more adequate.

c. Socialization.

Socialization of agriculture began earlier and moved more rapidly in Bulgaria than in any other Satellite. The principal factors contributing to the peasants' acceptance of socialization were the long-established cooperative movement in Bulgaria and the promise of the Communist regime to assist poor peasants. Collectivization began as early as 1945, but it was not pursued vigorously until 1950. ~~As a result of~~ This campaign, ~~which~~

lasted until about mid-1951. At the end of the year, some 57 percent of the country's arable land was in the collectivized sector of agriculture. Collectivization proceeded very slowly thereafter until early 1956, when there was another spurt of activity. Collective farms held three-fourths of the arable land in April 1956 (see Table B-4). State farms account for a relatively small part of Bulgaria's land.

Table B-4

Socialization of Agriculture in Bulgaria
1949-56

Year (as of December)	Collective Farms		State Farms		Total Socialized Sector
	Number	Percent of Arable Land	Number	Percent of Arable Land	Percent of Arable Land
1949	1,608	12.9	91	1.9	14.8
1950	2,608	48.8	91	2.1	50.9
1951	2,740	57.2	N.A.	2.3	59.5
1952	2,742	57.2	108	3.7	60.9
1953	2,747	58.6	100	4.0	62.6
1955	2,730	61.0	108	4.0 b/	65.0
1956 a/	3,074	75.0	N.A.	4.0 b/	79.0

a. April 1956.
b. Assumed to be the same percentage as reported previously.

3. Foreign Trade.

Significant changes have taken place since the war in the direction and composition of Bulgaria's foreign trade. Before World War II, Bulgaria's foreign trade was conducted principally with countries now outside the Soviet Bloc, and Germany was its most important trading partner. By 1946 the situation had changed greatly. Trade with other countries of the Bloc accounted for about 90 percent of the total, and trade with the USSR alone made

up 75 percent of Bulgaria's turnover. The USSR has continued as Bulgaria's chief supplier and customer, but its relative importance has declined as Bulgarian trade with other Bloc countries has expanded. In 1955, other Satellites accounted for about 38 percent of Bulgaria's total foreign trade turnover (see Table B-5).

Table B-5

Geographic Distribution of the Foreign Trade Turnover of Bulgaria 10/
1948, 1952, and 1954-55

	Percent of Total			
	1948	1952	1954	1955
Sino-Soviet Bloc	77.7	88.7	87.0	87.5
USSR	55.3	57.1	44.8	46.3
European Satellites	22.4	30.5	39.3	38.2
Albania	0.1	0.5	0.5	0.7
Czechoslovakia	11.3	12.6	11.9	11.6
East Germany	3.3	6.8	13.4	13.0
Hungary	1.3	3.6	4.8	4.3
Poland	5.4	5.3	5.0	4.0
Rumania	1.0	1.6	3.6	4.6
China	N.A.	0.7	1.8	2.1
Other Bloc Countries	Negligible	0.4	1.1	0.9
Other Countries	22.3	11.3	13.0	12.5
Of which: Austria	4.7	4.3	3.3	2.5
United Kingdom	1.2	1.9	2.5	1.6
West Germany	N.A.	0.9	2.7	2.8
Total	100.0	100.0	100.0	100.0

Bulgaria's trade outside the Bloc is principally with the industrialized countries of Western Europe. Since 1954, Bulgaria has made a special effort to increase trade with the West. Trade agreements were concluded in 1955 with many of Bulgaria's prewar trading partners and (in accordance with the recent trade policy of the Bloc) with a number of

underdeveloped countries.

The commodity composition of Bulgaria's trade has likewise changed considerably in the postwar years. To promote economic recovery and development, Bulgaria considerably increased its imports of industrial and agricultural machinery. In 1949, machines, equipment, and other producer goods intended for the industrialization and electrification of the country and for the development of agriculture and transport amounted to 38 percent of total imports. By 1951, the proportion had increased to 45 percent. These goods were supplied by the USSR and other European Satellites, rather than by the industrialized Western European nations as in the prewar period. During the First Five Year Plan, the Bloc supplied over 90 percent of Bulgaria's imports of metals, petroleum products, chemicals, and rubber and textile raw materials. The USSR was the primary supplier of machinery and equipment.

As a result of the industrialization program, the variety of goods exported by Bulgaria was broadened significantly. Agricultural products and industrial raw materials accounted for over 90 percent of total exports before the war, but exports of machinery, equipment, and other manufacturers have gained a more prominent position in the exports of recent years (see Table B-6).

Table B-6

Imports and Exports of Bulgaria by Product Group 11/
1948, 1952, and 1954-55

	Percent of Total			
	1948	1952	1954	1955
	Imports			
Food, drink, and tobacco	9.5	1.6	1.5	4.4
Raw materials and fuels	20.8	22.3	17.6	17.2
Semimanufactured and chemical products	31.0	26.7	30.3	27.4
Machinery and transport equipment	25.6	39.6	39.3	40.6
Other manufactures	13.1	9.8	11.3	10.4
Total	100.0	100.0	100.0	100.0
	Exports			
Food, drink, and tobacco	88.3	65.4	63.5	51.0
Raw materials and fuels	8.6	19.4	14.5	17.6
Semimanufactured and chemical products	2.1	8.2	9.2	11.0
Machinery and transport equipment	0.1	2.2	2.1	2.9
Other manufactures	0.9	4.8	10.7	17.5
Total	100.0	100.0	100.0	100.0

4. Other Sectors.

Transportation activity, as measured by the number of ton-kilometers of freight carried, increased about 145 percent from 1948 to 1955. Railroad freight traffic increased about 130 percent, and highway traffic about 150 percent. Ocean shipping increased about 225 percent (but remained below the prewar level) and inland water freight traffic grew by about 150 percent.

The construction goals of the First Five Year Plan were generally attained, especially those for industrial facilities. Insufficient allocations of investment funds to agriculture limited construction

activity in this sector. During the Second Five Year Plan, the volume of construction in the entire economy is to be twice as large as under the previous plan. During the first three years of the current plan, 1953-55, the investment goals were underfulfilled, mainly because of bad planning and poor organization at the construction sites.

III. Czechoslovakia.

A. General Policy and Achievements.

The general aim of Communist economic policy has been to reorganize the structure of the Czechoslovak economy, in respect both to its output and its institutions. The planned changes in the level and composition of output were more extensive for industry than for agriculture. The industrial conversion entailed, in addition to nationalization, a very rapid expansion of heavy industry, particularly of the machine-building industry, and retardation of the growth of light industries which had been significant in the prewar period. Chief among these were the textile, leather, and glass industries, once important in Czechoslovakia's extensive prewar trade with the West. Economic policy was slightly modified at the end of the Five Year Plan period in 1953. As a result, the output of consumer goods grew more rapidly than producer goods during the following two years, although producer goods continued to predominate in total industrial output. Greater attention was likewise paid to agriculture, but there has been no significant increase in output since 1953. The emphasis on livestock and fodder crop production, which was introduced in 1949, has been continued.

The expansion of industry is mainly responsible for the estimated growth in gross national product of 65 percent from 1948 to 1955 (see Table C-1). Industrial output increased about 77 percent, whereas agricultural output grew only 28 percent over this period. The rate of growth of industry averaged 8.5 percent during the period and reached a peak of over 12 percent in 1952. Increases in electric power generation and production

Table C-1

Indexes of Estimated Gross National Product and Production by Economic Sector in Czechoslovakia
1938 and 1948-55

1948 = 100

	1938	1948	1949	1950	1951	1952	1953	1954	1955
Gross national product	109	100	107	118	124	136	146	153	165
Industry	100	100	106	118	124	139	154	162	177
Agriculture and forestry	147	100	110	120	118	127	125	117	128
Construction	105	100	112	148	170	198	228	242	250
Transportation and communications	73	100	114	126	142	151	162	171	179
Trade and services	109	100	104	110	116	121	128	143	153

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in the engineering industries were especially large. The interim "new course" plans of 1954-55 provided for continued expansion of industry (though at a slower rate than previously), but the excessive disproportion in the growth of producer goods and consumer goods was to be eliminated. The output pattern of the machine-building industry was broadened to include durable consumer goods and capital equipment for such consumer goods industries as food processing and textile manufacturing. This planned shift in output was manifest in Czechoslovakia's trade negotiations during 1955.

Over the 1949-53 period, a large share of the national income was channeled into investment, primarily for expansion of the industrial sector. At the start of the plan, about one-fifth of the national income was allocated to investment, rising to about one-fourth after 1950.[1] Investment is estimated to have doubled during the plan, whereas it is admitted officially that consumption increased by only 25 percent.[2] As planned, the major portion of the increase in consumption represented growing government expenditures for social welfare. Some gains appear to have been made in personal consumption since 1954, although real wages of industrial workers probably did not exceed prewar levels until 1956. When the poor-living conditions of other groups of the population along with the acknowledged general deficiencies in housing and the quality of consumer goods are considered, it is doubtful that prewar standards of living were attained by the Czechoslovak population in 1955.

B. Use of Resources to Promote Economic Development.

1. Manpower.

Chronic shortages of manpower hampered the attainment of Czechoslovakia's ambitious goals for industry and agriculture. Even prior to the war, the country had no significant reserves of manpower. The labor force was seriously reduced by the expulsion of some two million Germans just after the war, causing a severe strain on the economy after the First Five Year Plan was launched. In the competition for workers, industry always received the highest priority. Consequently, there was a continuous flow of labor from agriculture to industry during the plan, with resultant adverse effects on agricultural production.

By the end of 1953, the agricultural labor force comprised about one-~~fourth~~ ~~percent~~ of the total labor force, compared to one-third ~~percent~~ in 1948. This change reflected a decline of about 18 percent in the number of agricultural workers over the five year period. Meanwhile, the nonagricultural labor force grew by about one-~~fourth~~ fifth (see Table C-2). Although the industrial labor force was augmented by recruiting agricultural workers, youths, women, and the aged, shortages of labor were nevertheless encountered in such key branches as mining and metallurgy and in construction. Since 1954, there has been a better balance in the allocation of labor. New workers have been directed to agriculture, as well as to critical sectors in industry. In order to improve the tight labor supply, the government planned demobilization of 34,000 men in 1955 and an additional 10,000 in 1956. 3/

Table C-2

Estimated
1 Population and Labor Force in Czechoslovakia
1948 and 1953-55

Thousands a/

	1948	1953	1954	1955
Population	12,120	12,810	12,950	13,090
Civilian labor force	5,890	6,330	6,500	6,600
Agricultural	1,940	1,580	1,530	1,600
Nonagricultural	3,950	4,750	4,970	5,000

a. Averages of estimates for the beginning and end of the year.

2. Investment.

During the Five Year Plan, Czechoslovakia maintained a high level of investment, which represented more than one-fourth of national income in some years. The trend in investment during and since the plan is shown in the following tabulation: 4/

	Gross Fixed Investment as Percent of National Income	Index of Investment (1948 = 100)
1948	~~20~~ 19	100
1949	20	115
1950	26	162
1951	26	180
1952	24	195
1953	~~24~~ 23	195
1954	22	195

Under the original version of the First Five Year Plan, capital investments were to be concentrated on industry, transportation, and public works. Agriculture and trade, on the other hand, were to receive the smallest allocations, as indicated in the following breakdown of planned investment expenditures: 5/

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	Planned Percentage Share of Capital Investment, 1949-53
Industry	39.2
Transportation	15.7
Public works (roads, bridges, dams, etc.)	14.0
Housing	11.7
Social and cultural facilities	8.5
Agriculture	8.0
Trade and building trades	2.9
Total	100

Early in 1951, investment goals were increased by one-half, and a greater proportion of total investment than shown above was to be allocated to industry. Most of the increase was earmarked for heavy industry.[6] Accordingly, the industrial sector accounted for almost one-half of realized investment during the Five Year Plan.[7] Total investment fell an estimated 15 percent below the revised goal, however.[8] The neglected sectors of agriculture, trade, and housing received greater shares of investment than formerly under the "new course" plans of 1954-55. Because overall investment was held at the 1953 levels in each of these years, industry and transportation undoubtedly received correspondingly smaller shares than previously, but they continued to account for the major part of total investment.

C. Phases in Postwar Economic Development.

Postwar changes in economic policy in Czechoslovakia fall into three distinct periods: (1) the reconstruction period (1947-48), (2) intensive industrialization (1949-53) and (3) consolidation (1954-55). In all three periods, the industrial sector was the main concern of economic policy, though greater attention has been given to other sectors since 1954.

1. Reconstruction, 1947-48.

The Czechoslovak plan of reconstruction covered only the two years 1947-48 because the country had emerged from the war with a strong industry which was only partly damaged and disorganized. Industrial production was claimed to have increased 10 percent,[9] contrary to the indexes of estimated output given in Table C-1), but the gross national product was probably smaller than in 1938 because of the low level of agricultural production. Substantial gains were registered in coal, steel, and electricity, though the planned rehabilitation of industries suffering from capital depletion, particularly coal, and steel, was not achieved. Neither were investment goals in housing construction attained. A serious decline occurred in agriculture due to the 1947 drought, which, together with a reduction in livestock, adversely affected the food supply. With some 65 percent of industry nationalized and subject to central planning, the reconstruction period served as a proving ground for planning methods applied more comprehensively in subsequent plans.

2. Intensive Industrialization, 1949-53.

Soon after the Communists seized control of the government in 1948, they drafted a Five Year Plan (1949-53) which stressed development of heavy industry over light industry and provided for the industrialization of Slovakia, where a significant segment of the country's armament industry is now situated. Besides supplying some 65 percent of the total Satellite output of armaments, the country has developed many new lines of capital

goods necessary for the industrialization programs of other Satellites. Further sizable increases were also achieved in the output of electric power, coal, and steel. The goals for coal and iron ore were not entirely fulfilled, however, and production constantly lagged behind the demands of industrial consumers. It was these disproportionate rates of growth of various branches of industry which the interim plans of 1954 and 1955 sought to remedy.

3. Consolidation, 1954-55.

Along with other members of the Soviet Bloc, Czechoslovakia adopted a "new course" in late 1953 which was referred to as a policy of "proportionate growth." Under this policy, the rate of industrial expansion was moderated in order to allow time for the correction of imbalances that had developed under the forced industrialization of the Five Year Plan. These imbalances arose from an over-emphasis on industrial development at the expense of consumer goods production and a lag in the output of coal, power, and basic metals within heavy industry. An effort was also made to improve the distribution system for consumer goods. In agriculture, increased investment funds were allocated to both the private and collectivized sectors, and collectivization, though still a long-run goal, was put on a more voluntary basis. By means of these moves, the government hoped to put the economy on a firm basis for the launching of the Second Five Year Plan in 1956.

D. Survey of Major Sectors of the Economy.

1. Industry.

a. Principal Developments.

Czechoslovakia made impressive strides in industrial production during the Five Year Plan, but the rates of growth were extremely uneven among the various branches of industry. For example, production of basic materials increased an estimated 42 percent from 1948 to 1953 compared to an estimated 70 percent increase in the output of the engineering industries. These industries manufacture a wide range of products such as transportation equipment, construction and agricultural machinery, heavy electrical equipment, and equipment for the chemical, oil, textile, and sugar refining industries. Armaments production increased greatly during the plan.

Shortcomings in the fulfillment of the goals for coal, iron, and steel were largely responsible for the comparatively slow rate of growth of output in the basic materials category during the First Five Year Plan. Production goals for coal, iron, and steel were not attained because of inadequate investment and chronic shortages of experienced labor. Deficiencies in the output of basic materials adversely affected the engineering industry. Moreover, since the mines and foundries relied on captial equipment produced by the engineering industry, the lag in engineering production contributed to the inadequate output of basic materials. Output of basic materials has tended to correspond better to industrial requirements since 1954.

b. Analysis of Plan Fulfillment.

Most of the revised production goals for basic materials in 1953 were not fulfilled (see Table C-3), and in some instances these goals still had not been reached by 1955. Hard coal production in 1955 was still 12 percent, iron ore 45 percent, and crude steel 4 percent below the goals set for 1953. It is interesting to note, however, that the 1955 outputs of these products represented fulfillment or overfulfillment of their goals, indicating the adoption of more realistic plans for basic materials under the "new course." The degree of plan fulfillment for machinery and equipment in 1953 is not known, but the engineering industry appears to have lagged chronically in fulfillment of its plans, as it did also in 1954 and 1955 despite the fact that the planned annual rates of growth were lower than during the Five Year Plan.

c. Allocation of Resources to Industry.

The change in emphasis from light industry to heavy industry under the First Five Year Plan required a corresponding shift in the distribution of the industrial labor force. During this period, the proportion of industrial labor in the mining, engineering, and metalworking industries increased from 29 percent to 38 percent of the total, according to official sources, while the proportion in the textile, clothing, leather and footwear, and glassware industries declined from 28 percent to 21 percent. 10/

In recent years, the percentage of the population in the most productive age group, 15-64 years, has been declining. Because of the

limited prospects for increasing the labor force, Czechoslovakia has relied more on increases in labor productivity than on added manpower to meet industrial goals. According to official reports, 75-80 percent of industrial growth during the 1951-55 period resulted from increases in labor productivity. 11/

Table C-3

Planned and Actual Output of Selected Products in Czechoslovakia 1953 and 1955

	Million Metric Tons a/				
	Planned Output, 1953		Estimated Actual Output		Actual Output in 1953 as Percent of Revised Plan
	Original	Revised	1953	1955	
Hard coal	20.8	25.0	20.3	22.1	81
Brown coal	32.2	35.8	34.3	40.7	96
Coke	8.0	8.0	7.7	8.6 b/	96
Iron ore	1.4	3.8	1.8	2.1	47
Pig iron	2.7	3.0	2.5	3.0	83
Crude steel	3.5	4.7	4.4	4.5	94
Crude oil	0.24	0.31	0.12	0.13	39
Electric power (billion kwh)	11.2	12.3	12.5	15.0	102

a. With the exception indicated for electric power.

As already stated, industry was the main recipient of investment funds during the First Five Year Plan, and heavy industry received the bulk of the allocation.

2. Agriculture.

a. Production Trends.

Agricultural production in Czechoslovakia, as in the other Satellites, fell far behind the planned goals of the Five Year Plan. Gross

agricultural production increased only 14 percent over the plan period, compared to a planned goal of 53 percent. A drought in 1954 held production at the 1953 level. In 1955, however, it was claimed that gross output increased to about the prewar level.

Output of foodstuffs and fodder crops has increased much more rapidly than industrial crops; the greatest gains were in meat, animal fats, milk, barley, and oats. Production of potatoes, a basic food for the population, was still far below prewar levels in 1955, however. The expansion which has taken place in agricultural production reflects mainly governmental efforts to promote livestock production.

b. Food Availabilities.

The per capita caloric intake of food in Czechoslovakia during the postwar period has remained fairly stable at about the prewar level and therefore has been generally adequate. This level of food consumption probably would not have been possible, however, without the population losses and a slight shift to the lower quality foods during the postwar years. The stagnation in agricultural output therefore was not fully reflected in the per capita calorie intake of food. Temporary shortages (for example, of potatoes, meat, and grain in the 1954/55 food consumption year) have exerted some downward effect, however. Food availability during 1955/56 was somewhat higher again and is estimated to have reached the prewar average. This improvement was due to the exceptionally good harvest of 1955 and the continued large imports of quality foods, particularly meat and butter, from the West.

c. Socialization.

The socialized sector of agriculture has been relatively larger in Czechoslovakia than in most other Satellites, although it has not yet embraced more than 45 percent of total agricultural land. The number of collective farms, which comprise the greater part of the socialized sector, has fluctuated sharply in Czechoslovakia, for the rapid gains of forced collectivization during 1951 and 1952 were considerably reduced as a result of the more lenient policy adopted after the death of Stalin. Many collectives disbanded between June 1953 and June 1955, reducing the amount of agricultural land held by them from about one-third to one-fourth of the total (see Table C-4).[12] The decline in the socialized sector as a whole would have been even greater if some of the land of disbanded collectives had not been turned over to state farms and other public bodies such as ministries, schools, factories, and the army. The area held by state farms has increased gradually since mid-1953 and in early 1956 amounted to about 12 percent of the country's arable land.[13] Since June 1955 the regime has renewed the collectivization drive in a determined effort to make socialized agriculture predominate by the end of 1960. Many new collectives have been formed since mid-1955.

d. Investment and Manpower.

In accordance with the "new course" policy, there was some attempt to give the agricultural sector a greater proportion of investment funds. While total investment outlays for most sectors of the economy were held at approximately the 1953 level in 1954 and 1955, investment in agriculture reportedly doubled.[14] This investment pattern continued during 1955.

Table C-4

Socialization of Agriculture a/ in Czechoslovakia
1950-55

	Collective Farms (Types II-IV)		State Farms	Total Socialized Sector
	Number	Area (Percent of Land)	(Percent of Land)	(Percent of Land)
December 1950	3,743	15.1	N.A.	N.A.
December 1951	4,480	17.4	N.A.	N.A.
December 1952	7,819	34.8	8.2	43.0
June 1953	8,248	36.7	8.2	44.9
December 1953	7,350	N.A.	9.0	N.A.
June 1955	6,663	26.7	9.8	36.5

a. All percentages in the table refer to agricultural land, which consists of arable land plus permanent meadows and pastures.

A separate three year plan for agriculture, which called for the recruiting of 320,000 new permanent workers by 1956, was adopted in 1954. 15/ These recruits were to be primarily youths and women who would work for the collectives and machine tractor stations. In 1955, the Czechoslovak government claimed that an additional 100,000 workers had been recruited for agriculture and that 14,000 students had enrolled in agricultural schools. 16/ Although there is some doubt concerning the permanancy of some of these new workers, the increases registered in 1955 do manifest some success for the government's effort to augment the agricultural labor force. Nevertheless, the shortage of agricultural labor remains a persistent economic problem in the country.

3. Foreign Trade.

Changes in the structure of industrial output under the Communist regime have resulted in substantial changes in the composition and direction of Czechoslovak foreign trade. Prior to World War II, Czechoslovakia's

trade was conducted principally with countries now outside the Bloc. Germany (including East Germany and the German areas now under Polish administration) was the country's most important trading partner, but the USSR has assumed that role in postwar years, when trade was increasingly reoriented from Western Europe toward the Sino-Soviet Bloc. While industrial raw materials and foodstuffs still constituted the main categories of Czechoslovakia's imports, foodstuffs bulk much larger in imports than they did in the prewar period. Manufactures remain the country's chief exports, but producer goods (especially producer's equipment) now occupy the position once held by consumer goods as the chief export category.

As can be seen in Table C-5, Czechoslovak trade with the Sino-Soviet Bloc rose from 30 percent of total trade turnover in 1948 to 78 percent in 1953 but declined somewhat in relative importance with the introduction of the "new course." The USSR's share of Czechoslovak trade continued at the same high level as in 1953, however. Beginning with 1953, Soviet trade has accounted for about one-half of Czechoslovakia's trade with the Sino-Soviet Bloc and over one-third of total trade turnover.

Even though reduced to only 22 percent of Czechoslovakia's total trade by the end of the First Five Year Plan,[17] trade with non-Bloc countries was nevertheless of great importance to the economy. Most of this trade was conducted with countries of Western Europe. Since 1953, there has been a minor resurgence of non-Bloc trade, particularly with underdeveloped countries in Latin America, the Far East, and the Middle East. Czechoslovakia has been one of the most active Satellites, along

with East Germany and Poland, in the Soviet Bloc's economic penetration of these areas. Its expenditures at trade fairs in these areas have been the largest of any Bloc country, accounting for one-third of total Bloc spending for such purposes in 1955. As a leading exporter of land armaments to non-Bloc nations, Czechoslovakia concluded arms agreements in 1955 with Egypt valued at least at $18 million; with Syria, $7 million; and with Afghanistan, $5 million. The volume of arms shipments increased still further in 1956. In addition to supplying armaments and railroad equipment, the country has extended credits and signed contracts to furnish complete industrial units, such as cement, ceramic, shoe, textile, sugar, refrigeration, and power plants, to countries of the Middle East, Asia, and Latin America.

Table C-5

Geographic Distribution of the Foreign Trade Turnover of Czechoslovakia
1936-38, 1948, 1950, and 1953-1955

	Average 1936-38	1948	1950	1953	1954	1955
	Million Current US $					
Sino-Soviet Bloc	120	455	775	1,466	1,667	1,825
Of which: USSR	11	237	416	662	807	900
Other	572	1,050	642	404	568	745
Total	692	1,505	1,417	1,870	2,235	2,570
	Percent of Total					
Sino-Soviet Bloc	17	30	55	78	75	71
Of which: USSR	2	16	29	35	36	35
Other	83	70	45	22	25	29
Total	100	100	100	100	100	100

Exports of machinery and equipment, primarily to members of the Soviet Bloc, have more than compensated for the decline in consumer goods exports since the beginning of the First Five Year Plan. Machine tools, textile machinery, power plant equipment, motor vehicles, other engineering products, and semifinished metal products are well represented in Czechoslovak agreements for exports of capital goods. Textiles, footwear, leather, and paper products constitute about 10 percent of total exports and account for a significant part of the country's hard-currency earnings. Czechoslovakia also exports large quantities of sulfuric acid and coal-tar derivatives.

Czechoslovakia's raw material requirements are largely satisfied through imports. In 1955, the USSR supplied 80 percent of the iron ore, 70 percent of the copper, 80 percent of the synthetic rubber, and 60 percent of the phosphate which Czechoslovakia imported.[18] Petroleum products are imported from Russia and Austria, and hard coal from Poland. Because of Czechoslovakia's intensive industrialization drive, the country has become a net importer instead of a net exporter of coal. Raw cotton, wool, flax, hides, and crude rubber are also imported in substantial quantities. Apart from materials for the ceramics industry, timber, wood pulp, and uranium ores, Czechoslovakia exports few raw materials. It does, however, make sizable deliveries of coke and semifinished steel to other countries of the Bloc. In 1955, exports of finished steel products to western countries were increased due to a reduction of Soviet requirements for these products.

4. Other Sectors.

Goals for the expansion of the transportation and communications systems during the First Five Year Plan were generally attained and paralleled the expansion which took place in industry. This was achieved in the case of the railroads, which carried 87 percent of the total freight in 1955, by intensive utilization of rolling stock and by expanding the railroad network in the less developed, eastern part of the country. A second track of the "Friendship Line" from Prague to the USSR border at Cierna, for example, was completed in November 1955, further increasing the importance of this line in trade with the USSR. Railroads have been hampered by coal shortages from time to time in the past. Because they are the greatest single consumer of coal, the government plans to extend electrification of the railroads, thereby curtailing their consumption of coal and increasing their efficiency. Highway transport in 1955 accounted only for about 3 percent of the freight hauled.

Construction activity is claimed to have increased 130 percent during the First Five Year Plan and 10 percent beyond that during the following two years.[19] Despite these increases, construction goals were not fulfilled for any sectors of the economy. Goals in housing were not attained even in 1954 and 1955, when special stress was given to such construction in the plans.[20] The consistently poor showing of the building industry was due to shortages of qualified workers, worker absenteeism, failure to introduce modern construction methods, and the undertaking of too many projects at one time.

IV. East Germany.

A. General Policy and Achievements.

1. Introduction.

East Germany's two principal economic aims during the period of its First Five Year Plan (1951-55) were to extend greatly the socialized sector in both agriculture and industry and to raise industrial production to a level well above that of 1950. After a rapid start in 1952 and the first half of 1953, agricultural collectivization efforts were relaxed somewhat with the advent of the "new course". The proportion of total agricultural land in the socialist sector continued at about 30 percent during the last two years of the plan, although some additional collectives were formed from abandoned farm land administered by local governmental units. The share of the socialist sector in gross industrial production increased only from 76 percent in 1950 to 85 percent in 1955, 1/ leaving a much larger private sector in industry than is found in the other Satellites.

The five year goal for gross industrial production was officially claimed to have been fulfilled with an increase of about 90 percent from 1950 to 1955. Independent estimates based on production data for a sample of products suggest that the growth in net industrial production (which excludes the double-counting in measures of gross production) was somewhat smaller than that. The announced increase of 44 percent in gross agricultural production during the period 2/ is contradicted by a large amount of detailed information, which suggests an increase of perhaps

9 percent and almost certainly no more than 20 percent. The combined effect of the growth of output in industry, agriculture, and other parts of the economy was claimed to be a 62 percent increase in national income. 3/

East Germany's economic goals during the period probably were more stable than those of most of the other Satellites. The first revision of the East German plan, in 1951, was minor compared with the changes in several of the other countries and in part merely took into account the difference between anticipated and actual output of certain products in 1950, the base year of the plan. The "new course" program was marked by changes of varying degree in several aspects of the operational plans for 1953 and 1954, but there was little or no change in the over-all objectives for 1955. A series of measures was decreed which slowed up the effort to extend the socialization of agriculture and industry, provided for improvements in living standards, and changed the allocation of resources to some extent to bolster output of agricultural commodities, raw materials for industry, and consumer goods. Some of these measures were regarded merely as correctives for growing imbalances among the different parts of the economy. Other announced changes, particularly those aimed at improving living standards, were partly political in motivation and never were carried out to the full extent promised.

2. Growth of the Economy.

Even though a significant portion of East German industry, agriculture, and trade remained in private hands during the plan, the adoption

of Soviet techniques of economic planning and administration gave the regime extensive power to guide the area's economic development. This power was used to promote high rates of economic growth while holding down personal consumption and (during the first years of the plan) making the required reparations deliveries to the USSR. The economy was still operating at a comparatively depressed level in 1950, and there thus was considerable scope for more complete and efficient utilization of productive facilities and the labor supply. Effective advantage was taken of these opportunities to raise the total output of goods and services, or gross national product.

Paced by the expansion of industry, the gross national product increased by an estimated 60 percent from the low level of 1950 (see Table D-1). This increase, averaging about 10 percent per year, made East Germany's economy one of the most rapidly growing in the Soviet Bloc and in Europe generally. The annual rate of growth fell during most years of the period, however, as easy opportunities for exploiting unused or under-

Table D-1

Indexes of Estimated Gross National Product and Production by Economic Sector in East Germany a/
1938 and 1950-55

1950 = 100

	1938	1950	1951	1952	1953	1954	1955
Gross national product	149	100	116	129	139	151	160
Industry	137	100	120	137	152	169	184
Agriculture and forestry	130	100	107	106	108	107	109
Construction	204	100	122	152	163	186	198
Transportation and communications	123	100	110	112	125	132	138
Trade and services	170	100	112	124	134	144	150

a. These indexes were calculated prior to the publication of the official East German statistical yearbook for 1955 and should therefore be regarded as provisional.

utilized resources gradually disappeared. In 1955, the gross national product was only slightly higher than in 1938, leaving East Germany well behind the other Satellites and most western European countries in this respect.

3. Changes in Origin and Distribution of Output.

Significant changes took place both in the origin and in the ~~use~~ distribution of the gross national product during the Five Year Plan. The preferential development accorded industry resulted in its originating almost one-half of total output in 1955 -- a larger share than ever before. The share of agriculture in total output, on the other hand, is estimated to have declined from 16 percent in 1950 to only 11 percent in 1955. (~~See Appendix Table~~).

The principal factor affecting the distribution of the national product probably was East Germany's reparations obligations and other drains on its output for the benefit of the USSR. Soviet takings of all kinds took perhaps one-sixth of total output in 1950. 4/ The scaling down of reparations levies in the early years of the plan and the termination of such obligations at the end of 1953, together with a reduction in payments for the support of the Soviet occupation forces after 1953, are estimated to have reduced this ratio by about one-half by 1955. Increases in personal consumption during the first three years of the plan probably were quite small, considering the continuing high level of Soviet takings and the substantial increases in investment expenditures. In 1954 and 1955, however, East German consumers benefited from more substantial gains

in consumption as investment leveled off and the economic burden of the Soviet occupation was reduced.

Consumption of food during the First Five Year Plan was consistently below prewar consumption, varying from about 75 to 90 percent of the average caloric intake during the period 1935-38 (see Appendix Table 5). Although the volume of food imports has been comparatively large, imports have not been able to offset the low level of domestic production. Before the war, this area ranked first in food consumption among the present-day Satellites, but its per capita caloric intake is now one of the lowest in the group. Consumption of grains of all kinds has been maintained at or above the prewar level, however, indicating a reduction in the quality as well as the quantity of food consumed by the population. Meat, fats, and sugar were rationed throughout the period but the balance between starchy foods and animal products has improved somewhat in recent years.

B. Survey of Major Sectors of the Economy.

1. Industry.

a. Production Trends.

Industry grew much more than most other sectors of the economy during the First Five Year Plan (see Table D-1). The increase in net industrial production is estimated at 84 percent, compared with a planned increase in gross industrial production of 90 percent (later revised to 92 percent) and the officially announced fulfillment of the goal with an increase

an increase of 90 percent*. According to the regime, this accomplishment raised industrial production to more than twice the 1936 level, 6/ but estimates derived from sample commodity data indicate an increase of only about one-third over 1938, or roughly 60 percent over 1936. East Germany now claims to be the ranking industrial producer among the European Satellites and the fifth largest in Europe, following the USSR, the United Kingdom, France, and West Germany. 7/

In spite of the mediocre resource base, large gains were made in the output of most important raw materials. Brown coal production increased by 45 percent (to 200 million metric tons), and electric power generation (based primarily on brown coal supplies) grew to a similar extent. Production of crude steel was raised to more than 2½ times the 1950 level, but not without increasing the area's dependence on imported iron ore, which provided over one-half of requirements in 1955. Among the nonferrous metals, copper and aluminum production increased materially, but lead production in 1955 was only slightly higher than in 1950. In the case of chemicals -- an East German specialty which provides about one-sixth of exports 8/-- output rose by more than three-fourths. Production of bricks and cement also increased substantially.

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* Official East German statistics 5/ indicate that the goal for industrial production for the entire five years of the plan period was fulfilled by 104.4 percent. The more usual comparison, between output in the year preceding the plan and output in the final year of the plan, indicates an increase of 89.6 percent and, consequently, slight underfulfillment of both the original goal and the revised goal for 1955.

Generalizations concerning the trend in the output of machinery and equipment are difficult because of the variety of such items and the lack of information about many of them. Production of passenger automobiles, mainline freight cars, and machine tools approached or exceeded twice the 1950 level in 1955, and truck production increased even more. Tractor output, on the other hand, grew much more slowly, and production of mainline locomotives was negligible throughout the period. Large gains in the output of some consumer goods other than foodstuffs were also achieved.

Unlike most of the Satellites' long-term plans, East Germany's plan did not contain widely divergent goals for heavy industry and light industry. The increases planned and officially reported to have been achieved for these two categories from 1950 to 1955 were within about 10 percent of the projected increase for industry as a whole. This relationship is perhaps explained by the fact that East Germany's engineering industries were reasonably well-developed at the start of the plan and the investment program was somewhat less ambitious than those of most other Satellites. Furthermore, the indicated growth for light industry probably has an upward bias because of the increasing statistical coverage of food processing and handicraft output in the course of the plan.

Official reports of annual increases in gross industrial production and calculations of annual increases in net industrial production from available commodity statistics suggest that the growth of industrial production in East Germany was more regular than that of most

of the other Satellites. In particular, East Germany apparently avoided the conspicuous slackening in the rate of industrial growth which occurred in Czechoslovakia and Hungary in 1954.

b. Manpower, Investment, and Productivity.

A vital factor in East Germany's industrial performance during the plan was the enlargement of the industrial labor force by some 600,000 workers, or over one-fourth. This was accomplished in the face of a decline in population of nearly one-half million persons and a nonagricultural labor force which increased very little (see Table D-2). Through a combination of incentives and pressures, employment of women was increased by about 650,000 during the period. 9/ Numerous persons were induced to leave agriculture for industrial employment, but not without unfortunate effects on the availability of foodstuffs. Transfers of labor to industry from agriculture and the less essential nonagricultural employments became progressively more difficult, however. The problem was aggravated greatly by the movement of East Germans to the West, which reached a peak of over 300,000 in 1953. 10/ Net migration from East Germany apparently approximated one million persons during the five year period. In 1955, the industrial labor force grew by only 5,000 workers.

Table D-2

Estimated Population and Labor Force in East Germany
1950-55

Millions a/

	1950	1951	1952	1953	1954	1955
Population	18.40	18.35	18.33	18.18	18.06	17.94
Civilian labor force	8.50	8.30	8.10	7.90	8.10	8.24
Agricultural	1.98	1.86	1.74	1.63	1.62	1.67
Non agricultural	6.52	6.44	6.36	6.27	6.48	6.57
Of which: Industrial 11/	2.15	2.40	2.57	2.64	2.76	2.77

a. Averages of estimates for the beginning and end of the year except for industrial labor force data, which are annual averages.

The trend in investment in industry during the plan generally paralleled that in the economy as a whole. The largest increases evidently were realized in 1951-53, followed by a dip in 1954 and a return to the 1953 volume in 1955. 12/ Since the plans for both total investment and industrial investment were fulfilled by little more than two-thirds, industry accounted for about one-half of total investment as planned (see Table D-3). Investment in light industry was increased considerably after the "new course" but in 1954 still amounted to less than one-fourth of investment in heavy industry. 13/

Table D-3

Planned and Estimated Actual Gross Investment in Fixed Capital in East Germany during the First Five Year Plan 14/
1951-55

Billion Deutschemarks at 1950 Prices

	Planned for Period		Estimated Actual during Period
	Initial Plan	1951 Revision	
Industry	14.1	15.4	10.7
Agriculture	1.4	1.8	1.9
Transportation and communications	2.0	2.7	1.8 a/
Housing	5.1	4.3	3.5
Educational, health, and cultural facilities	1.6	2.4	0.9
Other	2.7	2.0	1.6
Total	26.9	28.6	20.4

a. Excluding telecommunications.

Despite the leveling off in the volume of investment after 1953, it probably expanded more than the total output of goods and services during

the plan. The general level of investment, however, apparently was lower in relation to total output than in the other Satellites because of the reparations deliveries and other takings by the USSR. 15/ Moreover, since East Germany was already a developed industrial country, it was necessary in some instances only to repair, enlarge, or modernize existing facilities to obtain prompt and substantial increments in output.

Although labor productivity did not rise as rapidly as planned, causing East German authorities to step up the flow of labor into industry, a sizable gain in average output per worker was nevertheless achieved. Roughly two-thirds of the five-year increase in industrial production is ascribable to improved labor productivity, and one-third to the additions to the labor force. In addition to rehabilitating and expanding productive facilities, the regime endeavored to raise average output per worker through the use of piece-rate pay systems, training programs, bonus plans, and social security benefits, together with frequent productivity campaigns and unceasing exhortation. The year-to-year improvement in labor productivity during the plan evidently was quite steady. Fluctuations in the annual rate of growth of industrial output consequently were due in large part to the varying numbers of workers added to the labor force each year.

2. Agriculture.

a. Production Trends.

Agriculture was the victim of serious neglect by the East German regime during the First Five Year Plan. In contrast to the

large increase in industrial output during the period 1951-55, agricultural output rose only an estimated 9 percent. Most of that gain, moreover, was registered in the first year of the period; increases in output during the next four years were negligible. Despite better than average weather, the output of most major agricultural commodities in 1955 amounted to only 50 to 75 percent of the plan goals. Total agricultural production in 1955 probably was at least 10 percent below the 1935-39 average.

Crop yields per hectare generally remained below the prewar level, but the output of some minor crops such as oilseeds, flax, and hemp was raised above the prewar level by expanding their cultivated area. A more important change in the pattern of agricultural output was the greater emphasis on livestock. Whereas the average output of grains, potatoes, and sugar beets during the period 1951-55 was substantially lower than before the war, average inventories of cattle and hogs were appreciably higher. The output of meat, milk, and animal fats did not reach a correspondingly high level, but the output of such products has increased gradually and now more nearly approximates the prewar achievement than is the case with grain or root crops.

The stagnation of East German agriculture is the direct result of the regime's stress on industrial expansion and its efforts to collectivize the land rapidly. These policies led to shortages of agricultural machinery and fertilizer; serious loss of manpower to industry and to the West; and reduced incentives for farmers because of inadequate supplies of consumer goods in rural areas, onerous government regulations concerning farming operations, pressure for collectivization, and state procurement

of a large part of their output at controlled low prices. The effect of these policies on agricultural output has been such that East Germany requires a sizable net import balance in foodstuffs to maintain the present depressed level of consumption, whereas the higher consumption level of the prewar period was accomplished with balanced trade in foodstuffs.

b. Socialization.

The drive to socialize agriculture began somewhat later in East Germany than in the other Satellites. Concerted efforts to form agricultural collectives were first made by the regime in 1952, and by mid-1953 about 5,000 collectives with a membership of nearly 150,000 persons had been organized. Several hundred of these were disbanded during the second half of 1953 (after the announcement of the "new course"), reducing the proportion of total agricultural land held by collectives from about 12½ percent to 11 percent. Abandoned land administered by local units of government apparently accounted for about 14 percent of the total agricultural area at this time, or more than the area cultivated by collectives. Over 500 state farms accounted for an additional 4 percent, making a total of about 30 percent of the agricultural land in the socialist sector (see Table D-4).

The area within the socialist sector increased very little during the remaining two years of the plan. Approximately 1,000 collectives were formed from part of the land held by the local governmental units, however, and the proportion of the more advanced collectives of Type III (which most nearly resemble Soviet collectives) was increased from about one-third to three-fourths of the total. 17/

Table D-4

Socialization of Agriculture a/ in East Germany 16/
1951-55

	Agricultural Collectives / Farms			Local Agricultural Enterprises b/ (Percent of Land)	State Farms (Percent of Land)	Total Socialized Sector (Percent of Land)
	Number	Membership (Thousands)	Area (Percent of Land)			
31 December 1951	Negligible	Negligible	Negligible	Negligible	4 c/	4
31 December 1952	1,815	31.2	2.5	N.A.	4 d/	N.A.
30 June 1953	5,074	146.9	12.5	N.A.	4 d/	N.A.
31 December 1953	4,691	133.8	11.2	14	4	29
31 December 1954	5,120	158.4	14.6	N.A.	4 d/	N.A.
15 November 1955	6,047	196.9	20.0	6 e/	4 e/	30

a. All percentages in the table refer to agricultural land, which consists of arable land plus permanent meadows and pastures.
b. Abandoned farms and other community lands administered by local units of government.
c. Land held by educational and other institutions (amounting to about one percent of total agricultural land) is excluded to make the percentage comparable with those for 1953 and 1955.
d. Assumed to be the same percentage as reported previously.
e. 15 December 1955.

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c. Investment and Manpower.

The preference which industrial development received under the First Five Year Plan considerably restricted the amount of investment funds and labor allocated to agriculture. The share of total investment in fixed capital planned for agriculture during the five year period was about 6 percent, or much less than the estimated share of agricultural output in the gross national product. Actual agricultural investment was especially small until the introduction of the "new course" in 1953. The level of agricultural investment during the last three years of the plan was approximately double that of the first two, and the small goal of the plan evidently was fulfilled. 18/ The new investment policy for agriculture, which apparently will be continued during the Second Five Year Plan, has not yet had an appreciable effect on agricultural output, however.

Mechanization of East German agriculture, though fairly advanced by Satellite standards, was not increased enough to compensate for the heavy losses of agricultural labor during the period of the plan. In addition to the transfer of labor from agriculture to industry, which was fostered by all of the Satellites until 1953, East Germany's agricultural labor force was materially reduced by the loss of population to West Germany. During the course of the plan, the agricultural labor force declined by an estimated 500,000 persons, or nearly one-fourth. Moreover, this group included a larger than average proportion of males in the most productive age-groups and disproportionately large numbers of specialists and the more highly skilled types of laborers. By 1955, only 20 percent of East Germany's labor force remained in agriculture, compared with a ratio of 25 percent in

Czechoslovakia, the next most industrialized Satellite.

3. Other Sectors.

Transportation, communications, finance, and foreign trade were largely or entirely nationalized before the start of the plan, but private enterprise was still important in some areas other than industry and agriculture at the end of the period. Many small private handicraft establishments are still in business, and about one-third of retail trade turnover and one-half of construction output (including handicrafts) remained in private hands in 1955. 19/

The volume of construction output is estimated to have approximately doubled from 1950 to 1955. Building of industrial plants and community facilities received a clear priority over housing construction, which apparently grew only by about one-third. Several large industrial combines were built during the plan, including the Stalin Metallurgical Combine near Furstenburg/Oder, the Metallurgical Works/West at Calbe, and a large plant at Lauchhammer which produces metallurgical-grade coke from brown coal. The operations at Lauchhammer were not entirely sucessful at first, but the process has been improved sufficiently to permit the manufacture of a reasonably satisfactory substitute for coke made from hard coal. In addition to these examples of new construction, numerous other plants were enlarged during the period.

Freight and passenger traffic increased substantially in volume from 1950 to 1955. Ton-kilometers of railroad freight traffic in 1955 exceeded the 1938 level by about 10 percent, and highway freight traffic was several times as great as before the war. Freight traffic on inland

waterways, on the other hand, was much smaller than in 1938 because of the reduced volume of trade between the areas which now make up East Germany and West Germany. As in the other Satellites, facilities have been used more and more intensively in recent years, but the deterioration of both track and equipment under the strain of heavy traffic probably is most serious in East Germany.

In retail trade, too, considerable progress during the plan was claimed officially. The reported doubling of retail trade turnover (at comparable prices) 20/ undoubtedly gives an exaggerated impression of the improvement in East German living standards, however. Part of this increase is due to the further urbanization of the population, which increased the proportion of consumer goods marketed through regular retail channels. Furthermore, the official figures do not adequately reflect the deterioration in the quality of consumer goods during the plan.

The foreign trade turnover of East Germany was still far below the prewar level in 1950. The plan stressed the need for increased trade and provided for nearly a tripling of the 1950 volume. This goal was now quite reached, but trade nevertheless increased substantially (see Table D-5). The share of basic raw materials and foodstuffs in total imports fell during

Table D-5

Indexes of the Foreign Trade Turnover of East Germany 21/
1950-55

1950 = 100

	1950	1951	1952	1953	1954	1955
Total turnover	100	151	173	223	271	280
Imports	100	138	178	225	243	255
Exports	100	207	216	275	360	350

the period, and that of agricultural products and ~~processed foods~~ textiles rose. ~~Each category accounted for almost two-fifths of total imports in 1955.~~ Products of the metal-fabricating industries became particularly important in East German exports in the course of the plan, increasing from 32 percent of total exports in 1950 to about 60 percent in 1955 (see Table D-6).

Table D-6

Imports and Exports of East Germany by Product Group 22/
1950 and 1953-55

	Percent of Total			
	1950	1953	1954	1955
	Imports			
Basic materials	44.6	36.9	37.8	38.6
Of which: Metallurgical products	16.9	13.6	13.7	14.5
Fabricated metal products	8.2	5.2	4.8	4.7
Products of light and food industries	34.0	36.3	36.9	34.8
Of which: Textiles	8.4	12.6	13.6	14.0
Food and stimulants	22.3	20.8	18.8	15.9
Agricultural and forest products	13.2	21.6	20.5	21.9
Total	100	100	100	100
	Exports			
Basic materials	42.6	26.2	25.7	28.6
Of which: Chemicals	21.9	14.5	15.7	17.0
Fabricated metal products	31.9	62.7	62.2	60.4
Products of light and food industries	21.7	10.1	11.2	10.1
Agricultural and forest products	3.8	1.0	0.9	0.9
Total	100	100	100	100

The share of other Bloc countries in East Germany's foreign trade grew from about 72 percent in 1950 to over 77 percent in 1953, but a ratio approximating that of 1950 was reestablished in 1955 (see Table D-7). This change was a consequence of the general Bloc campaign to expand trade with the underdeveloped areas.

Table D-7

Geographic Distribution of the Foreign Trade Turnover of East Germany 23/
1950 and 1953-55

	Percent of Total			
	1950	1953	1954	1955
Sino-Soviet Bloc	72.3	77.5	76.1	72.0
USSR	39.7	45.7	44.0	38.3
European Satellites	32.6	25.6	24.7	25.8
Albania	Negligible	0.2	0.1	0.3
Bulgaria	0.9	1.9	2.0	2.1
Czechoslovakia	8.3	5.9	6.3	6.7
Hungary	3.8	3.9	4.0	4.4
Poland	18.9	11.3	10.3	9.7
Rumania	0.7	2.4	2.0	2.6
Communist China, Korea and Vietnam	Negligible	6.2	7.4	7.9
Other countries a/	27.7	22.5	23.9	28.0
Of which: European countries a/	27.2	20.6	21.5	24.0
Of which: West Germany	16.0	6.9	8.8	11.0
Total	100	100	100	100

a. Including Yugoslavia, which in the source is lumped with the Sino-Soviet Bloc countries to from the "democratic world market".

V. Hungary.

A. Major Economic Policies and Problems.

In accordance with Communist theory, the long-term economic policy of Hungary stresses rapid industrialization of the country and socialization of the means of production. For the First Five Year Plan (1950-1954), the primary emphasis was placed on the development of heavy industry, that is, on the machine-building industry and the supporting industries supplying basic materials and electric power. This was in line with the Communist principle that investment should first be concentrated on industries producing capital goods, which ostensibly would then be used to produce more consumer goods.

Hungary's difficulties consist chiefly in attempting to build an economy with a broad line of heavy industrial products on a weak foundation of natural resources. It has attempted to finance substantial capital investment in heavy industry from domestic resources, and in so doing has limited consumption severely. At the same time, there has been a large drain on its resources through payments to the USSR for (1) reparations, (2) relinquishment of the Soviet share in the so-called "former German assets" organized as joint companies, and (3) the support of Soviet occupation troops. Raw materials for Hungarian industries must largely be purchased abroad, and although the best Hungarian products have been exported in an effort to obtain essential imports, frequent shortages of raw materials have occurred. One of Hungary's best resources, fertile land, has been used under conditions which produced far less output than would have been possible with good management, better income incentives for farmers, and adequate supplies of agricultural implements and fertilizer. In spite of its endowment

of arable land and a relatively large agricultural labor force, Hungary has been unable to produce sufficient food for domestic consumption.

Hungary started its first long-term plan in 1950 and almost immediately raised the production goals for the final year of the plan. In 1952, however, there were many signs of industrial difficulty, and the severe drought of that year caused acute shortages of food products in 1953. These agricultural and industrial problems were responsible for the modification of economic policy in June 1953 known as the "new course". All of the Bloc countries were suffering in a greater or lesser degree from over-rapid industrialization and neglect of agriculture, but these problems were most serious in Hungary. Hungary was probably the most radical of the Satellites in its statement of the new policy, and the measurements taken in implementing it were more persistent and complete than those of the other countries. Some of these measures were later modified, however, and the more extreme statements of the political leaders of the early "new course" period were repudiated.

The weaknesses in Hungary's economic structure were by no means completely remedied in the two and a half years during which the "new course" policies were followed, and it remains to be seen whether sufficient changes have been made to ameliorate Hungary's economic conditions substantially. Party and government officials have frequently disavowed a policy re-establishing the previous emphasis on development of heavy industry. The reduction in both total investment and the share allocation to heavy industry under the "new course" policy was considered a corrective for the admittedly over-ambitious investment program. Nevertheless, an increase in the percentage allocation of investment to that sector was

perceptible in the 1956 plan and even more so in the ~~entire~~ Second Five Year Plan. It is doubtful, therefore, whether the planners have profited from past mistakes in any fundamental sense.

During the period of the "new course," the regime attempted to raise the standard of living by producing more consumer goods, giving them a wider distribution, and reducing their prices. Particular attention was given to expansion of agricultural output, and the drive toward collectivization of the peasants accordingly was relaxed for a time. Collectivization of the land is considered basic to the efficient growth of farm production in the long-run, however, and has never been abandoned as an ultimate goal. Pressure for collectivization was renewed in 1955, and at least 50 percent of the arable land is planned to be socialized by 1960. ~~Cooperatives~~ Collectives of types I and II, in which the participants do not give up their ownership of animals and equipment, have been encouraged to promote cooperative farming among peasants with above-average amounts of working capital. Nevertheless, new members in 1955 were principally peasants who owned little land and frequently had sold most of their livestock before joining. The government is still seeking a policy that will induce the more substantial independent peasants to join the ~~cooperatives~~ collectives and to do so with their farm capital intact.

With the change of attitude in the USSR toward "new course" objectives in early 1955, Hungary moved toward the previous emphasis on the development of heavy industry. Plans for continuing agricultural growth were maintained, however, and production in the food processing industries was scheduled to increase.

The principal objective of Hungarian economic planning at the present time is the equalization of its requirements for imported raw materials and its ability to produce a surplus of salable goods for export. The planners are attacking this problem from several angles. One important goal is a widespread replacement of imports with domestic output. Where possible, domestic resources will be developed to replace imports of timber, pit props, cotton, nonferrous metals and ferroalloys, foundry coke, and rubber, among other materials. Another aim is to change the principal line of exports from consumer goods such as textiles to machinery and equipment. Improvement of product design and technology and a reduction of manufacturing costs to a competitive level are also major objectives in the effort to balance imports and exports. Finally, there is a desire to acquire markets in the underdeveloped countries of the world, where Hungarian products may be traded for raw materials under favorable circumstances.

Hungary's general emphasis on heavy industry has now been modified in the direction of greater concentration of effort on production lines in which it has had long experience or for which it has special resources. These industries include alumina and aluminum, railroad equipment, electrical and electronic equipment, farm machinery, food processing, and pharmaceuticals. Specialization of Hungarian output along these lines has been stressed at conferences held by the Council for Economic Mutual Assistance (CEMA).

B. Achievements Under the First Five Year Plan (1950-54).

1. Introduction.

At the start of the First Five Year Plan in 1950, Hungary had just completed a Three Year Plan of reconstruction in two years and five months, thus permitting a change from fiscal year to calendar year accounting. During this period, the remaining war damage to the industrial plant was repaired, the currency was stabilized, the financial and banking system was reorganized under state management, and first large industries and then smaller enterprises employing ten or more persons were brought under state control. Production in most of the basic industries had exceeded prewar output by 1947, and by 1949 industry had made a complete recovery in its productive power. Manpower employed in industry in 1949 far exceeded that of 1938, and labor productivity had risen about 15 percent in both heavy and light industry and about 3.5 percent in the food industry. Agricultural output rose substantially in 1949 but still amounted to only an estimated 80 percent of the prewar level. In short, the country had made excellent progress in economic reconstruction and had almost overcome the inflationary tendencies of the early postwar period.

The First Five Year Plan was prepared in an atmosphere of optimism by a government completely under the control of Hungary's Communist Party. The scheduled pace of economic growth was much more rapid than in the previous plan, but the planner's assessment at that time of the possibilities of growth was generally realistic, since the major industrial production and investment goals set forth in the original version of the plan were met or

exceeded. Considering the economy as a whole, the chief planning error was the assumption that the overfulfillment of some goals in the first year of the plan indicated that the long-term goals for 1954 were not sufficiently ambitious to utilize all the capabilities of the economy. Even in the first year, when about three-fourths of the major construction projects were started, requirements for raw materials exceeded the supply, and the outputs of the electric power plants, the extractive industries, and the metallurgical industry could not be pushed fast enough to keep the advanced processing and fabricating industries fully supplied.

On the strength of the first year's accomplishments, however, there was an extreme upward revision of the 1954 goals for production and investment. The planned increase in gross industrial production was revised upward from 86 percent to 210 percent, and planned capital investment by the state was raised from 50.9 billion forints to 85 billion forints. The central objective of the revised plan was stated to be the conversion of Hungary "from a predominantly agricultural economy to a country of steel, pig iron, and machines."

This revision of the plan probably retarded the country's economic growth, since it demanded a grossly disproportionate development of heavy industry and investment priorities for industry which hampered agricultural growth. Shortages of foods and other consumer goods, accompanied by large shipments of goods to the USSR, alienated the workers and set up resistance to the pressures for increased output, which the regime exacted. Moreover, the adoption of unbalanced and unrealistic objectives for 1954 led to much

waste, confusion, and inefficiency.

2. Fulfillment of Major Production Goals.

The national income of Hungary rose about 50 percent during the First Five Year Plan, according to the official index calculated from values expressed in constant plan prices. This is an increase of respectable size, but it is somewhat less than the original target for 1954 and considerably less than the revised goal of the plan. The following tabulation shows that much of the increase was achieved in the first two years of the period and, more remarkably, that declines in national income occurred in both 1952 and 1954.*

	Official Index of National Income
1949	100.0
1950	120.6
1951	141.2
1952	138.5
1953	156.7
1954	150.3

* The index of estimated gross national product in Table E-4, below, shows about the same increase during the plan period as that announced officially for national income (which in Communist terminology excludes depreciation and services not connected directly with the production of goods). The index in Table E-4 and the official index of national income do not, however, show the same pattern of growth within the period. Since the Hungarian regime would hardly publish figures indicating declines in the national income in some years of the plan if they had not actually taken place, this disparity between the two indexes suggests that the product sample and/or the production figures, weights, and other data used at present in estimating the trend in gross national product have serious shortcomings. The indexes in Table E-4 should therefore be considered as provisional.

Hungary probably is the only European Satellite which has experienced such setbacks in economic growth during the past five years.

Comparatively large increases were also claimed in the gross output of industry and its major components. Although nearly all of the announced gains for total industry and the various industry groupings fell short of the extremely ambitious objectives formulated in 1951 for the end of the period, they substantially exceeded the original targets in every case except electric power (see Table E-1). The outstanding failure of the plan was in agriculture, where an increase of 42 percent in gross production was originally scheduled but only a 12-percent gain was claimed to have been realized.

3. Personal Income and Consumption.

The average per capita income of workers and employees was reported to have increased by 20 percent from 1949 to 1954, and according to official claims, the real income of peasants increased somewhat more. The total consumption of the population increased by 30 percent, compared with the planned rise of 50 percent. Most of the indicated increase occurred during the last year and a half of the plan, after the announcement of the "new course" policy.

4. Enlargement of Industrial Capacity.

The industrial capacity of the country was enlarged during the plan by the completion of 65 new factories, mostly for the production of machinery and chemicals. Nineteen new electric power plants were put into operation, two new foundries were completed and another almost finished,

Table E-1

Planned and Reported Actual Increases in National Income and Gross Production in Major Economic Sectors in Hungary during the First Five Year Plan ~~(1950-54)~~ 1949-54

Percent Increase, ~~1949 to 1954~~

	Planned		
	Original Plan	Revision of 1951	Reported Actual
National income	63	130	50
Industry	86	210	155
Heavy Industry	104	280	188
Mining	55	142	96
Metallurgy	95	162	132
Machinery	125	390	264
Electric power	94	175	92
Building materials	115	306	162
Chemicals	138	273	195
Light and food industries	73	145	127
Textiles	52	92	67
Clothing	250	750	355
Woodworking	78	220	162
Paper and printing	56	116	N.A.
Food processing	70	157	170
Construction	131	338	170
Agriculture	42	54	12

and a new pipe factory and a rolling mill were completed. In addition, the capacity of a number of older plants were enlarged. New equipment was installed in the Ganz freight car and machine factory, the Red Star tractor plant, the Gheorghiu-Dej shipyard, the Csepel automobile factory, and others.

The new or enlarged plant capacity permitted the production of various new products, including mining machines; new types of machine tools, agricultural machines, construction machines and locomotives; antifriction bearings; and synthetic material in a straw cellulose factory. Chemicals

production was advanced by building factories for pharmaceuticals, dyestuffs, asphalt, fertilizer, and industrial gas. The largest venture of the plan, the Stalinvaros iron and steel combine, was discontinued for the period of the "new course" to permit the reallocation of material and labor to more urgent uses. A large prestige project -- the Budapest subway -- was also discontinued.

The capacity of light industry was expanded little, except for an increase in the number of spindles in the spinning mills and the construction of one linen mill and one hemp mill. In the food industry, some cold storage plants and bakeries were built in decentralized locations.

5. Labor Productivity.

Labor productivity was reported to have increased 46.6 percent in the manufacturing industry from 1949 to 1954 and 47.4 percent in the building trades. These increases are well below the planned increase of 92 percent for all of industry. Approximately 63 percent of the increase in industrial output was due to increased manpower and 37 percent to greater productivity.

C. Use of Resources to Promote Economic Development.

1. Manpower.

The population of Hungary in 1955 averaged 9.8 million persons, of which about 4.5 million, or 46 percent of the population, were in the civilian labor force. Whereas the population increased only 6 percent from 1949 to 1955, the civilian labor force rose by over 12 percent. This accretion to the labor force was accomplished despite an abnormally large proportion of

women in the population and a decreasing proportion of persons in the economically active age group (15-64 years) -- both the result of war losses.

The nonagricultural labor force increased 35 percent between 1949 and 1955 through absorption of the unemployed (in the early years), transfers from agriculture, and an increase in the participation of women in the labor force. The proportion of the civilian labor force in industry grew from less than one-fifth of the total in 1949 to about one-fourth in 1955. Construction, transportation, trade, and the civil service also shared in the general expansion of the nonagricultural labor force during this period (see Table E-2).

The agricultural labor force was reduced by about 200,000 persons from 1949 to 1953, but this trend subsequently was halted and even reversed. In recent years, the labor force in agriculture has amounted to an estimated 44 percent of the total. This is still an excessive proportion by western standards, but the small farms, backward methods of cultivation, and limited mechanization keep the productivity of farm labor low. Agricultural machinery has so far been available only to the state farms, the ~~cooperatives~~ collectives, and to those private farmers who could afford to pay a high fee for the services of the machine-tractor stations. Most cultivation is still done with farm animals.

2. Investment.

State investment has constituted the major portion of total investment since 1949. Some investment is made by ~~the~~ cooperatives; this is important in amount only in agriculture. The amount of private capital investment in agriculture is not known but is probably small. Medium and

Table E-2

Estimated Population and Labor Force in Hungary
1949-55

	1949	1950	1951	1952	1953	1954	1955
	Thousands a/						
Population	9,240	9,330	9,420	9,500	9,590	9,690	9,800
Civilian labor force	3,990	4,150	4,270	4,320	4,370	4,430	4,490
Agricultural	2,120	2,090	2,070	1,990	1,920	1,930	1,970
Nonagricultural	1,870	2,060	2,200	2,330	2,450	2,500	2,520
	Percent of Civilian Labor Force						
Agricultural	53.1	50.4	48.5	46.1	43.9	43.6	43.9
Nonagricultural	46.9	49.6	51.5	53.9	56.1	56.4	56.1
Industry	19.3	19.3	20.0	21.2	22.7	24.6	24.9
Construction	2.5	3.9	5.2	6.3	6.4	5.4	4.7
Transportation	4.1	4.2	4.5	4.8	5.1	5.2	5.4
Trade	5.3	5.5	5.5	5.4	5.4	5.7	6.1
Other nonagricultural b/	15.7	16.7	16.3	16.2	16.5	15.5	15.0

a. Averages of estimates for the beginning and end of the year.
b. Including the civil service, which increased from 4.8 percent of the civilian labor force in 1949 to 6.3 percent in 1955.

long term loans have been made by the state to agricultural collectives or other cooperative enterprises but not to private persons except for housing. ~~Net~~ state investment ~~through the national budget~~ has been as follows since 1949:

Gross Capital Investment by the State
(Million Forints)

	Total Actual Investment (Plan Prices)	Investment through the Budget (Current Prices) Scheduled	Actual
1949	N.A.	3,320	N.A.
1950	9,700	7,250	N.A.
1951	13,100	11,700	N.A.
1952	16,000	15,300	N.A.
1953	16,000	19,019	15,837
1954	11,800	12,656	9,300
1955	11,200	9,000	9,800

Actual investment probably equalled or even exceeded the amounts in the budget plans until 1953, when investment was much smaller than scheduled. Hungary was forced to reduce its investment goal for 1954 in the middle of the year, and the target for 1955 was even more conservative.

The share of heavy industry in state capital investment was maintained at a high level (averaging about 40 of the total) throughout the First Five Year Plan. This share was reduced in 1955, permitting a substantial increase in the shares allocated to the light and food industry and agriculture, which had also been raised in 1954. Planned and actual allocations of state capital investment are shown in Table E-3 for the period 1950-54.

Table E-3

State Capital Investment under the First Five Year Plan in Hungary, by Major Sector 1950-54

	Billion Forints a/			Percent of Total		
	Original Plan	Revised Plan	Actual	Original Plan	Revised Plan	Actual
Industry	20.45	41.00	29.75	40.2	48.2	44.1
Heavy industry	17.45	37.50	27.45	34.3	44.1	40.7
Light and food industry	3.00	3.50	2.30	5.9	4.1	3.4
Construction industry	0.85	3.00	1.75	1.7	3.5	2.6
Agriculture	8.00	11.00	9.30	15.7	12.9	13.8
Transportation and communications	7.50	10.00	8.60	14.7	11.8	12.8
Trade	0.90	1.00	1.70	1.8	1.2	2.5
Housing and public works	7.40	14.00	10.00	14.5	16.5	14.8
Other	5.80	5.00	6.30	11.4	5.9	9.4
Total	50.90	85.00	67.4	100.0	100.0	100.0

a. At plan prices.

Industrial investments fell short of the augmented goals of the First Five Year Plan in every major category, but the amounts originally planned were exceeded except in the machine-building industry and light and food industry. Investment in machine-building facilities was cut severely after mid-1953 in order to free resources for the expansion of the basic materials and power industries. Even the existing plants in the machine-building industry could not be fully utilized at this time because of the shortages or poor quality of forgings, castings, and other iron and steel products.

State investment in agriculture has consisted largely of expenditures for the development of state farms and machine-tractor stations, including the purchase of livestock for the state farms and of machinery for both types of organizations. Reforestation and irrigation projects are also included in agricultural investment. State agricultural investment, not including medium and long-term loans to the agricultural ~~cooperatives~~ collectives, averaged about 17 percent of total state investment during the Three Year Plan (1947-49) but less than 14 percent of the total during the First Five Year Plan. The share of agriculture in state capital investment since 1947 is shown in the following tabulation:

	State Investment in Agriculture	
	Value (Billion Forints at 1 July 1949 Prices	Percent of Total State Investment
1947-49 average	1.7	17.1
1949	1.2	13.0
1950	0.9	9.0
1951	1.4	11.0
1952	2.1	13.0
1953	2.2	13.0
1954	2.7	23.0
1950-54 average	9.3	13.3
1955	2.5	26.0

D. Survey of Major Sectors of the Economy.

1. General Economic Growth.

The gross national product (GNP) of Hungary is estimated to have increased by about one-half from 1949 to 1954. After a further increase of moderate size in 1955, the GNP probably was nearly 50 percent higher than in 1938. Output in the industry and transportation sectors has experienced the most rapid growth, nearly doubling in each case ~~since~~ 1949 (see Table E-4). There was also a substantial growth in the volume of construction, which apparently reached a peak in 1953 and declined somewhat with the abandonment of certain projects under the "new course."

Agricultural production moved erratically because of varying weather conditions and shifts in agricultural policies. Estimated output in several years of the plan period was about one-sixth above that of 1949. A postwar high was reached in 1955, but output apparently was still significantly smaller than before the war.

2. Industry.

a. Production Trends.

Table E-4

Indexes of Estimated Gross National Product and Production by Economic Sector in 1938 and 1948-55

1949 = 100

	1938	1948	1949	1950	1951	1952	1953	1954	1955
Gross National product	107	86	100	117	128	138	148	149	158
Industry	82	86	100	121	141	164	177	184	197
Agriculture and forestry	149	98	100	115	116	106	117	110	122
Construction	65	43	100	130	156	186	191	169	160
Transportation and communications	79	85	100	117	140	170	189	189	199
Trade and services	112	91	100	105	109	110	120	132	137

a. These indexes were calculated prior to the publication of the Hungarian statistical handbook in 1956 and should therefore be regarded as provisional. See footnote on p. 68.

Table E-5 presents a comparison of the outputs of a number of important industrial products in 1954 and 1955 with the goals set in the Five Year Plan for 1954. Although the growth attained in the production of coal, electric power, iron and steel, and construction materials was substantial, it was insufficient to keep the economy running at the desired pace.

Total coal production increased from 11.8 million metric tons in 1949 to 22.3 million metric tons in 1955. The heat value of the coal mined has gradually declined, however, so that greater quantities are needed to produce the same amount of energy. The quality of Hungarian coal is for the most part poor and, except for limited deposits near Pecs, is unfit for making the metallurgical-grade coke required for production of iron and steel. Hungary is trying to free itself from dependency on imports of coke and has been constructing a modern byproduct coking plant at Sztalinvaros which is intended to use coal from Pecs and Komlo. Recent reports state, however, that the new plant will depend for its supply on a mixture of various kinds of coal, chiefly imported. The best indigenous bituminous coals go to the gas and coke plants and to heavy industry, leaving only the brown coal for the use of power plants and railroads.

Increased production of electric power has been the object of great effort. During the period 1949-1955 Hungary was reported to have built 19 power stations, increasing output from 2.52 billion kwh in 1949 to 5.43 billion kwh in 1955. Electric energy is required in large quantities for industrial use, particularly for refining aluminum. The aluminum industry reportedly uses 17 percent of the total output of electric power, even though most of

Table E-5

Planned and Actual Output of Selected Products in Hungary
1954-55

		1954			1955	Percent Increase
		Original Plan	Revised Plan	Actual	Actual	1949 to 1955
Electric power	Billion kwh	~~4,270~~ 11.27	6.05	4.83	5.43	115
Coal (all types)	Million metric tons	11.8	27.5	21.5	22.3	89
P,g iron	Thousand metric tons	960	1,280	820	855	115
Crude steel	Thousand metric tons	1,600	2,200	1,491	1,629	89
Bricks	Millions	N.A.	1,420	1,138	1,198	208
Cement	Thousand metric tons	1,050	2,100	947	1,175	113
Trucks	Units	9,000	9,000	4,217	3,664	268
Combines	Units	N.A.	1,500	925	1,535	a/
Radios	Thousands	146	N.A.	258	377	454
Cotton cloth	Million sq. meters	258	264	224	234	41
Wool cloth	Million sq. meters	23.9	27.0	21	26	13
Knitwear	Metric tons	N.A.	4,750	4,124	5,057	295
Leather shoes	Million pairs	N.A.	12.3	10.7	12.4	222
Sugar	Thousand metric tons	279	N.A.	274	~~316~~ 311	18

a. Output in 1949 was negligible or zero.

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the bauxite and alumina produced in Hungary is shipped to Czechoslovakia and the USSR for refining.

Although pig iron and crude steel production increased by 106 percent and 73 percent, respectively, between 1949 and 1954, output of both products fell far short of the plan. Moreover, the quality of iron and steel produced in Hungary has been very poor and has held down the quality of machine products made from it. Because of the large proportion of rejects, usable production has been much smaller than that reported.

In the chemicals industry, Hungary has been struggling to attain a larger degree of self-sufficiency. Production during the First Five Year Plan was confined chiefly to the manufacture of basic chemicals for domestic use, but production of pharmaceuticals was also important. The country has not been able to meet its own requirements for calcium carbide, caustic soda, or coal chemicals, and no soda ash is produced.

b. Principal Problems.

The most acute problem of industry is the shortage of raw materials, which necessitates the export of products badly needed at home in order to obtain supplies of the most essential materials. A second and related problem is the backward technology of Hungarian industry, which keeps production costs high and makes it difficult to sell Hungarian products in the highly competitive market of Western Europe.

Although it has been admitted officially that shortages of raw materials are the chief industrial weakness, it is claimed that new trade agreements will assure the import of necessary basic materials and power in the future. These raw materials include not only coal and iron ore but also

nickel, zinc, pyrites, flax, and other commodities. The machine-building industries are expected to furnish the bulk of future Hungarian exports to countries outside the Bloc.

A second and related problem is the backward technology of Hungarian industry which keeps production costs high and makes it difficult to sell Hungarian products in the highly competitive markets of Western Europe. Numerous official statements have emphasized the obsolescent character of the existing industrial equipment, even in such Hungarian specialities as the electrical equipment industry.

3. Agriculture.

a. Production Trends.

During the First Five Year Plan gross agricultural production rose by a meager 12 percent, according to official reports, in comparison with the 54 percent increase specified in the revised plan. The planted acreage in fiber crops, oil seeds, vegetables, and rice rose substantially during the period, while that in grain crops and livestock fodder crops declined.

Agricultural output in 1955 was well above the average annual output during the First Five Year Plan, and crop production probably was the highest since 1951. Impressive gains were also made in livestock and poultry numbers and in the output of animal products. Outputs of breadgrains, potatoes, and animal products during the past several years have generally remained well below prewar levels, however. Indexes of the per capita production of a number of important foodstuffs during the period

1950-55 are presented in Table E-6.

Table E-6

Indexes of Per Capita Production of Selected Foodstuffs in Hungary 1950-55

1933-37 average=100

	1950	1951	1952	1953	1954	1955
Breadgrains	89	107	73	76	64	76
Potatoes	56	90	43	72	82	89
Sugar	216	219	174	235	223	251
Meat	79	59	76	78	62	67
Animal fats	46	38	44	48	42	48
Milk	66	62	72	65	73	78
Vegetable oils	362	677	315	508	400	477

b. Collectivization.

Agricultural collectivization efforts were renewed in 1955 after the dismissal of Premier Imre Nagy and the repudiation of the "new course" policy. After the Nagy government granted permission to dissatisfied members to leave the collectives, many members withdrew and hundreds of collectives were dissolved. The number of ~~cooperatives~~ collectives dropped by about one-sixth during the eighteen months following the "new course" announcement and the number of households was reduced by nearly one-half. This setback to the collectivization effort was so severe that the losses had not yet been made up by the end of 1955 (see Table E-7). Recent additions to the membership of collectives have consisted primarily of families with small land holdings. In March 1956, collective farms embraced 21 percent and state farms about 13 percent of the total arable land, making a total of 34 percent of the arable land in the socialized sector.

Table E-7

Socialization of Agriculture in Hungary
1949-56

	Collective Farms				State Farms		Total Socialized Sector
			Area				
	Number of Farms	Number of Households (Thousands)	Hectares of Arable Land (Thousands)	Percent of Total Arable Land	Hectares of Arable Land (Thousands)	Percent of Total Arable Land	Percent of Total Arable Land
December 1949	1,760	40	173	3.0	230	4.0	7.0
September 1950	2,229	89	403	7.0	345	6.0	13.0
November 1951	4,653	236	898	15.6	518	9.0	24.6
December 1952	5,300	318	1,416	24.6	731	12.7	37.3
April 1953	5,315	340	1,445	26.0	734	13.2	39.2
December 1953	4,677	238	1,117	20.1	693	12.5	32.6
December 1954	4,381	185	940	16.9	689	12.4	29.3
December 1955	4,996	245	1,107	19.9	706	12.7	32.6
March 1956	5,186	280	1,174	21.1	706	12.7	33.8

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c. Mechanization.

Mechanization of agriculture progressed at a faster rate in 1955 than in previous years, but its level is still low by Western European standards. Although the production of farm machinery has increased considerably since 1949, the country's export requirements have absorbed a major part of such manufactures. Consequently, the planned deliveries of machinery to the agricultural sector during the First Five Year Plan were not fully carried out, as is shown by the following figures:

Deliveries of Agricultural Machines to State Farms and MTS's, 1950-54*

	Planned	Actual	Actual Deliveries as Percent of Plan
Tractors	26,100	12,403	48
Tractor plows	17,320	11,488	66
Harrows	11,300	8,053	71
Grain binders	9,060	3,448	38
Cultivators	6,800	4,277	63
Grain drills	5,300	4,729	89
Combines	2,600	2,052	79

* A small number of these machines, amounting to less than 5 percent of the total, were delivered to collective farms or private farmers.

In 1955, there were 312 machine-tractor stations (MTS's) with about 13,000 tractors, or an average of 42 tractors per station. Indications are that the machinery of the MTS's has not been fully used because of a lack of trained personnel, poor maintenance, shortage of parts, and poor planning. Because of high and discriminatory fees, it is doubtful whether the private farms obtain much benefit from the machinery of the MTS's. Most of the work on private farms is done with horse-drawn machinery. Small machines and implements have usually been scarce, but the situation has improved since 1953.

4. Transportation.

Since World War II, the major east-west railroad lines of Hungary have been strengthened and railroad bridges destroyed in the war have been rebuilt. Improved signal and communications facilities have been installed on the major lines, and key railroad yards and stations have been improved. In spite of increases in the production of locomotives and rolling stock, the inventory is inadequate to handle the present volume of traffic efficiently. Reduction of turnaround time for freight cars by 17 percent between 1950 and 1955 reflects the growing intensity of freight car utilization. There were sizable increases in the volume of freight traffic from 1949 to 1955, as shown in the following tabulation:

	Ton-kilometers of Freight Traffic (Millions)		
	Railroad	Inland Waterways	Highway
1949	4,510	424	209
1954	8,087	867	702
1955	8,499	935	744

5. Housing.

Most of the war damage to Hungary's housing stock was repaired by 1949, but most housing in the country is still very old. Construction of urban and rural dwellings from 1949 to 1954 amounted to 138,000 and 100,000 units, respectively. Even though state expenditures on housing construction have increased considerably since 1952, relatively low quotas for dwelling units have not been fulfilled. Construction has not kept up with the average annual increase in population, for which about 22,500 new units are required annually. Even the repair and replacement needs of the existing stock of houses have not been met.

6. Retail Trade.

After remaining unchanged or actually decreasing in the early years of the plan, the volume of retail sales in Hungary rose almost 20 percent in 1954 and 28 percent in 1955. This rapid rise was the result of the increased volume of consumer goods placed on the market during the implementation of the "new course" policy. Sales of nonfood items reportedly increased by 31 percent from 1953 to 1954 and constituted about 43 percent of total retail trade turnover in the latter year. Sales of foods and stimulants also increased but only about half as much (in percentage terms) as nonfood products. The average intake of food in Hungary during the food year 1954/55 reached 2,362 calories, or 90 percent of the prewar average. (see Appendix Table 5). The average diet in Hungary remains inadequate in milk products and barely adequate in meat and fish. In spite of improvements since 1949 consumer goods generally remain scarce and high-priced.

7. Foreign Trade.

One of the objectives stressed in Hungary's "new course" announcement in 1953 was an increase in its trade with non-Bloc countries. An associated aim was a lessening of emphasis on economic autarky, including the attempt of Hungary to supply its own coal, iron, and other raw materials despite its resource deficiencies. Trade with countries outside the Bloc almost doubled during the next two years, rising from 23 percent of its foreign trade turnover in 1953 to 26 percent in 1954 and 35 percent in 1955.

The value of foreign trade with other countries of the Bloc also increased in 1954 but declined in 1955. Trade with the USSR reportedly declined in both years.

The increase in Hungary's trade with the Western countries was to some extent made possible by credits granted by the latter. By 1955, Hungary had amassed debts to the West totalling about $229 million and was striving for a favorable trade balance with which to pay it off. The total balance of Hungarian trade in 1955 was reported to be favorable, but the balance with countries outside the Soviet Bloc was still unfavorable.

Certain changes in the commodity composition of Hungarian trade have also taken place . Hungary was a net importer of textiles before the war but is now a net exporter. About 50 percent of total production of cotton goods was exported in 1955. Since Hungary has had difficulty in selling such consumer goods as bicycles, toys, and radio sets in Western Europe, the planners have concluded that the sale of certain types of consumer goods abroad does not pay. They are therefore attempting to increase exports of heavy industrial products instead. Among the new commodities which Hungary is exporting to the West are residual oil, steel pipe, and rolled steel products.

In spite of Hungary's elaborate plans to balance its foreign trade, its balance of payments position is precarious. A recent agreement with Yugoslavia calls for reparations payments totalling $85 million over the next 5 years, and another agreement with the UK provides for

payment of $12.6 million in full settlement of prewar and wartime claims against Hungary. In addition, a sizable foreign debt must be serviced, and payments must be made to the USSR for occupation costs and the transfer to Hungary of the Soviet share of joint companies formed from former German assets. As a consequence, Hungary will make substantial exports without any return in the form of needed raw materials.

VI. Poland.

A. General Policy and Achievements.

Polish economic policies during the postwar period followed a pattern common to all Soviet Bloc countries. After a short period of reconstruction (1947-49), during which the Communist party consolidated and broadened its control over the economy, Poland entered into a Six Year Plan (1950-55) of economic development. This plan was designed primarily to hasten the industrialization of the country by all possible means. Although other branches of the economy were also planned to expand rapidly, it was clearly intended that heavy industry and economic activities directly connected with it receive the highest priorities in allocations of the factors of production.

The 6-year targets were in general not achieved. The agricultural goals proved to be completely unrealistic, and official claims of over-fulfillment of goals for industry are open to question. Nevertheless, Polish industrial growth was extremely rapid during the 1950-55 period (about 11 percent a year, judging by production data available for a sample of products). With the aid of newly-acquired productive capacity in the western territories detached from Germany, Poland not only expanded production of industrial materials such as steel, coal, electric power, and basic chemicals but also undertook large-scale production of a wide range of technically complex items in the machine-building and chemical industries. Expansion of heavy industry was the primary factor causing an estimated growth of about 50 percent in Poland's gross national product during the Six Year Plan period. Agriculture and related light industries

on the other hand, fared badly. Agricultural production in 1955 was about 13 percent above 1949 but only 4 percent above the good crop year of 1950. The stagnation of agricultural production is attributable not only to low priorities for skilled labor and capital goods in this area but also to the deleterious effects on farmer's incentives of the system of forced deliveries of farm products at low prices and the continuing threat of collectivization. The process of collectivization was very slow, however, and by the end of 1955 state-owned and cooperative farms controlled only 24 percent of the agricultural land, the lowest percentage in the European Satellites.

The great disparity between the growth of heavy industry and that of light industry and agriculture is reflected in the relative increases in investment and the consumption of goods, the principal end-uses of these products (see Table F-1). Investment increased about 3 times faster than the consumption of goods from 1949 to 1955. A small rise in per capita consumption appears to have taken place, but because of severe shortages of certain commodities, the poor system of distribution, and a decline in housing space per capita in urban areas, the people may not feel that they are much better off now than in 1949. Even official statistics show that money wages in many occupations increased more slowly than the cost of living. Since 1953, there has been widespread criticism of the so-called imbalance in the growth of the economy, and steps have been taken to correct it to some degree by devoting a larger part of the gains in production to raising consumption.

1. Use of Resources to Promote Economic Development.

Table F-1

Indexes of Estimated Production in Selected Economic Sectors and of End-Uses of Gross National Product in Poland
1948-55

1949 = 100

	1948	1949	1950	1951	1952	1953	1954	1955
Gross national product	96	100	110	122	123	132 ~~136~~	142 ~~150~~	157 ~~172~~
Industry	86	100	115	125	135	152	168	185
Heavy industry	89	100	114	126	143	164	185	207
Light industry	82	100	117	122	124	134	141	151
Agriculture	78	100	113	108	108	109	114	118
Investment	81	100	142	157	185	211	215	215
Consumption of goods a/	N. A.	100	114	121	119	122	130	139
Consumption of goods per capita	N. A.	100	112	116	112	113	118	124

a. Per capita consumption of selected consumer goods (from official reports) was weighted by estimated average prices in state stores in 1955. The index excludes services and consumer durables, and no adjustment was made for changes in the quality of goods. The index number for 1955 was derived from an official index of real wages.

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a. Manpower.

The Polish population emerged from World War II severely reduced in size as a result of heavy war losses, territorial changes, and forced emigration. The population in 1948 was about 24 million compared to 31 million before the war within the same boundaries. Although the lands acquired from Germany were highly industrialized, a large portion of their German inhabitants had been forced to leave the country. Consequently, only 35 percent of the labor force in 1948 was employed outside agriculture. Through about 1950, labor was recruited for industry and construction from low-productivity occupations such as agriculture, private trade, and domestic service. There was also a heavy demand for labor on the part of the military, the internal security forces, and the civil service.

After 1950, nationalization of nonagricultural occupations was almost complete, but the movement away from the farms continued. The "new course" efforts to stimulate agricultural production have led to a reversal of this trend since 1953, however. Recent government measures designed to ease the very tight labor situation include the demobilization of 47,000 men and the granting of amnesties to some 70,000 political prisoners. Throughout the postwar period, the state has also sought with apparent success to increase the participation of women in the urban labor force. Low real wages for most men have been an important stimulus in forcing wives to work. Table F-2 shows the growth of the Polish population and labor force since 1948.

b. Investment.

The bulk of capital investment during the postwar

Table F-2

Estimated Population and Labor Force in Poland
1948 ~~-~~ 1955

Thousands a/

	1948	1949	1950	1951	1952	1953	1954	1955
Population	23,850	24,300	24,770	25,270	25,750	26,250	26,760	27,280
Civilian labor force	12,430	12,600	12,760	12,860	13,010	13,360	13,640	13,770
Agricultural	8,100	7,850	7,570	7,300	7,240	7,310	7,380	7,240
Nonagricultural	4,330	4,750	5,190	5,560	5,770	6,050	6,260	6,530
Of which: Industrial b/	1,456	1,636	1,972	2,195	2,327	2,466	2,576	2,693

a. Averages of estimates for the beginning and end of the year except for industrial labor force data, which are annual averages.
b. Excluding private industry and handicrafts.

period has been allocated to industry in order to support the planned growth in industrial output (see Table F-3). Agriculture received an extremely small share (about ~~2~~ 8.5 percent), considering its importance in the gross national product. Housing also suffered in the allocation of investment funds, resulting in a decline in housing space per capita. The concentration of investment in industry on the other hand, was greater than planned. This policy undoubtedly was a strong stimulus to economic growth in the short run, but it was also largely responsible for the lag in consumer goods production and has left a legacy of problems which will affect investment allocations in the new Five Year Plan.

c. Economic Planning and Control.

The operation of economic planning and control has tended increasingly to conform to the Soviet pattern. On the whole it has been inefficient and wasteful. Plans were in general unrealistically high, and when quantity plans were met, the quality or assortment of goods often suffered. Accounting and financial control over the expenditures of enterprises was severely damaged by a great inflation of wage rates during a period when prices of producer goods were nearly constant. This resulted in large and increasing subsidy payments from the state budget to nearly all heavy industries. There has been some recent improvement in both planning and control methods, however. Planned increases in output for the next 5 years appear to be much more realistic than in the past. Measures intended to reduce waste include the major price-cost reform of January 1956, which is designed to make most industrial enterprises profitable and therefore more amenable to

Table F-3

Distribution of Centralized Investment in Poland, by Major Category a/
1947 and 1949-55

Percent of Total

	1947	1949	1950	1951	1952	1953	1954	Total during Period 1950-55 Planned	Total during Period 1950-55 Actual
Industry	35.4	43.1	42.1	46.6	56.8	52.4	50.8	45.4	50.7
Agriculture and forestry	15.9	11.0	10.1	10.3	8.2	8.3	10.7	11.9	8.5
Transportation and communications	27.5	18.4	15.7	15.7	12.6	11.6	10.8	14.9	12.6
Internal trade	2.2	5.1	5.1	5.3	3.4	3.6	3.1	4.2	3.7
Housing and communal buildings	9.6	12.7	12.0	13.9	13.6	13.5	15.1	11.5	13.6
Cultural and social	6.4	7.6	8.3	7.7	4.3	4.7	5.8	8.8	10.9
Miscellaneous	3.0	2.1	6.7	0.9	1.1	5.9	3.7	3.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. The planned and actual distributions of investment during the period 1950-55 are based on 1950 prices and 1956 prices, respectively, and data for 1953 and 1954 are based on 1953 prices. Changes in relative prices; however, probably do not greatly affect the percentage distribution of investment by sector, as the percentages given in the Six Year Plan fulfillment report are close to a weighted average of the percentages available for individual years through 1954. Data are from the following sources: 1947 and 1949-52, 1/; 1953-54, 2/; 1950-55 total, planned 3/ and actual 4/.

accounting control.

2. Phases in Postwar Economic Development.

Since World War II, there have been 3 clearly delineated phases in Polish economic development: 1947-49, the reconstruction period; 1950-53, a period of headlong industrialization; and 1954-55, a period of readjustment. The effect of these changes in policy on the growth and allocation of output can be seen in Tables F-1 to F-3, above, and in the following tabulation, which shows the varing share of accumulation in the Polish national income:

	Accumulation as Percent of National Income*
1949	23.2
1950	27.2
1951	28.1
1952	26.9
1953	25.1
1954 (plan)	21.2
1955 (plan)	19.8

a. 1947-49.

The period of the Three Year Plan of reconstruction was one of extremely rapid recovery of all parts of the economy from the low levels of output of the first postwar years. Industrial recovery was greatly aided by the reconstruction of plants in the Silesian territories during 1947-49 and, to some extent, during the first few years of the Six Year Plan.

* Accumulation consists essentially of capital investment plus increases in working capital and stockpiles. National income; in the Marxist definition, excludes most direct services and depreciation allowances but includes indirect taxes. The percentages are based on data in current prices.

In 1946-47, agricultural production was so low that the urban population could not be fed without extensive imports. By 1949, agricultural production had recovered sufficiently to satisfy domestic requirements and in addition permit net exports of some foods. 5/ The improvement in food supplies was achieved without extensive use of compulsory deliveries of farm products and without collectivization. During the Three Year Plan, however, the state, which already owned most large-scale industry, wholesale trade, and transport, rapidly extended its control over retail trade. By the end of 1949, only a part of handicrafts and 44 percent of retail trade remained in private hands. (By 1951, the share of private trade had declined to only 5 percent.

Rapid growth was achieved simultaneously in investment and consumption, whose shares in the national income did not vary significantly during the period. Domestic investment was supplemented considerably from foreign sources, particularly during the period of UNRRA aid. In terms of dollars or 1937 zlotys, imports greatly exceeded exports in 1947-48. In terms of current domestic prices, the trade deficit probably was even greater. By 1949, however, foreign trade was about balanced in terms of dollars.

b. 1950-53.

The first 4 years of the Six Year Plan saw a tremendous concentration of resources on the construction of new industrial projects plus the added strain, after the start of the Korean war, of a substantial program for the production of modern military equipment such as jet

aircraft and tanks. Production of heavy industry increased at a rate of about 14 percent per year. After a good year in 1950, production of light industry grew only an estimated 5 percent a year during the 1951-53 period, and agricultural production fell. A rapid expansion of nonagricultural employment continued to make inroads on the agricultural labor force, but forced deliveries of agricultural products insured the cities' food supplies.

Investment more than doubled during the period, while the consumption of goods rose little if at all. The share of accumulation in the national income (at current prices) rose from 23 percent in 1949 to 28 percent in 1951 in spite of the fact that prices of consumer goods were increasing faster than those of capital goods. The share of industry in centralized investment rose from 43 percent in 1949 to ~~47~~ 57 percent in 1952, while the share of agriculture fell from 11 percent to 8 percent. The investment plan for heavy industry was overfulfilled by 19 percent over the 1950-53 period, but the investment plans for most other sectors were underfulfilled, e.g., in light industry by 23 percent, in agriculture by 25 percent, and in social-cultural construction by 45 percent. 6/ The low priority of consumption and consumer welfare in this period is also shown by the decline in both absolute and relative terms of budgetary expenditures for social and cultural purposes. At the same time, military expenditures grew rapidly.

Although foreign trade statistics for the 1950-53 period are very incomplete, it is probable that Poland financed its development with little or no net foreign aid. Polish exports increased by 850 million rubles from 1949 to 1953, while imports increased by only 570 million rubles.

The cost of headlong industrialization was increased by waste and inefficiency, about which there have been severe and numerous complaints in the Polish literature. Large new projects were undertaken although output could have been raised at lower cost by modernizing existing facilities. Waste resulting from too great a pressure to increase output was protected and even fostered by the irrational price-cost structure discussed above.

c. 1954-55.

Economic developments in 1954-55 were in sharp contrast to those of the preceding period with respect to the growth of production and especially to the allocation of resources, although the "new course" changes were not as great as in certain other Satellites. The average rate of growth of heavy industry declined to about 12 percent a year, while that of light industry and agriculture increased to 6 percent and 4 percent, respectively. Capital investment remained at about the 1953 level in terms of constant prices, declining from about 25 percent of the national income in 1953 to below 20 percent in 1955. This drop is all the more notable in that consumer goods prices were falling while prices of capital goods were stable or showed a slight rise. A decided rise in consumption took place in 1954-55, as is shown by the consumption index in Table F-1, above. Although the extent of the rise is indicated only roughly by the index, the level of consumption probably was higher in 1955 than in any other postwar year. The share of investment in industry fell from 57 percent to 51 percent from 1952 to 1954, while the share of agriculture and forestry rose from 8 percent to nearly 11 percent.

In addition, private farmers received larger credits than before, and the flow of workers from the farms to the cities was reversed. Military expenditures rose much more slowly than in the preceding period. The share of social-cultural expenditures in the budget increased, while the share of investment declined.

By the end of 1955, it was apparent that consumer goods production would continue to receive higher priorities than in the 1950-53 period. "New course" policies have in general been continued. On the other hand, recent demobilization of military personnel, political amnesties, and reductions of administrative personnel and costs represent an attempt to minimize the depressive effect of the "new course" on the country's industrial growth. The relaxation of the international situation also led to a cut in the military budget for 1956.

B. Survey of Major Sectors of the Economy.

1. Industry.

a. Principal Developments.

Polish industry grew at a rapid rate during the Six Year Plan. Production of industrial materials (fuels, metals, chemicals, and building materials) increased by an estimated 72 percent, while the output of the machine-building and defense industries almost tripled. A significant share of industrial production now represents items not produced or produced only in negligible quantities prior to 1949. Included in this category are most pharmaceuticals and synthetic

materials, boilers and turbines, automobiles and trucks, antifriction bearings, various types of agricultural machinery, and a wide range of consumer durables. The smallest percentage increases in output during the plan were in coal, cotton fabrics, and food processing.

The coal industry presents a special problem since it not only provides the domestic economy with about 90 percent of its primary energy but also supplies coal to other Satellites and the USSR and is the most important means of earning western currencies. Coal production increased by only 27 percent during the period, to a level only slightly in excess of 1943 production within the same boundaries. 7/ The internal demand for coal has grown faster than production as a result of the rapid development of metallurgy, coke chemicals, electric power, and railroad transport. Although coal allocations to low-priority domestic users (especially household consumers) were cut, a drop in coal exports was necessary.

b. Analysis of Plan Fulfillment.

The Six Year Plan was not fulfilled for any important industrial raw material (see Table F-3a). Output of the three key products of electric power, hard coal, and crude steel, for example, fell short of the 1955 targets by 4 to 8 percent. Goals for various other basic materials were underfulfilled by substantially larger percentages. The degree of plan fulfillment in machinery output cannot be clearly ascertained from the limited data available for individual products. Nevertheless, official claims of overfulfillment of the plans for industrial output in the socialist sector and for the output of heavy industry are difficult

Table F-3a
Planned and Actual Output of Selected Products in Poland
1955

Output in 1955

	Unit	Planned	Estimated Actual	Actual Output as Percent of Plan	Percent Increase in Output, 1949 to 1955
Electric power	Billion kwh	19.3	17.7	92	113
Hard coal	Million mt	100	94.5	94	28
Brown coal	Million mt	8.4	6.0	71	30
Crude oil	Thousand mt	394	180	46	20
Pig iron	Million mt	3.50	3.10	89	138
Crude steel	Million mt	4.60	4.43	96	93
Zinc	Thousand mt	198	156	79	44
Sulfuric acid	Thousand mt	540	450	83	63
Caustic soda	Thousand mt	162	97.6	60	65
Nitrogen and phosphorous fertilizer	Thousand mt	481	283	59	91
Cement	Million mt	5.0	3.8	76	63
Bricks	Billions	3.8	3.1	82	158
Freight cars	Thousands a/	18.8	16.0	85	-5
Tractors	Thousands	11.0	8.0	73	220
Trucks	Thousands	25.0	12.5	50	5,100
Cotton fabrics	Million linear meters	608	565	93	39
Wool fabrics	Million linear meters	74.9	75.7	101	51
Silk fabrics	Million linear meters	104	84.5	81	77
Leather footwear	Million pairs	22.2	24.6	111	186
Sugar	Million mt	1.10	0.98	89	16

a. Standard-gauge freight cars in 2-axle equivalent units.

to believe. Official indexes of the volume of industrial production appear to have a substantial upward bias.

c. Allocation of Resources to Industry.

Table F-4 shows the distribution of the industrial labor force in 1949 and 1954 and the growth of employment in individual industries during the period. The metallurgical, construction materials, and metal-fabricating industries had the largest percentage increases in employment, whereas textiles, leather, and shoes had the lowest. A comparison of the growth of production with the growth of employment suggests that output per worker increased slowly in industries producing primarily basic materials but increased rapidly in chemicals and the metal-fabricating industries, where goods of increasing complexity were being produced. The highest wages and wage increases were permitted in the key producer goods industries as a means of attracting labor or raising labor productivity. Workers in light industries such as textiles, however, probably suffered a decline in their living standards.

Labor productivity in coal mines in 1955 was at about the 1949 level and thus considerably below prewar levels[9/1] in spite of substantial investments and labor incentives in the form of above-average and rapidly-growing wages.

Apart from the fact that heavy industry received the great bulk of industrial investments, there is no information on the allocation of investments to individual industries during the Six Year Plan.

Table F-4

Employment in Principal Industries a/ in Poland b/
1949 and 1954

	Thousands		Percentage Increase
	1949 c/	1954 d/	1949 to 1954
Coal mining	215	279	30
Other mining	32	37	16
Ferrous metallurgy	(96	133	(85
Nonferrous metallurgy	(	45	(
Electric power	51	59	16
Chemicals	100	130	30
Construction materials	(106	145	(93
Glass and porcelain	(	60	(
Metals manufactures	305	(651	(86
Electro-technical	45	(	(
Wood and wood products	123	162	32
Paper and printing	67	76	13
Textiles, leather, and shoes	519	560	8
Food processing	225	320	42
Other industries	109	47	-57
Total	1,993	2,704	36

a. Including private industry and handicrafts (including self-employed).
b. Data are from the US Bureau of the Census and source 8/.
c. Industrial employment in March 1949 plus handicrafts employment in June 1948.
d. Annual averages.

2. Agriculture.

a. Production Trends.

Polish agricultural production increased by 18 percent from 1949 to 1955, while the Six Year Plan had called for an increase of 50 percent. Production in 1955 was only 4 percent above the exceptionally good crop year of 1950. After a period of stagnation (1951-53), favorable weather during 1954 and 1955, combined with more liberal government policies toward private farmers, raised production to approximately the prewar level.

Crop production rose by less than 10 percent from 1949 to 1955; the output of grains grew more slowly than this and that of industrial crops faster. Livestock numbers increased significantly. In the case of hogs, which are the principal source of meat and fats in Poland, numbers rose 78 percent or more than planned. An inadequate fodder base, however, led to a decline in productivity per animal and a growth in the output of animal products of only 32 percent. The inability of grain production to meet rising bread and fodder requirements has led to a net import position on grain, reversing the 1949-51 net export position.

b. Food Availabilities.

Per capita caloric intake of food in Poland during the 1954/55 food consumption year was about 10 percent above the prewar level (partly as a result of population losses) and also exceeded the 1948/49 level by a comparable extent (see Appendix Table 5). There was some improvement in the quality of the diet during the plan period. Since increases in meat production were roughly proportionate to the growth of the urban labor force, meat consumption of persons already living in urban areas by 1949 probably did not increase. Workers moving to urban areas probably obtained increased supplies of meat, however, as meat has historically had much more importance in the Polish urban diet than in the rural diet.

c. Socialization.

The socialization of agriculture in Poland has progressed very slowly in spite of continuous official pressure. Collective farms,

which were insignificant in 1949, held 5 percent of agricultural land in 1953 and 4 percent in 1955. State farms are more important, representing 9 percent of agricultural land in 1949 and 13 percent in 1955 (see Table F-5). Very few of the state and collective farms are in the old Polish lands, however; Polish peasants have strongly resisted collectivization.

Table F-5

Socialization of Agriculture In Poland
1949-55

Year (as of December)	Percent of Agricultural Land a/ Collective Farms	State Farms	Total Socialized Sector
1949	0.2	9.0	9.2
1950	2.1	10.9	13.0
1951	3.2	11.8	15.0
1952	4.8	12.0	16.8
1953	7.2	12.8	20.0
1954	8.6	12.5	21.1
1955	10.6	13.0	23.6

a. Agricultural land consists of arable land plus permanent meadows and pastures.

d. Investment and Manpower.

Centralized investments in agriculture doubled during the 1949-53 period. This represented only 75 percent fulfillment of the plan, however, and it was partly counteracted by a fall in private agricultural investments. 10/ Since 1953, an increase of 84 percent in centralized agricultural investment is officially claimed, together with a substantial growth of credits to private farmers.

The number of tractors available to agriculture at the end of 1955 was announced to be 56,000 -- which is only 69 percent of the

Six Year Plan goal -- and deliveries of other types of agricultural machinery appear to have lagged even more. The following tabulation shows the growth of the tractor park during the 1949-55 period:

	Tractor Park 11/ (15-hp. Units)
1949	18,019
1950	22,800
1951	31,800
1952	39,200
1953	45,691
1954	51,303
1955	56,000

The recent emphasis on agriculture has led to a reversal of the downward trend in the agricultural labor force. Agricultural labor continues to be scarce, however, especially in the western territories, which are incompletely settled.

3. Foreign Trade.

Rapid industrialization created substantial changes in the pattern of Polish foreign trade. In general, it led to a rapid growth of imports of machinery and of heavy industrial materials with which Poland is poorly endowed, for example, petroleum, iron ore, and phosphorous fertilizer. At the same time, the pressure of domestic demand led to a considerable reduction in the ratio of exports to domestic production for such goods as coal, coke, cement, caustic soda, soda ash, and rolled steel products. In the case of coal, there was an absolute decline in exports. Poland's most important and most salable exports increased slowly or not at all, while the portion of her imports which were tied to the industrialization

program were growing rapidly. Consequently, other imports, representing mostly fibers and foods, had to be reduced. Exports of machinery and equipment increased very rapidly but have only recently become an important source of foreign currency.

The effect of "new course" policies is clearly reflected in the trade statistics for 1954-55. Exports of textile fabrics declined, while imports of light industrial materials recovered to the 1949 level and imports of foods tripled. In this manner, domestic availabilities of consumer goods were increased. These changes, however, did not fundamentally alter the trade pattern established as a result of the industrial development program. Table F-6 shows the percentage distribution of the value of imports and exports by major product group in 1949 and 1953-55. In 1955, Poland still depended on coal and coke for nearly one-half of its export earnings. Machinery and equipment represented 13 percent of exports, compared to 2.4 percent in 1949. The share of machinery and raw materials for heavy industry in total imports rose from 42 percent in 1949 to 51 percent in 1955, while the share of raw materials for light industry fell from 36 percent to 24 percent.

The growth of imports and exports in certain categories during the Six Year Plan is indicated in Table F-7. Although the basis of calculation of these official indexes is not known, the magnitudes are reasonable and consistent with the data on imports and exports of individual commodities shown in Table F-8. Polish trade with the USSR has declined recently in relative importance, but the USSR is still Poland's leading trading partner by a wide margin. The neighboring Satellites of East Germany and

Table F-6

Imports and Exports of Poland by Product Groups 12/25
1949 and 1953-55

	Percent of Total			
	1949	1953	1954	1955
Imports				
Machines, installations, and transport equipment	24.4	40.6	32.5	30.9
Of which: Machines and installations for complete industrial projects	N.A.	10.7	10.4	9.8
Electrical and power machines and installations	5.0	6.2	4.7	3.5
Transport equipment	6.5	6.3	5.0	2.3
Raw materials	61.4	50.0	50.6	51.7
Fuels	3.4	3.5	4.2	4.7
Raw materials for heavy industry	17.5	19.8	19.8	20.4
Raw materials for light industry	35.8	22.3	23.0	23.7
Supplies for agriculture	4.7	4.3	3.6	2.9
Agricultural consumer goods	11.4	6.7	13.5	13.1
Industrial consumer goods	2.8	2.7	3.4	4.3
Total	100	100	100	100
Exports				
Machines, installations, and transport equipment	2.4	12.3	11.1	13.1
Of which: Land transport equipment	0.7	7.3	6.3	5.4
Marine transport equipment	0.4	3.1	2.9	4.0
Raw materials	68.7	57.8	61.6	64.4
Of which: Coal and coke	47.8	38.0	44.6	46.6
Iron and zinc	9.7	9.9	7.8	8.9
Chemicals	3.6	2.0	2.6	3.1
Wood and paper	3.5	3.9	3.8	3.7
Agricultural consumer goods	19.8	20.3	18.0	15.3
Industrial consumer goods	9.1	9.6	9.3	7.2
Total	100	100	100	100

Czechoslovakia rank next in importance. Trade with Communist China formed a larger part of Poland's turnover in 1955 than trade with several of the other Satellites or any country of western Europe other than the UK (see Table F-9).

Table F-7

Indexes of the Imports and Exports of Poland by Selected Product Group 13/
1949 and 1953-55

1949 = 100

	1949	1953	1954	1955
	Imports			
Machinery and equipment	100	204	190	186
Materials for heavy industry	100	138	162	165
Materials for light industry	100	77	92	100
Agricultural products (including foodstuffs)	100	98	282	293
	Exports			
Machinery and equipment	100	706	658	816
Materials for heavy industry	100	110	126	135
Agricultural products (including foodstuffs)	100	131	136	128

Like most rapidly industrializing countries, Poland has experienced a chronic shortage of foreign exchange during the postwar period. UNRRA gifts greatly aided the Three Year Plan of reconstruction. After the cessation of UNRRA aid, the recovery of agricultural production continued to increase export availabilities and reduce import requirements until about 1950. The 1951-53 period was one of maximum balance-of-payments pressure because of the rapidly growing demands of domestic industry and the stagnation of agriculture. Imports of low priority such as consumer-oriented goods fell sharply. The foreign exchange shortage was relieved somewhat by the

Table F-8

Foreign Trade in Selected Commodities ~~in~~ Poland a/
1949 and 1955

	Volume of Trade			Trade as Percent of Production	
	Unit	1949	1955	1949	1955
Imports					
Crude petroleum	Thousand metric tons	91.5	545	61	303
Petroleum products	Thousand metric tons	255	886	111	94
Iron ore	Million metric tons	1.6	4.4	380 b/	344 b/
Nitrogen fertilizer	Thousand metric tons	35.8	56.4	48	37
Phosphorous fertilizer	Thousand metric tons	387	522	526	402
Wheat and rye	Thousand metric tons	165	1,154	2	14
Cotton	Thousand metric tons	98.3	95.2	c/	c/
Wool	Thousand metric tons	15.4	16.3	733	170
Exports					
Hard coal	Million metric tons	26.3	24.3	35	26
Coke	Million metric tons	1.85	2.24	31	21
Caustic soda and soda ash	Thousand metric tons	54.7	51.8	19	16
Cement	Thousand metric tons	506	674	22	18
Rolled steel products	Thousand metric tons	162	247	11	8
Lumber	Thousand cubic meters	697	915	5	6
Cotton fabrics	Million linear meters	50.5	57.5	12	10
Wool fabrics	Million linear meters	5.9	5.8	12	8
Sugar	Thousand metric tons	184	372	22	38
Meat and meat products	Thousand metric tons	26	71	5	9

a. Trade data are from source 14/.
b. On a comparable iron-content basis. The iron-contents of domestic ores and imported ores are estimated roughly as 30 percent and 50 percent, respectively.
c. Poland's production of cotton is negligible or zero.

Table F-9

Geographic Distribution of the Foreign Trade Turnover of Poland 25X1 15/ 1954-1955

	Percent of Total	
	1954	1955
Sino-Soviet Bloc a/	70.0	63.3
USSR	37.6	32.1
European Satellites	28.6	27.4
Bulgaria	1.3	0.9
Czechoslovakia	8.9	8.4
East Germany	14.1	13.3
Hungary	3.0	3.1
Rumania	1.3	1.3
Communist China	3.8	3.8
Other European Countries	21.2	26.2
Of which: Austria	2.2	2.5
Finland	2.3	2.6
France	2.1	2.6
United Kingdom	5.2	6.5
West Germany	1.9	2.9
Asia excepting Communist China	2.2	3.2
Other areas	6.6	7.3
Total	100	100

a. Excluding Albania and Communist Korea and Vietnam.

high prices paid for Polish coal in the West during the early part of the period and by Soviet credits for the purchase of equipment. These advantages were partly offset, however, by the low prices paid for Polish coal exports to the USSR. In terms of rubles, exports increased faster than imports during this period. During the "new course", exports appear to have increased too slowly to pay for the additional imports of consumer goods. From 1953 to 1955, the value of imports grew by 630 million rubles and the value of exports by only 255 million rubles. Although clear conclusions cannot be drawn without substantially more knowledge of the methods of valuing Polish foreign trade, it seems probable that Poland has used up its foreign currency reserves or credits to finance "new course" programs.

4. Other Sectors.

Polish railroads attained a large increase in traffic (about 58 percent) from 1949 to 1955, primarily through more efficient use of existing facilities. Very little electrification and dieselization has taken place up to now, however, and the added strain of increased traffic has caused some deterioration of rolling stock. Although motor, air, and sea transport grew much more rapidly than railroad transport, they accounted for only about a quarter of total ton-kilometers of goods carried in 1955. Communications services also increased rapidly. The communications network is believed to be adequate for present needs.

Construction activity represents a large part of the value of investment and may therefore be assumed to have increased about proportionately with it (~~see Table E-3, above~~). Although housing construction

increased rapidly, it did not keep up with the growth of the urban labor force and was generally of very poor quality.

The rapid growth of retail trade (see Table F-10) reflects in large part the process of urbanization. Employment in education, health, and other state services has grown rapidly, as have the number of students in schools and the number of hospital beds. Private services have slowly declined in volume since 1950 and are now of small importance.

Table F-10

Retail Trade Turnover in Poland 16/
1949-55

	Value of Retail Sales a/ (Billion 1953 Zlotys)			Index of Total Retail Sales (1949 = 100)
	Private	Socialist	Total	
1949	36.5	46.5	83.0	100
1950	16.0	79.0	95.0	114.4
1951	7.0	93.0	100.0	120.5
1952	5.0	96.0	101.0	121.7
1953	4.2	102.3	106.5	128.3
1954	5.0	120.7	125.7	151.4
1955	5.6	134.0	139.6	168.2

a. Includes sales of public catering establishments.

VII. Rumania.

A. General Policy and Achievements.

Rumania was still a comparatively underdeveloped country at the end of the war, when the Communists gained control. About ~~70 percent~~ three-fourths of the population was dependent on agriculture, ~~before the war,~~ and the living standard was one of the lowest in Europe. The Communist regime has attempted to develop the economy through industrial development and agricultural reform. As a result, most of the large estates were broken up, but the largest ones were converted into state farms which were to serve as models of agricultural production. Industrial development was promoted within the framework of the Soviet-Rumanian joint stock companies (Sovroms), which were established in the spring of 1945. The Sovroms included a wide variety of nonagricultural enterprises. Consequently, there was a large degree of state ownership in the economy long before nationalization was undertaken officially in June 1948.

Nationalization of productive facilities was followed by the introduction of national economic plans, consisting first of annual plans for 1949 and 1950 and more recently of five year plans for 1951-55 and 1956-60. Although these plans have had the usual aim of general development of a heavy industrial base, particular attention has been given to the exploitation of the country's principal mineral resource -- petroleum. Production of crude oil increased considerably during the First Five Year Plan and is somewhat larger than before the war. Output before the war was concentrated very largely in Ploesti, but this area has declined in importance as other areas have been developed.

During the First Five Year Plan, Rumania's gross national product increased an estimated 50 percent and substantial progress was made in the effort to industrialize the economy. Heavy investment in industry contributed to an increase in industrial production of about three-fourths during the plan period. Producer goods output increased even more, according to intelligence estimates, while consumer goods output probably rose by about 50 percent (see Table G-1). Agricultural production has generally lagged behind the prewar accomplishment. A substantial improvement was registered in 1955, however, as a result of favorable weather and expansion of the cultivated area.

Table G-1

Indexes of Estimated Gross National Product and Production in Selected Economic Sectors in Rumania 1938 and 1948-55

1950 = 100

	1938	1948	1949	1950	1951	1952	1953	1954	1955
Gross national product	103	87	91	100	111	111	123	134	150
Industry	79	70	86	100	116	132	146	156	178
Producer goods	74	63	82	100	123	145	167	173	201
Consumer goods	84	80	91	100	108	116	122	136	151
Agriculture	122	106	100	100	112	97	106	121	148

B. Economic Plans.

1. One Year Plans for 1949-50.

The first Rumanian economic plans were relatively simple and unambitious one year plans for 1949 and 1950. The major goal of a rapid recovery of industry apparently was achieved. According to official claims, gross industrial production in 1949 and 1950 increased by about 40 percent and 37 percent, respectively, over the preceding years. 1/ On the other hand, agricultural production remained well below the prewar level, primarily because of the low level of investment.

In 1949, heavy industry received 37 percent of total investment; light and food industries, 10 percent; transport and telecommunications, 21 percent; social and cultural activities, 11 percent; and agriculture and forestry only 9 percent.[2] The funds available for investment in the 1950 plan were similarly allocated, except that agriculture received a larger share (15 percent) to expedite collectivization.[3] Rumania's foreign trade was drastically reoriented under the 1949 and 1950 plans. Trade turnover with the countries which now make up the Soviet Bloc increased from 23 percent of the total in 1938 to 83 percent in 1950.

2. First Five Year Plan, 1951-55.

The main goals of the First Five Year Plan were greater industrialization, gradual collectivization and mechanization of agriculture, and expansion of the state and cooperative trade network. As in the earlier one year plans, about one-half of planned total investment was allocated to industry, most of it to heavy industry. Investment in agriculture however, comprised a still smaller share of total outlays than previously.

The goals for gross industrial production in 1951 and 1952 were overfulfilled. Apparently impressed with this performance, Rumanian planners increased the goals for the remaining years and spoke of attaining the over-all industrial objective of the Five Year Plan in four years. Certain factors interfered with the successful completion of the revised plan, however. First of all, the industry was beginning to outstrip its limited base of raw materials. The coal industry, for example, failed to meet its goals for 1952 and 1953, and this deficiency adversely affected

the growth of steel and electric power production. Secondly, the government's indifference to consumer welfare had begun to have an unfavorable effect on labor productivity. These problems were aggravated by the subnormal harvests of food crops in 1952 and 1953. As a consequence, the 1953 plan for industrial output would not have been fulfilled if the target had not been lowered substantially. The gross output of industry grew only 14 percent in 1953, compared with a rise of 23 percent in the previous year.[4] This decline probably was one of the principal considerations underlying the "new course" modification in economic policy in the latter part of 1953.

The "new course" also called for an increase in the share of national income distributed to consumers. The consumption fund, which includes some governmental outlays for defense as well as private consumption expenditures, was to be increased from 62 percent to 72 percent of the national income. Capital investments in agriculture also were scheduled to increase sharply. The original 1953 plan allocated 7.2 percent of total capital investment to agriculture, but this share was increased to 16.4 percent in 1955.[5] Capital investments in industry and particularly heavy industry were to be reduced. For example, planning work on such large-scale projects as the Danube-Black Sea Canal, the Bucharest subway, the Bistrita-Bicaz hydroelectric complex, and the Roman iron and steel complex in Moldavia was either halted or slowed down.

The plan revisions of the "new course" were ostensibly designed to redress the excessive disproportions which had arisen during the first

part of the Five Year Plan. These revisions were partly disregarded however, and the actual allocation of investment during the "new course" followed much the same pattern as in earlier years. The share of heavy industry in total investment exceeded the very high level of the original schedule for 1951-55, while the share of the consumer goods industries fell below the orininal plan (see Table G-2).

Table G-2

Planned and Actual Distribution of Capital Investment in Rumania during the First Five Year Plan 1951-55

	Percent of Total		
	Planned		
	Original 6/	"New Course" Revision 7/	Actual 8/
Industry	51.4	48.2	58.0
Producer goods	42.1	34.1	50.6
Consumer goods	9.3	14.1	7.4
Agriculture and forestry	10.0	13.1	10.4
Transportation and communications	16.2	16.2	11.2
Construction industry	2.0	2.2	4.6
Social and cultural projects	13.4	15.2	N.A.
Of which: Workers' dwellings	3.2	5.2	3.8 — 15.8
Other	7.0	5.1	N.A.
Total	100	100	100

With the exception of crude oil, production of major industrial materials in 1955 failed to meet the goals set down in the original Five Year Plan. Only in a few instances were the five year plan targets in the basic materials, chemicals, building materials, and food industries fulfilled more than 70 percent. The 1955 outputs of coal, pig iron, steel, and cement, for example, were well below the original goals (see Table G-3). A general overfulfillment of goals was claimed by the regime, however, on the basis of the reduced goals adopted during the "new course", ~~for 1955~~.

Table G-3

Planned and Actual Output of Selected Products in Rumania
1950 and 1955

	Million Metric Tons a/			Actual Output in 1955 as Percent of Plan
	Estimated Actual Output		Original Planned Output, 1955	
	1950	1955		
Coal (all types)	3.9	6.2	8.5	73
Crude oil	5.1	~~11.0~~ 10.6	10.0	106
Pig iron	0.32	0.58	0.8	72
Crude steel	0.56	0.76	1.25	61
Finished steel	0.46	0.57	0.83	69
Cement	1.0	2.0	2.9	69
Electric power (billion kwh)	2.2	4.3	4.7	91

a. With the exception indicated for electric power.

C. Survey of Major Sectors of the Economy.

1. Industry.

Rumanian industry had recovered from wartime damage and dislocation by the beginning of the Five Year Plan in 1951. Industrial production ~~in 1950~~ is estimated to have been about one-fourth above ~~that~~ the level in 1950 (increased an additional three-fourths during ~~of~~ 1938 and to have ~~increased in the course of~~ the plan. The petroleum industry was expanded greatly to meet reparation requirements until 1953, and increments to output since then have served as a means of earning foreign exchange, particularly hard currencies. Like total industrial production, outputs of electric power, crude oil, pig iron, and cement, in 1955 were roughly twice as high as in 1950. As in the other Satellites, these gains were accomplished by a sizable increase in the industrial labor force and by limitation of investment in other sectors of the economy. The gains in nonagricultural employment did not, however, appreciably affect the labor force in agriculture, which still has a surplus of workers (see Table G-4).

Table G-4

Estimated Population and Labor Force in Rumania
1948 and 1950-55

Thousands a/

	1948	1950	1951	1952	1953	1954	1955
Population	15,980	16,370	16,570	16,800	17,020	17,230	17,430
Civilian labor force	9,320	9,870	10,020	10,130	10,200	10,270	10,380
Agricultural	7,120	2,700	7,070	7,010	7,000	7,000	7,040
Nonagricultural	2,200	7,170	2,950	3,120	3,200	3,270	3,340

a. Averages of estimates for the beginning and end of the year.

2. Agriculture.

a. Trends in Production and Food Availabilities.

Agricultural policy during the First Five Year Plan was conditioned by the investment priority of heavy industry and by the Communist dogma calling for the socialization of agriculture. As a result of this policy, agriculture did not achieve very high levels of output until the end of the plan. The substantial gain in agricultural production in 1954 served only to restore the pre-war level, but an additional large increase in 1955 pushed output well above the prewar accomplishment. Output in 1955 nevertheless was considerably smaller than scheduled in the plan.

Food consumption per capita dropped to about 80 percent of the prewar average in the 1952/53 consumption year, but has risen steadily since then (see Appendix Table 5). The estimated present caloric level of 2,500 calories per day is still slightly under the prewar average of 2,600 calories because of the smaller proportion of quality foods in the Rumanian diet.

b. Manpower.

The labor force in agriculture changed little during the Five Year Plan, and a shortage of farm labor does not appear to be a serious problem as in some Satellites. About 7 million people were employed in agriculture in 1955, representing about 70 percent of the civilian labor force and 40 percent of the population.

c. Collectivization.

Socialization of Rumanian agriculture has been less rapid than in most other Satellites. The holdings in the socialist sector advanced from about ~~12~~ 9 percent of the total arable land at the end of 1950 to over 26 percent at the end of 1955. The "new course" policies initiated in mid-1953 relaxed somewhat the earlier pressure on farmers to join collectives. By the beginning of 1955, however, the old doctrines were in operation again. Although the increase in 1955 in the amount of arable land under collectivization was relatively modest because of the small size of the new collectives, the program made notable gains on the organizational level. The number of collective farms and agricultural associations increased from 4,968 in January, 1955 to 6,600 by the end of the year. There was also a gain of about 21 percent during the year in the number of farm families in collectives.

3. Foreign Trade.

Rumania's trade during the First Five Year Plan is characterized by a steady growth in volume and by a general shift in

its direction toward other Bloc countries. The value of Rumanian foreign trade rose from less than $500 million in 1950 to about $870 million in 1955.[11] About 80 percent of this trade was with Bloc countries, compared with a ratio of about 23 percent in 1938. Although Bloc countries offer a ready market for Rumanian exports, especially oil and timber products, they have been unable to supply all her needed imports.

In 1950 Rumania exported 70 percent of its production of petroleum products, of which 97 percent went to the Sino-Soviet Bloc and 3 percent to the West. By 1955, however, about 73 percent of the output of petroleum products was exported, of which only 70 percent went to Bloc countries. Petroleum exports accounted for at least 40 percent of Rumania's exports to non-Bloc countries in 1955 and were a valuable source of badly needed foreign exchange.

Appendix Table /
Output of Selected Products in Albania and Bulgaria
Selected Years

	Units	Albania			Bulgaria			
		1938	1950	1955	1938	1948	1952	1955
Energy products								
Electric power	Billion kilowatt hours	Negligible	0.02	0.13	0.23	0.55	1.35	2.10
Lignite and brown coal	Million metric tons	Negligible	0.06	0.40	1.94	4.15	7.22	9.87
Hard coal	Million metric tons	0	0	0	0.15	0.13	0.19	0.30
Coke (all types)	Million metric tons	0	0	0	Negligible	0.01	0.02	0.02
Crude oil	Million metric tons	0.13	0.13	0.21	0	0	0	0.16
Petroleum products	Million metric tons	0	0.03	0.13	0.02 a/	0	0	Negligible
Natural gas	Million metric tons	0	0	0	0	0	0	Negligible
Metals and minerals								
Pig iron	Thousand metric tons	0	0	0	0	0	0	0
Crude steel	Thousand metric tons	0	0	0	21	26	40	142
Manganese ore	Thousand metric tons	0	0	0	2	8	20	45
Bauxite	Thousand metric tons	0	0	0	0	0	0	0
Primary aluminum	Thousand metric tons	0	0	0	0	0	0	0
Refined copper	Thousand metric tons	Negligible	0.90	2.50	Negligible	1.0	2.8	7.4
Lead	Thousand metric tons	0	0	0	N. A.	7.4	27.0	51.0
Zinc	Thousand metric tons	0	0	0	N. A.	3.6	13.6	28.0
Chemicals and rubber								
Sulfuric acid	Thousand metric tons	0	0	0	0	0	5.2	8.1
Nitric acid	Thousand metric tons	0	0	0	0	Negligible	40	70
Synthetic ammonia	Thousand metric tons	0	0	0	0	0	15.4	26.0
Caustic soda	Thousand metric tons	0	0	0	-	Negligible	Negligible	3.7
Chlorine	Thousand metric tons	0	0	0	0	0	0	0
Soda ash	Thousand metric tons	0	0	0	0	0	0	40.0
Calcium carbide	Thousand metric tons	0	0	0	2.5	1.6	4.5	6.0
Refined benzol	Thousand metric tons	0	0	0	0	0	0	0
Nitrogen and phosphorous fertilizers	Thousand metric tons	0	0	0	0	0	14.0	23.8
Synthetic rubber	Thousand metric tons	0	0	0	0	0	0	0
Rubber tires	Thousands ~~of units~~ tons	0	0	0	N.A.	12.5	60	87

a. 1936.

Appendix Table /
Output of Selected Products in Albania and Bulgaria
Selected Years
(Continued)

	Units	Albania			Bulgaria			
		1938	1950	1955	1938	1948	1952	1955
Building materials								
Cement	Thousand metric tons	14	15	47	180	380	620	825
Bricks	Millions	0.8	3.6	18	52 a/	130	540	655
Machinery, equipment, and ships								
Machine tools	Thousands	0	0	0	0	0	0.1	0.35
Trucks	Thousands	0	0	0	0	0	0	0
Tractors	Thousands	0	0	0	0	0	0	0
Mainline locomotives	Units	0	0	0	0	1	0	0
Freight cars (2-axle equivalent units)	Thousands	0	0	0	0	0	0.3	1.0
Passenger automobiles	Thousands	0	0	0	0	0	0	0
Maritime vessels	Thousand gross register tons	N. A.	0.4	0.4	0	0	0	0
Fishing vessels	Thousand gross register tons	N. A.	.10	.20	0	0	0	0
Inland vessels, non-self propelled	Thousand deadweight tons	0	0	0	N. A.	N. A.	~~8.9~~ 9.6	11.5
Military end items								
Armored fighting vehicles	Units	0	0	0	0	0	0	0
Small arms	Thousands of pieces	0	0	0	0	0	0	0
Ammunition	Thousand short tons	0	0	0	N. A.	0.2	0.9	1.0
Food and industrial crops		Prewar b/			Prewar b/			
Wheat	Thousand metric tons	41	62	125	1880	2040	1760	2120
Rye	Thousand metric tons	3	3	4	283	254	238	279
Barley	Thousand metric tons	5	6	9	378	435	342	390
Oats	Thousand metric tons	10	10	10	131	131	104	122
Corn	Thousand metric tons	129	127	133	906	889	440	1020
Potatoes	Million metric tons	Negligible	Negligible	Negligible	0.11	0.10	0.06	0.13
Sugar beets	Thousand metric tons	Negligible	6	57	152	300	325	479
Wool (grease basis)	Thousand metric tons	2.0 c/	2.2	2.7	13.3 c/	12.4	13.4	14.4
Lumber	Million cubic meters	1.02 c/	2.06	2.44	3.70 c/	6.00	5.70	10.8

a. 1939.
b. 1935-39 average, unless otherwise noted.
c. 1938.

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Appendix Table /

Output of Selected Products in Albania and Bulgaria
Selected Years
(Continued)

	Units	Albania			Bulgaria			
		1938	1940	1955	1938	1946	1952	1955
Processed foods								
Meat	Thousand metric tons	13 c/	7	16	153 c/	100	121	121
Animal fats	Thousand metric tons	2 c/	2	2	40 c/	19	85	84
Milk	Thousand metric tons	N. A.	N. A.	19	454 c/	750	446	455
Flour	Thousand metric tons	34 b/	N. A.	166	1040 b/	1280	1200	1370
Sugar (raw)	Thousand metric tons	0	1	4	22 b/	74	50	62
Vegetable oils	Thousand metric tons	2.7 d/	2.7	8.4	47.0 d/	32.8	28.8	32.0
Footwear and textiles								
Leather footwear	Million pairs	N. A.	N. A.	N. A.	N. A.	0.5	1.2	1.5
Cotton fabrics	Million linear meters	N. A.	1.1	13.6	33 a/	60	109	138
Wool fabrics	Million linear meters	N. A.	N. A.	0.5	4.5 a/	5.1	8.6	12.0

a. 1939.
b. 1935-39 average.
c. 1933-37 average.
d. 1938.

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Appendix Table 2

Output of Selected Products in Czechoslovakia and East Germany
Selected Years

	Units	Czechoslovakia				East Germany		
		1938	1948	1953	1955	1938	1950	1955
Energy products								
Electric power	Billion kilowatt hours	4.05	7.52	12.5	15.0	18.0	18.9	24.4
Lignite and brown coal	Million metric tons	16.0	23.6	34.3	40.7	120	137	200
Hard coal	Million metric tons	15.8	17.8	20.3	22.1	3.51	2.81	2.63
Coke (all types)	Million metric tons	3.02	5.20	7.70	8.60	4.23	6.67	9.20
Crude oil	Million metric tons	0.02	0.03	0.12	0.13	0	0	Negligible
Petroleum products	Million metric tons	0.28 a/	0.42	0.87	0.80	N.A.	1.32	2.10
Natural gas	Million metric tons	Negligible	0.01	0.06	0.08	0	0	0.01
Metals and minerals								
Pig iron	Thousand metric tons	1323	1640	2780	2980	232	340	1500
Crude steel	Thousand metric tons	1873	2620	4370	4480	1700	1000	2720
Manganese ore	Thousand metric tons	95	150	220	280	0	0	0
Bauxite	Thousand metric tons	0	0	0	0	0	0	0
Primary aluminum	Thousand metric tons	0	0	1.0	20	78.7	2.0	27
Refined copper	Thousand metric tons	N.A.	0.6	3.0	23	29.5	27.8	44.1
Lead	Thousand metric tons	5.0	5.8	9.2	10.0	15.0	19.0	20.0
Zinc	Thousand metric tons	8.8	2.23	4.70	5.70	44.4	0	3.5
Chemicals and rubber								
Sulfuric acid	Thousand metric tons	180	196	285	363	447	280	594
Nitric acid	Thousand metric tons	36.3	35.0	50.9	67.9	164	184	280
Synthetic ammonia	Thousand metric tons	21.0	25.8	36.8	40.5	320	236	335
Caustic soda	Thousand metric tons	27.0	37.3	61.2	73.5	195	149	258
Chlorine	Thousand metric tons	14.0	11.5	32.0	39.5	226	142	212
Soda ash	Thousand metric tons	132	102	85.0	85.0	496	103	458
Calcium carbide	Thousand metric tons	13.0	50.5	45.4	70.4	390 b/	628	820
Refined benzol	Thousand metric tons	23.6	34.9	53.6	56.8	9.5	8.5	11.9
Nitrogen and phosphorous fertilizers	Thousand metric tons	74.5	72.9	96.9	148	464	260	373
Synthetic rubber	Thousand metric tons	0	0.3	0.6	0.6	5.7	39.0	70.7
Rubber tires	Thousands	N.A.	953	1750	2000	313	394	1300

a. 1936
b. 1939

Appendix Table 2

Output of Selected Products in Czechoslovakia and East Germany
Selected Years
(continued)

	Units	Czechoslovakia				East Germany		
		1936	1948	1953	1955	1936	1952	1955
Building materials								
Cement	Thousand metric tons	1270	1660	2400	2990	2300	1.412	2.971
Bricks	Millions	1130	984	1440	1750	1180 g/	1.356	1.963
Machinery, equipment, and ships								
Machine tools	Thousands	7.0	11.8	13.0	15.7	38 h/	16	20
Trucks	Thousands	1.6	7.0	11.5	10.5	N.A.	1.00	14.2
Tractors	Thousands	0.2 g/	9.1	13.0	12.3	N.A.	5.2	6.5
Mainline locomotives	Units	74 g/	301	480	400	N.A.	0	3
Freight cars (2-axle equivalent units)	Thousands	1.7 g/	14.0	15.7	15.7	N.A.	23 7.3	13.0
Passenger automobiles	Thousands	11.4	16.2	12.0	12.5	N.A.	7.17	22.2
Maritime vessels	Thousand gross register tons	0	0	0	0	N.A.	5.6	61.1
Fishing vessels	Thousand gross register tons	0	0	0	0	N.A.	53.4	48.5
Inland vessels, non-self propelled	Thousand deadweight tons	N.A.	N.A.	16.2	8.4	0	0	0
Military end items								
Armored fighting vehicles	Units	200	0	150	300	N.A.	0	0
Small arms	Thousands of pieces	N.A.	60	200	60	N.A.	0	18
Ammunition	Thousand short tons	N.A.	7	12	12	N.A.	0	0.2
Food and industrial crops		Prewar d/				Prewar d/		
Wheat	Thousand metric tons	1550	1480	1580	1480	1550	1370	1870
Rye	Thousand metric tons	1580	1110	1190	948	2130	2160	1980
Barley	Thousand metric tons	1130	985	1800	1300	1080 f/	719	616
Oats	Thousand metric tons	1830	987	1680	974	1690	1200	1080
Corn g/	Thousand metric tons	287	306	819	418	N.A.	N.A.	N.A.
Potatoes	Million metric tons	18.1	6.58	5.07	7.9	13.6	13.1	9.7
Sugar beets	Thousand metric tons	4050	3800	4870	4900	6080	5730	4940
Wool (grease basis)	Thousand metric tons	1.1 e/	.9	1.5	2.0	6.2 e/	2.9	5.0
Lumber	Million cubic meters	13.0 e/	10.5	11.0	10.5	16.0 e/	14.6	12.9

a. 1937
b. 1939
c. Including miscellaneous grains.
d. 1935-39 average, unless otherwise indicated.
e. 1938.
f. 1935-38 average.

Appendix Table 2

Output of Selected Products in Czechoslovakia and East Germany
Selected Years
(continued)

	Units	Czechoslovakia				East Germany		
		1938	1948	1953	1955	1938	1950	1955
Processed foods								
Meat	Thousand metric tons	388 d/	263	434	381	615 e/	428	596
Animal fats	Thousand metric tons	146 d/	90	119	119	245	115	196
Milk	Thousand metric tons	~~4500~~ ~~4460~~ d/	2230	3380	3420	~~4900~~ ~~4950~~ e/	3020	4930
Flour	Thousand metric tons	1780 c/	1770	1600	1720	1650 e/	2050	1900
Sugar (raw)	Thousand metric tons	649 c/	634	653	652	872 e/	780	650
Vegetable oils	Thousand metric tons	11.0	12.6	13.0	12.0	20.0 e/	49.2	50.1
Footwear and textiles								
Leather footwear	Million pairs	N.A.	27.7	33.7	29.6	15.3 a/	8.0	17.6
Cotton fabrics	Million linear meters	377 b/	280	347	340	N.A.	106	286
Wool fabrics	Million linear meters	29 b/	41	49	39	N.A.	N.A.	N.A.

a. 1936.
b. 1937.
c. 1935-39 average.
d. 1935-37 average.
e. 1935-38 average

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Appendix Table 3
Output of Selected Products in Hungary and Poland
Selected Years

	Units	Hungary				Poland		
		1938	1949	1954	1955	1938	1949	1955
Energy products								
Electric power	Billion kilowatt hours	1.40	~~2.57~~ 2.52	4.83	5.45	6.96	8.30	17.7
Lignite and brown coal	Million metric tons	8.32	10.5	19.1	19.6	5.8	4.6	6.0
Hard coal	Million metric tons	1.04	1.38	2.44	2.69	69.4	74.1	94.5
Coke (all types)	Million metric tons	0.31	0.23	0.28	0.28	5.33	5.88	10.7
Crude oil	Million metric tons	0.04	0.51	1.20	1.60	0.51	0.15	0.18
Petroleum products	Million metric tons	0.19 a/	0.60	1.44	1.70	N. A.	0.23	0.94
Natural gas	Million metric tons	0.01	0.13	0.21	0.23	0.55	0.11	0.31
Metals and minerals								
Pig iron	Thousand metric tons	335	398	820	855	880	1300	3100
Crude steel	Thousand metric tons	647	860	1491	1629	1400	2300	4430
Manganese ore	Thousand metric tons	22	58	71	110	0	0	0
Bauxite	Thousand metric tons	340	598	1260	1290	0	0	0
Primary aluminum	Thousand metric tons	1.50	14.4	32.8	37.0	0	0	12.0
Refined copper	Thousand metric tons	Negligible	Negligible	Negligible	Negligible	N. A.	N. A.	20.5
Lead	Thousand metric tons	Negligible	Negligible	Negligible	Negligible	20.0	18.0	35.6
Zinc	Thousand metric tons	Negligible	Negligible	Negligible	Negligible	108	108	156
Chemicals and rubber								
Sulfuric acid	Thousand metric tons	40	40	110	111	196	276	450
Nitric acid	Thousand metric tons	15	30	55	43	31.4	25.6	119
Synthetic ammonia	Thousand metric tons	5.4	12.0	16.1	19.3	30.9	28.2	121
Caustic soda	Thousand metric tons	2.9	6.0	10.0	10.2	29.8	59.0	97.6
Chlorine	Thousand metric tons	2.5	4.6	8.6	8.7	4.0	3.0	28.8
Soda ash	Thousand metric tons	0	0	0	0	87.4	129	228
Calcium carbide	Thousand metric tons	5.8	7.3	8.5	8.5	67.1	158	230
Refined benzol	Thousand metric tons	0	0.3	0.5	0.5	27.9	43.7	106
Nitrogen and phosphorous fertilizers	Thousand metric tons	15.1	26.3	43.8	38.3	88.4	148	283
Synthetic rubber	Thousand metric tons	0	0	0	0	0	1.4	7.0
Rubber tires	Thousands	N. A.	72	180	195	N. A.	172	462

a. 1936.

Appendix Table 3
Output of Selected Products in Hungary and Poland
Selected Years
(Continued)

	Units	Hungary				Poland		
		1938	1949	1954	1955	1938	1949	1955
Building materials								
Cement	Thousand metric tons	342	552	941 947	1175	1720	2340	3820
Bricks	Millions	642	389	1150 1138	1198	1880	1250	3100
Machinery, equipment, and ships								
Machine tools	Thousands	0.03	2.34	4.96	5.12	1.16	4.1	10.8
Trucks	Thousands	0.55	1.00	4.22	3.66	0.82 a/	0.24	12.5
Tractors	Thousands	N. A.	2.74	3.70	4.66	N. A.	2.5	8.00
Mainline locomotives	Units	70	195	154	152	28	228	278
Freight cars (2-axle equivalent units)	Thousands	3.0	9.9	9.0	9.0	0.6	16.8	16.0
Passenger automobiles	Thousands	0.2	0	0	0	N. A.	0	6
Maritime vessels	Thousand gross register tons	N. A.	N. A.	16.3	15.6	N. A.	N. A.	70.0
Fishing vessels	Thousand gross register tons	0	0	0	0	N. A.	7.4	9.3
Inland vessels, non-self propelled	Thousand deadweight tons	0	0	0	0	0	0	Negligible
Military end items								
Armored fighting vehicles	Units	0	0	0	0	0	0	300
Small arms	Thousands of pieces	N. A.	0.	45.	7.	N. A.	10.	10.
Ammunition	Thousand short tons	N. A.	1.5	3.0	2.4	N. A.	1.1	3.3
Food and industrial crops		Basic b/				Basic b/		
Wheat	Thousand metric tons	2480	1900	1560	1900	2010	1630	1960
Rye	Thousand metric tons	746	635	478	515	7210	6350	6480
Barley	Thousand metric tons	657	719	513	682	1660	1310	1180
Oats	Thousand metric tons	291	283	163	195	2960	2250	2090
Corn	Thousand metric tons	2340	2670	2043	2430	Negligible	Negligible	Negligible
Potatoes	Million metric tons	2.17	1.90	1.88	2.08	38.0	30.9	25.8
Sugar beets	Thousand metric tons	886	1810	1930	2220	5670	4790	6770
Wool (grease basis)	Thousand metric tons	6.2 c/	2.2	3.8	4.5	3.1 c/	2.1	9.6
Lumber	Million cubic meters	3.1 c/	3.0	3.0	3.0	16.8 c/	11.0	14.3

a. 1937
b. 1934-38 average, unless otherwise indicated.
c. 1938.

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Appendix Table 3
Output of Selected Products in Hungary and Poland
Selected Years
(Continued)

	Units	Hungary				Poland		
		1938	1949	1954	1955	1938	1949	1955
Processed foods								
Meat	Thousand metric tons	280 d/	121	186	205	965 e/	479	832
Animal fats	Thousand metric tons	158 d/	47	72	83	370 e/	241	351
Milk	Thousand metric tons	1540	1100	1340	1440	10400 e/	6070	9600
Flour	Thousand metric tons	1420 c/	1420	1410	1720	4100 e/	3780	4490
Sugar (raw)	Thousand metric tons	113 d/	263	274	311	898 e/	845	984
Vegetable oils	Thousand metric tons	12.0	93.5	50.0	60.0	20.0	41.0	55.8
Footwear and textiles								
Leather footwear	Million pairs	3.5	3.8	10.7	12.4	2.8	8.6	24.6
Cotton fabrics	Million linear meters	185	266 a/	358 a/	374 a/	288	406	565
Wool fabrics	Million linear meters	14.3 b/	16.4 b/	15.0 b/	18.6 b/	37.7	50.0	75.7

a. Official figure in square meters converted to linear meters using a factor of 1.6.
b. Official figure in square meters converted to linear meters using a factor of 0.715.
c. 1935-39 average.
d. 1933-37 average.
e. 1934-38 average.

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Appendix Table 4

Output of Selected Products in Rumania and in the European Satellites
Selected Years

	Units	Rumania [illegible]	Rumania [illegible]	Rumania [illegible]	European Satellites a/ Prewar b/	European Satellites a/ [illegible]	European Satellites a/ [illegible]	Rumania as Percent of European Satellites [illegible]	Rumania as Percent of European Satellites [illegible]
Energy products									
Electric power	Billion kilowatt hours	1.15	2.17	[illegible]	31.6	43.1	73.1	[illegible]	[illegible]
Lignite and brown coal	Million metric tons	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hard coal	Million metric tons	0.33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Coke (all types)	Million metric tons	[illegible]	[illegible]	0.35	13.0	19.9	[illegible]	[illegible]	65
Crude oil	Million metric tons	[illegible]	3.10	11.0	[illegible]	[illegible]	13.3	15	[illegible]
Petroleum products	Million metric tons	[illegible] c/	[illegible]	[illegible]	[illegible]	[illegible]	15.1	[illegible]	[illegible]
Natural gas	Million metric tons	[illegible]	2.5	[illegible]	[illegible]	2.80	5.03	75	[illegible]
Metals and minerals									
Pig iron	Thousand metric tons	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Crude steel	Thousand metric tons	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Manganese ore	Thousand metric tons	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bauxite	Thousand metric tons	[illegible]	1.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Primary aluminum	Thousand metric tons	0	0	0	[illegible]	[illegible]	96.0	[illegible]	[illegible]
Refined copper	Thousand metric tons	[illegible]	0.70	3.7	[illegible]	[illegible]	[illegible]	11	[illegible]
Lead	Thousand metric tons	5.7	4.0	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Zinc	Thousand metric tons	[illegible]	3.0	6.0	[illegible]	[illegible]	199	89	[illegible]
Chemicals and rubber									
Sulfuric acid	Thousand metric tons	44.0	51.6	[illegible]	[illegible]	[illegible]	1,600	43	45
Nitric acid	Thousand metric tons	0.4	3.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Synthetic ammonia	Thousand metric tons	0.6	1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	73
Caustic soda	Thousand metric tons	[illegible]	[illegible]	40.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Thousand metric tons	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Soda ash	Thousand metric tons	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Calcium carbide	Thousand metric tons	[illegible]	9.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Thousand metric tons	6.9	1.3	2.7	[illegible]	97.0	178	43	[illegible]
Nitrogen and phosphorous fertilizers	Thousand metric tons	0.3	0.3	5.7	[illegible]	[illegible]	[illegible]	940	[illegible]
Synthetic rubber	Thousand metric tons	[illegible]	[illegible]	[illegible]	5.7	[illegible]	[illegible]	[illegible]	33
Rubber tires	Thousands	N.A.	105	195	N.A.	2,250	4,240	27	31

a. Because of rounding, totals differ in some instances from the sums of the estimates for the individual countries.
b. Generally 1938. See figures for individual countries for exceptions.
c. 1936

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Output of Selected Products in Rumania and in the European Satellites
Selected Years
(Continued)

	Units	Rumania			European Satellites a/			European Satellites as Percent of USSR	
		1938	1950	1955	Prewar b/	1950	1955	1950	1955
Building materials									
Cement	Thousand metric tons	474	1,020	2,050	6,500	8,341	13,870	82	62
Bricks	Millions	372	340	801	5,175	5,305	9,485	52	45
Machinery, equipment and ships									
Machine tools	Thousands	0	0.3	1.5	46.2	37.3	53.5	47	51
Trucks	Thousands	0	0	2.0	N.A.	13.9	42.9	5	13
Tractors	Thousands	2.0	3.3	5.0	N.A.	26.4	36.6	24	22
Mainline locomotives	Units	N.A.	90	110	N.A.	898	943	74	89
Freight cars (2-axle equivalent units)	Thousands	4.0	4.0	6.0	N.A.	52.4	60.7	51	88
Passenger automobiles	Thousands	0	0	0	N.A.	31.4	40.7	49	38
Maritime vessels	Thousand gross register tons	N.A.	Negligible	Negligible	N.A.	21.1	147	92	131
Fishing vessels	Thousand gross register tons	N.A.	4.2	7.0	N.A.	65.0	65.0	468	180
Inland vessels, non-self propelled	Thousand deadweight tons	N.A.	22.0	32.0	N.A.	33.3	45.9	5	7
Military end items									
Armored fighting vehicles	Units	0	0	0	N.A.	N.A.	600	N.A.	10
Small arms	Thousands of pieces	N.A.	0	10	N.A.	190	106	67	27
Ammunition	Thousand short tons	N.A.	0.7	1.3	N.A.	14.8	20.2	5	3
Food and industrial crops		Prewar c/							
Wheat	Thousand metric tons	3,050	2,090	3,120	12,600	10,600	11,750	34	28
Rye	Thousand metric tons	254	123	180	12,200	10,640	10,390	46	56
Barley	Thousand metric tons	610	395	500	5,510	4,590	4,670	68	81
Oats	Thousand metric tons	544	427	388	6,860	5,150	4,860	40	40
Corn	Thousand metric tons	4,370	2,920	4,420	8,030	5,820	8,420	149	60
Potatoes	Million metric tons	1.31	1.01	2.19	65.3	59.7	47.9	82	72
Sugar beets	Thousand metric tons	564	727	1,740	17,400	19,820	21,100	96	70
Wool (grease basis)	Thousand metric tons	18.5 d/	20.2	21.6	50.4	44.5	59.8	25	24
Lumber	Million cubic meters	19.0 d/	15.0	16.9	72.6	67.1	70.8	342	385

a. Because of rounding totals differ in some instances from the sums of the estimates for the individual countries.
b. Generally 1938, except for food crops, which are 1935-39 averages. See figures for individual countries for exceptions.
c. 1935-39 average, unless indicated otherwise.
d. 1938.

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Appendix Table 4

Output of Selected Products in Rumania and in the European Satellites
Selected Years
(Continued)

	Units	Rumania			European Satellites b/			European Satellites as Percent of USSR	
		1938	1950	1955	Prewar a/	1950	1955	1950	1955
Processed foods									
Meat	Thousand metric tons	295 c/	239	440	2,710	2,200	2,590	71	65
Animal fats	Thousand metric tons	55 c/	36	67	1,016	743	842	220	172
Milk	Thousand metric tons	1,400 c/	1,670	1,840	~~23,200~~ 23000	16,900	21,700	68	73
Flour	Thousand metric tons	1,250 ~~c/~~ d/	1,440	1,920	11,300 a/	11,800	13,300	32	33
Sugar (raw)	Thousand metric tons	66 d/	95	174	2,640 a/	3,010	2,840	119	83
Vegetable oils	Thousand metric tons	30.0	47.1	89.0	143	243	301	31	27
Footwear and textiles									
Leather footwear	Million pairs	3.6	8.58	13.6	N.A.	61.7	99.3	30	36
Cotton fabrics	Million linear meters	149	207	350	N.A.	1,469	2,072	38	35
Wool fabrics	Million linear meters	9.3	14.7	2.2	N.A.	134.5	167.9	87	67

~~a. 1935-39 average.~~

a. Because of rounding, totals differ in some instances from the sum of the estimates for the individual countries.
b. Totals of the estimates shown in Appendix Tables 1-4 for the individual countries. Except for the estimates for flour, which are 1935-39 averages, the period of the estimate varies from country to country.
c. 1933-37 average.
d. 1934-38 average.
e. 1935-39 average.

Appendix Table 5

Indexes of Average Daily Per Capita Consumption of Food in Calories in the European Satellites

Prewar Average, 1948/49, and 1951/52 to 1955/56[a]

Prewar Average = 100

	Prewar Average[c]	1948/49	1951/52	1952/53	1953/54	1954/55	1955/56[b]
Albania	100[c]	N.A.	92	84	99	99	108
Bulgaria	100[c]	111	98	88	97	103	109
Czechoslovakia	100[d]	102	101	90	101	96	102
East Germany	100[e]	N.A.	75	74	91	82	86
Hungary	100[c]	N.A.	89	87	93	92	100
Poland	100[d]	98	110	106	106	110	107
Rumania	100[d]	97	97	80	84	90	96

a. Food consumption years beginning on 1 July.
b. Preliminary estimates.
c. 1933-37.
d. 1934-38.
e. 1935-38.

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Appendix Table 6

Officially Announced Increases in Gross Industrial Production in the European Satellites
1949-55

Percent

	Announced Increase over Previous Years a/							Increase during First Long-Term Plan		Average Annual Increase over Previous Year c/	
	1949	1950	1951	1952	1953	1954	1955	Cumulation of Annual Increases	Announced at End of Plan b/	Period of Long-Term Plan	Period of 1951-55
Albania	N.A.	N.A.	47.1	20	22	10.7	14.9	174	179	22.3	22.3
Bulgaria	29.5	23.2	19	18.0	12	8.7	9.6	124	130	22.4	13.4
Czechoslovakia	7.8	15.3	14.9	18.3	10	4.4	10.6	86	102	13.1	11.5
East Germany	20	26	21.9	16	12.5	10	8.3	90	90	13.7	13.7
Hungary	N.A.	37.3	30.5	25.5	11.2	3.1	8.2	158	155	20.9	15.2
Poland d/	38	30.8	24	20	17.5	11	11	182	170	18.9	16.6
Rumania e/	40	37	28.7	23.0	14.4	6.6	14.0	120	120	17.9	17.9

a. Increases during the first long-term plans are enclosed in boxes.
b. The increase announced at the end of the long-term plan probably differs in some instances from the cumulation of the announced annual increases because the latter are either preliminary or rounded figures or are applicable only to the socialist sector of industry. This explanation seems inadequate for Czechoslovakia, considering the extent and direction of the discrepancy, but no other explanation is presently available.
c. Calculated from the announced annual increases during the plan rather than from the over-all increase announced at the end of the plan.
d. Announced annual increases probably refer only to the socialist sector of industry.
e. All increases shown probably refer only to the socialist sector of industry.

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