

ECONOMIC PLANS
OF SIX EUROPEAN SATELLITE COUNTRIES
THROUGH 1965:
A GENERAL APPRAISAL



August 1962

NOT TO BE REPRODUCED IN WHOLE OR
IN PART WITHOUT THE PERMISSION OF
THE CENTRAL INTELLIGENCE AGENCY

CENTRAL INTELLIGENCE AGENCY
Office of Research and Reports

NOTICE

This report has been loaned to the recipient by the Central Intelligence Agency. When it has served its purpose it should be destroyed or returned to the:

CIA Librarian
Central Intelligence Agency
Washington 25, D. C.

ECONOMIC PLANS
OF SIX EUROPEAN SATELLITE COUNTRIES
THROUGH 1965:
A GENERAL APPRAISAL

CIA/RR ER 62-28

CENTRAL INTELLIGENCE AGENCY
Office of Research and Reports

FOREWORD

This report describes and assesses the economic plans of six European Satellite countries for varying periods ending in 1965. It is concerned therefore with the general outlook for economic growth and not with an estimate of short-term developments in the economic policies of each country, because such an estimate requires detailed analysis beyond the scope of this report. Because of the uncertain effects of economic progress on stability and the great importance of noneconomic factors, no attempt is made to judge the prospects for political stability.

Czechoslovakia, Hungary, Poland, and Albania have Five Year Plans for 1961-65, Rumania has a Six Year Plan for 1960-65, and East Germany has a Seven Year Plan for 1959-65. Bulgaria also has a Five Year Plan for 1961-65, but information regarding it is so meager in some respects and appeared so late that Bulgaria has been omitted from the report.

Some of the published plans are much more definite and detailed than others. The East German Seven Year Plan has the formal status of a law, but this version of the plan is now 3 years old, and certain goals have been revised. The Polish and Czechoslovak plans also have been revised since the first announcements. The most recent versions of these plans take the form of a law passed by the Polish parliament in February 1961 and a resolution of a National Conference of the Czechoslovak Communist Party in July 1960 that was adopted by the National Assembly 4 months later.

Rumania and Albania have published only the Communist Party's "draft directives" for the economic development of the country through 1965, which in the case of Rumania give some objectives only as ranges or round numbers. The Rumanian directives were approved by the Party Congress in June 1960 -- apparently without significant changes -- but revision of some goals in the Albanian directives was indicated in a speech by Premier Shehu in February 1961. In Hungary the Party's "draft directives," which covered the period 1959-65, have been replaced by a plan law for 1961-65 that was published in October 1961. Unless otherwise indicated, all the plan goals shown in this report are the latest known figures.

For convenience the various plan periods are frequently described in the text and tables of the report as the "period ending in 1965." In comparing planned economic developments with those of recent years, the period 1955-59 frequently is used for each country in order to simplify the exposition. In this report a total percentage increase

or an average annual percentage increase shown for a period such as 1955-59 indicates the increase from 1954 to 1959.

All dollar values shown in this report refer to US dollars. Except for planned values of export surpluses in 1965, all dollar values are expressed in current prices. Estimates of planned export surpluses are expressed in the prices of the year preceding the respective plan periods, having been obtained by applying planned percentage increases in the volume of exports and imports to values in current prices for that year. Values expressed in the various national currencies have not been converted to US dollars, because meaningful rates of exchange for the categories of goods involved are not available.

Documentation of data has been simplified by omitting detailed sources for historical statistics and plan goals that are readily available in official statistical yearbooks and basic plan announcements. Those sources used most frequently in preparing the statistical tables are listed in the first part of Appendix B. In some instances, two or more of these sources have been used in deriving the figures shown in the statistical tables.

CONTENTS

	<u>Page</u>
Summary and Conclusions	1
I. Introduction	7
II. General Policies and Objectives	9
1. Growth and Structure of Output	9
a. Industry	9
b. Agriculture	13
2. Distribution of Output by End-Use	17
a. General Relationships	17
b. Specific Plans for Consumption	19
III. Factors in Planned Economic Development	27
1. Employment and Labor Productivity	27
2. Investment	34
a. Volume and Distribution	34
b. Prospects for Fulfillment of Investment Plans	41
c. Investment Costs in Industry	46
3. Supply of Key Materials	52
a. Electric Power and Fuels	52
b. Steel	55
c. Nonferrous Materials	58
d. Chemicals	59
4. Technological Progress	61
5. Agricultural Organization and Other Institutional Changes	64
6. Foreign Trade and Economic Cooperation	67
7. Transportation Service	73
IV. Prospects and Implications	75

Appendixes

	<u>Page</u>
Appendix A. Statistical Tables	83
Appendix B. Sources	89

Tables

1. Six European Satellite Countries and European Member Countries of OECD: Comparison of Increases in Production in Selected Branches of Industry, Recent Five Year Period and Plan for the Period Ending in 1965	11
2. Six European Satellite Countries and European Member Countries of OECD: Indexes of Output Per Capita of Selected Industrial Products, 1960 and Plan for 1965	12
3. Four European Satellite Countries: Planned Growth of Consumption Per Capita of Selected Foods During the Period Ending in 1965	22
4. Three European Satellite Countries: Planned Growth of Consumption Per Capita of Selected Textiles and Shoes During the Period Ending in 1965	23
5. Five European Satellite Countries: Construction of Dwellings, 1955-59 and Plan for the Period Ending in 1965	25
6. Six European Satellite Countries: Planned Value of Gross Fixed Investment During the Period Ending in 1965	35
7. Six European Satellite Countries: Planned Growth of Gross Fixed Investment, by Economic Sector, Under the Plan Ending in 1965	37
8. Six European Satellite Countries: Development of Construction, 1955-59 and Plan for the Period Ending in 1965	43
9. Five European Satellite Countries: Relation of Gross Fixed Investment and Growth of Output in Industry, Recent Five Year Period and Plan for the Period Ending in 1965	47

	<u>Page</u>
10. Five European Satellite Countries: Planned Growth of the Supply of Chemical Fertilizers During the Period Ending in 1965	60
11. Five European Satellite Countries: Planned Changes in the Geographic Distribution of Foreign Trade During the Period Ending in 1965	70
12. Six European Satellite Countries: Growth of National Income and Industrial and Agricultural Production, 1955-59 and Plan for the Period Ending in 1965	85
13. Six European Satellite Countries: Growth of Investment and Consumption, 1955-59 and Plan for the Period Ending in 1965	86
14. Six European Satellite Countries: Planned Growth of the Park of Agricultural Tractors During the Period Ending in 1965 and Planned Amount of Arable Land per Tractor in 1965 . . .	87
15. Six European Satellite Countries: Growth of Foreign Trade, 1955-59 and Plan for the Period Ending in 1965	88

Charts

	<u>Following Page</u>
Figure 1. Six European Satellite Countries: Rates of Economic Growth, 1955-59 and Plan for the Period Ending in 1965	10
Figure 2. Six European Satellite Countries: Growth of Investment and Consumption, 1955-59 and Plan for the Period Ending in 1965 .	18

Following Page

Figure 3.	Six European Satellite Countries: Planned Growth of the Park of Agricultural Tractors During the Period Ending in 1965 and Planned Amount of Arable Land per Tractor in 1965	40
Figure 4.	Six European Satellite Countries: Growth of Foreign Trade, 1955-59 and Plan for the Period Ending in 1965	68

ECONOMIC PLANS OF SIX EUROPEAN SATELLITE COUNTRIES THROUGH 1965:
A GENERAL APPRAISAL

Summary and Conclusions

All six European Satellite countries covered by this report -- Czechoslovakia, East Germany, Hungary, Poland, Rumania, and Albania -- have published 5-year to 7-year programs ending in 1965 that are aimed at rapid and varied development of their economies. In their objectives for growth and structural changes and in their approach to problems of development, the new plans generally call for a continuation of the past. As usual the underlying -- but not always explicit -- theme of the plans is rapid industrialization.

Some aspects of these programs are ambitious although not unreasonable; others are clearly unrealistic, especially the goals for agricultural production. On the whole, the regimes appear to be relying too much on improvements in economic efficiency to reach their goals. None of the plans is likely to be realized in full, but a substantial rate of economic growth is expected in each country. High rates of investment and technological progress are anticipated even though investment goals probably will not be reached. The orientation of the plans toward long-term growth rules out striking improvements in living conditions by 1965, but some gains should be possible.

Only the Rumanian regime has scheduled a much higher rate of industrial growth than is claimed for recent years. Embarking on its own "leap forward," the regime has planned very rapid rates of growth for both industry and agriculture. Rates of economic growth planned in East Germany are no higher than those for several other Satellites, but these rates also seem unusually ambitious in view of the labor shortage and other difficulties. Albania's economic prospects became very uncertain in 1961 as relations with Bloc countries deteriorated, but prompt Chinese support has done much to make the Albanian plan meaningful again, although by no means reasonable in its agricultural objective. In each country except Poland, economic development will be conditioned by complete or nearly complete socialization of agriculture -- a new institutional circumstance. The regimes now squarely face the perplexing problem of getting satisfactory results from collective and state farms.

In general, the economies of the Satellites and the USSR are expected to become more interdependent with the further rapid expansion of intra-Bloc trade. The Satellite economies also should become more

self-reliant and less dependent on Soviet credits, although perhaps not to the extent planned. Exports typically are to be increased more than imports to permit payments on earlier credits or, in some instances, to permit more economic assistance to underdeveloped countries.

Problems in carrying out investment projects economically, exaggerated estimates of possible savings in the use of materials, and excessive reliance on high motivation among managers and employees are likely to prevent many objectives from being realized fully. In adjusting to these shortcomings, the regimes almost certainly will let most of the effect fall on consumption. Plans for housing and consumer durables are likely to be scaled down to accommodate the programs for productive investment. The anticipated underfulfillment of goals for agricultural production will have a direct impact on the objectives for consumption. Shortcomings in plan fulfillment also are likely to have a considerable effect on the development of export surpluses, limiting the programs for economic penetration of non-Bloc countries or making payments on earlier credits very difficult.

The regimes in all six countries plan continuing high rates of growth in national income (Communist concept), reflecting their intense desire to "catch up" with advanced Western countries as soon as possible. These rates range from 6 or 7 percent annually in Czechoslovakia, East Germany, Hungary, and Poland to as much as 9 or 10 percent in the other, less developed countries. These rates generally equal or exceed the achievements in 1955-59 and -- after rough adjustment to the Western concept of gross national product (GNP) -- are somewhat higher than the rates in Western Europe during that period.

The goals for national income are unlikely to be reached in view of the expected underfulfillment of industrial goals, except possibly in Hungary, and of agricultural goals in each country, but rates of growth are not expected to fall more than 1 percentage point below recent levels. In terms of GNP, the average rates of growth through 1965 are expected to range from about 4 percent in East Germany to about 5.5 percent in Poland and Rumania. Such rates of growth are very creditable but not exceptional by Western European standards.

Although Rumania and Albania have nominally scheduled very high rates of growth for agriculture, all of the plans are clearly aimed at further industrialization. The planned annual rates of growth for industrial production are 13 percent in Rumania and 8 or 9 percent in the other countries, most of them representing an increase above recent accomplishments. The general relationship of the rates of growth planned for various branches of industry is similar to that of recent years in both these countries and the countries of Western Europe. The highest rates generally are stipulated for the chemical, metalworking, electric power, and building materials industries.

If major industrial goals for 1965 are approximated, the Satellites will accomplish a further significant advance in their level of industrialization. In Czechoslovakia, for example -- where outputs of coal and aluminum per capita in 1960 were higher than in West Germany -- the plan calls for per capita outputs of electric power, crude steel, sulfuric acid, and cement in 1965 that are considerably higher than outputs in 1960 in West Germany. Realization of goals for 1965 for basic industrial products in Poland, Hungary, and Rumania would not generally yield per capita outputs as high as the averages of Western European countries in 1960, but they would compare favorably with recent levels in Italy.

The industrial plans have little slack in them, and it is believed that most branches of industry will have difficulty in reaching their goals. Supplies of steel and other materials are likely to prove to be inadequate because of production difficulties and too optimistic an appraisal of possible savings in their use. Imports of materials also may fall below plan because of production problems in the supplying country or export problems in the receiving country that limit imports. For the metalworking industries particularly, there also is doubt that the large increases planned in labor productivity can be achieved, as production capacity is being utilized more fully than before and no special priority has been given to investment in these industries.

In support of their industrial objectives, most of the regimes have planned a more rapid increase in industrial investment than in total investment, priority generally being accorded to the chemical, metallurgical, and electric power industries. Perhaps overoptimistically, most of the countries are counting on investment to be more productive than in the past, for construction periods are supposed to be shortened and construction costs reduced.

Closely related to the investment programs is the intention of the Satellites of raising substantially the technical level of economic activity, especially in industry and construction. The hopes of the regimes rest heavily on plans for (1) more widespread use of mass-production techniques based on mechanization and automation, fewer types and models of products, and growing internal and international specialization; (2) economies in the use of materials; (3) improved methods of work organization; and (4) periodic revision of work norms and wage rates to maintain a strong system of incentives and pressures.

Labor is about the only resource that has not been committed fully in the plans of most of the countries. Industrial employment generally is scheduled to grow less rapidly than in recent years, but each country other than East Germany probably can provide more labor than is planned. This step would involve an additional cost, however, in the form of increased needs for housing and other urban facilities for labor

moving from agriculture, provision of correspondingly larger supplies of food in urban areas, and possibly some adverse effect on the growth of production in other sectors.

Some of the agricultural plans are highly unrealistic, notably the Rumanian and Albanian targets for increases in production of 9 to 11 per cent annually. Even the less extreme targets in East Germany and Hungary are not considered feasible because of the problems involved in making efficient producing units out of the collective farms, especially the many new ones formed during the last 2 or 3 years. The Czechoslovak and Polish plans seem more sound, but annual rates of growth of about 3 percent seem more likely than the scheduled rates of 4 percent.

Greatly increased inputs are needed in each country for satisfactory agricultural progress, considering the weakness of incentives among people who are still predominantly opposed to collective ownership but (except in Poland) are now largely organized into collective farms. Except in Albania, investment in agriculture is scheduled to rise by 54 to 100 percent during the plan period, much of it being earmarked for agricultural machinery or construction of buildings required by the centralization of activity in collective farms.

Although mechanization of agriculture is important in the manpower plans, permitting increased production with declining employment, progress in agriculture depends much more on the use of fertilizers and insecticides, the consumption of which is supposed to rise markedly, and on the introduction of better seed and farming methods. Equally important is the avoidance of further institutional changes that would weaken incentives. Difficulties would be aggravated, for example, if the regimes abolished or restricted activity on the private plots of collective farm members, for these plots make a large contribution to the supply of livestock products.

Economic development in these countries should continue to be influenced favorably by a growing volume of foreign trade and increased international specialization under the prodding of the Council for Mutual Economic Assistance (CEMA). Most of the plans do not call for foreign trade turnover to grow as rapidly as in 1955-59, however, when autarkic policies were relaxed somewhat and the USSR decided to supply much larger amounts of materials to the Satellites.

Except for Albania and possibly Rumania, the countries hope to raise exports much more rapidly than imports so that the economies not only will be self-supporting by 1965 but can reduce their foreign debts, if any, and in some cases give economic assistance to other countries. Especially ambitious in this respect is Czechoslovakia, which apparently intends to develop an export surplus of some \$500 million by 1965.

Shortcomings in reaching production goals, however, may seriously upset the plans of the regimes in this sphere.

The present large share of the Sino-Soviet Bloc in the foreign trade of the Satellites will generally continue. An interesting exception is Rumania, whose trade with non-Bloc countries is to increase from 20 percent of the total trade in 1959 to between 30 and 35 percent in 1965. Some shift in trade to non-Bloc countries also is in prospect for Albania, but much more important is Communist China's recent replacement of the USSR as Albania's leading trade partner.

Consumption of goods per capita is unlikely to rise at the rates of 4.5 or 5 percent planned in Czechoslovakia and Poland -- much less the higher rates planned in East Germany and Rumania -- but small gains can be expected. An improvement in the quality and variety of the diet is one of the principal objectives of the agricultural plans. The plans call for the per capita availability of livestock products and other quality foods in the more advanced Satellites in 1965 to reach current levels in such countries as West Germany and the UK, but shortcomings in domestic production and a tight situation in foreign trade are expected to prevent an advance of this extent. Important gains also are scheduled in most of the countries for supplies of textiles and shoes, but the largest advances are likely to be made in supplies of consumer durables, which are not yet very widely owned.

Housing conditions in these countries are still rather poor. The plans include housing programs that should improve matters if they are carried out and -- if continued over several more plan periods -- would alleviate one of the deepest sources of discontent among the people. Recent progress has been promising, but these programs are a logical area for cutbacks if the regimes decide that resources must be transferred to productive investment.

I. Introduction

In outlining their economic plans for the period through 1965, the European Satellite regimes have made it clear that they do not regard their recent high rates of growth as temporary phenomena arising from favorable but nonrecurring circumstances. On the contrary, the plans generally express the conviction that these rates can be sustained through 1965, and announcements by Poland and Rumania reveal a belief that rates almost as high as these can be maintained through 1975 -- that is to say, almost indefinitely. The regimes recognize that some factors underlying their rate of economic growth will be less favorable than in the past. For example, easily exploitable reserves of industrial capacity and lags in the development of foreign trade have been reduced considerably in most of the countries, and the labor supply is tight in two of them. The new plans apparently assume that such developments can be offset largely by a general increase in efficiency resulting from accelerated technological development, improved economic planning and management, and more stable political and institutional conditions.

Even if allowance is made for differences in statistical concepts and methods, the rates of economic growth planned by the Satellites are somewhat higher than those projected for Western European countries by organizations such as the European Coal and Steel Community. Statements on the theme of "catching up with the West" have not been typically as brash or insistent in the Satellites as in the USSR, but Satellite leaders are well aware of the propaganda value of such announcements and no doubt will make more of them if rates of growth in the Satellites exceed those in Western Europe. One aim of the new Five Year Plan in Czechoslovakia is to "create the conditions" for catching up with the living standards of the most advanced capitalist countries. Czechoslovakia is as close to this objective as any country in the Bloc, although the gap remains quite large. Poland plans to match current living standards in the most prosperous Western European countries by about 1980, and Rumania has vague hopes of raising the welfare of its people to the level of the world's most advanced countries by about 1975. Only East Germany has ventured to set a specific goal for the period -- that of matching West German production and consumption per capita by 1965 -- but it was obvious from the outset that this goal could not be achieved.

If the fulfillment of ambitious plans promises substantial economic progress and propaganda advantages, it is also true that deficient performance may lead to economic problems and political weakness. Economic programs in the Bloc characteristically provide little margin for miscalculation, and adjustments are limited by doctrinal considerations and the

rigidities of bilaterally arranged foreign trade. A shortcoming in one area may therefore have serious repercussions in others. Disappointing economic results also may lead to disputes within the leadership over economic policy, and if the impact of reduced rates of growth is made to fall largely on consumers, there is the risk of popular disturbances as well.

That the USSR attaches importance to the maintenance of rapid economic growth in the Satellites has been demonstrated a number of times in recent years through the extension of Soviet credits to most of these countries. High rates of growth in the Satellites enhance the international prestige of the Communist movement and increase the means available for the economic penetration of underdeveloped countries. Soviet interest in the economic development of the Satellites presupposes, of course, that they acknowledge the USSR as the leader of the Sino-Soviet Bloc and pursue Soviet-approved policies unless special circumstances dictate a temporary deviation, such as Poland's failure to collectivize its agriculture. Albania's rejection of these conditions has led the USSR to break off diplomatic and economic relations, but it has not insisted that the other Satellites do likewise. The Soviet action thus seems designed only to express strong disapproval of Albanian policy rather than to cause the greatest possible economic difficulty, which might lead to unwelcome internal changes and force Albania into closer relations with Western countries as well as with Communist China.

In the following sections of the report, an attempt is made, first, to outline the objectives of the regimes for the growth and structure of national income and its use in investment and consumption (Section II). This discussion is followed by an examination of plans and prospects for employment, investment, supplies of key materials, and other factors bearing on the economic development of the six countries (Section III). Finally, there is a general discussion of the prospects for economic growth and some of their implications (Section IV).

II. General Policies and Objectives

1. Growth and Structure of Output

Satellite goals for the growth of national income and changes in its structure largely represent a continuation of recent developments. The planned increases in national income amount to about 6 or 7 percent annually in the more developed countries and 9 or 10 percent in Rumania and Albania.* Rates of growth thus are scheduled to rise slightly in Poland, Rumania, and Albania and continue at the 1955-59 level in Czechoslovakia and Hungary (see Figure 1** and Table 12***).

East Germany originally planned a rate of growth of 7.5 percent for national income compared with the estimated rate of 6 percent achieved in 1955-59, but cutbacks in goals for industrial production and investment in 1961 suggest that this objective has been abandoned. Economic assistance has recently been obtained from the USSR, but the regime cannot plan, with a reasonable hope of success, an increase in national income of more than 5 percent annually.

a. Industry

Each plan is focused on further industrialization of the economy, although Rumania and Albania have nominally scheduled large increases in agricultural production as well as industrial production. The planned rates of growth for industry fall between 8 and 9.5 percent except in Rumania, where a rate of 13 percent is sought. The scheduled rates thus do not differ greatly from the estimated accomplishments of recent years in Czechoslovakia and Poland but call for decidedly better performance in East Germany, Hungary, and Rumania (see Figure 1 and Table 12). Albania plans a considerably reduced rate of industrial growth presumably because prospective assistance from Bloc countries seems to be insufficient to maintain the previous rate.

* The planned increases would be somewhat smaller in terms of the Western concept of GNP, which includes items (governmental and personal services and provision for depreciation) that are excluded in the Communist definition of national income and are expected to grow less rapidly than the goods and services covered by the plans for national income. The planned increases generally would be reduced still further if the relative values of industrial production and agricultural production at established prices were adjusted to reflect factor costs more accurately.

** Following p. 10.

*** Appendix A, p. 85, below.

The relationships between the planned rates of growth of the various branches of industry generally are quite similar to those of recent years both in these countries and in the European member countries of the Organization for Economic Cooperation and Development (OECD),* as shown by the rankings in Table 1.** One of the most general and pronounced shifts planned in the industrial structure is the intensive development of the chemical industry (which usually includes petroleum processing). The planned percentage increases in output of chemicals are the largest of any industrial branch except in East Germany, which already has a well-developed chemical industry, and in Albania. The plans particularly stress an expanded output of plastics, synthetic fibers, and fertilizers.

The metalworking industries are another area of emphasis because of their importance in the plans for investment and export. These industries typically are scheduled to have the second or third highest rate of growth. Large construction programs and the growing importance of power-intensive industries such as chemicals require in most cases relatively high rates of growth for building materials and electric power. Planned increases for mining and petroleum extraction and for metallurgy generally are the lowest of the heavy industrial branches, reflecting such factors as (1) substitution of imported petroleum for domestically produced coal; (2) substitution of plastics and other materials for metals; (3) expected economies in the utilization of coal, coke, and metals; and (4) growing reliance, in some instances, on imports of metals.

Except for mining, the industries producing textiles, clothing, and processed foods commonly are scheduled to have the lowest rates of growth, as the planned increases resemble the moderate gains stipulated for personal consumption. In Rumania, however, production of processed foods and of textiles, clothing, leather, and shoes is supposed to rise nearly as fast as the total industrial production.

An impression of current and planned levels of industrial development in the Satellites can be gained from the comparisons in Table 2*** of per capita outputs of nine representative industrial products in these countries and in the OECD countries. In East Germany, for example, further large increases are planned in the per capita outputs

* Known as the Organization for European Economic Cooperation (OEEC) before 30 September 1961. The US and Canada are full members of the new organization.

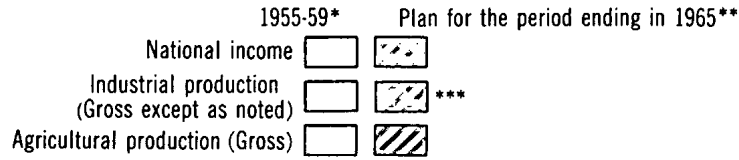
** Table 1 follows on p. 11.

*** Table 2 follows on p. 12.

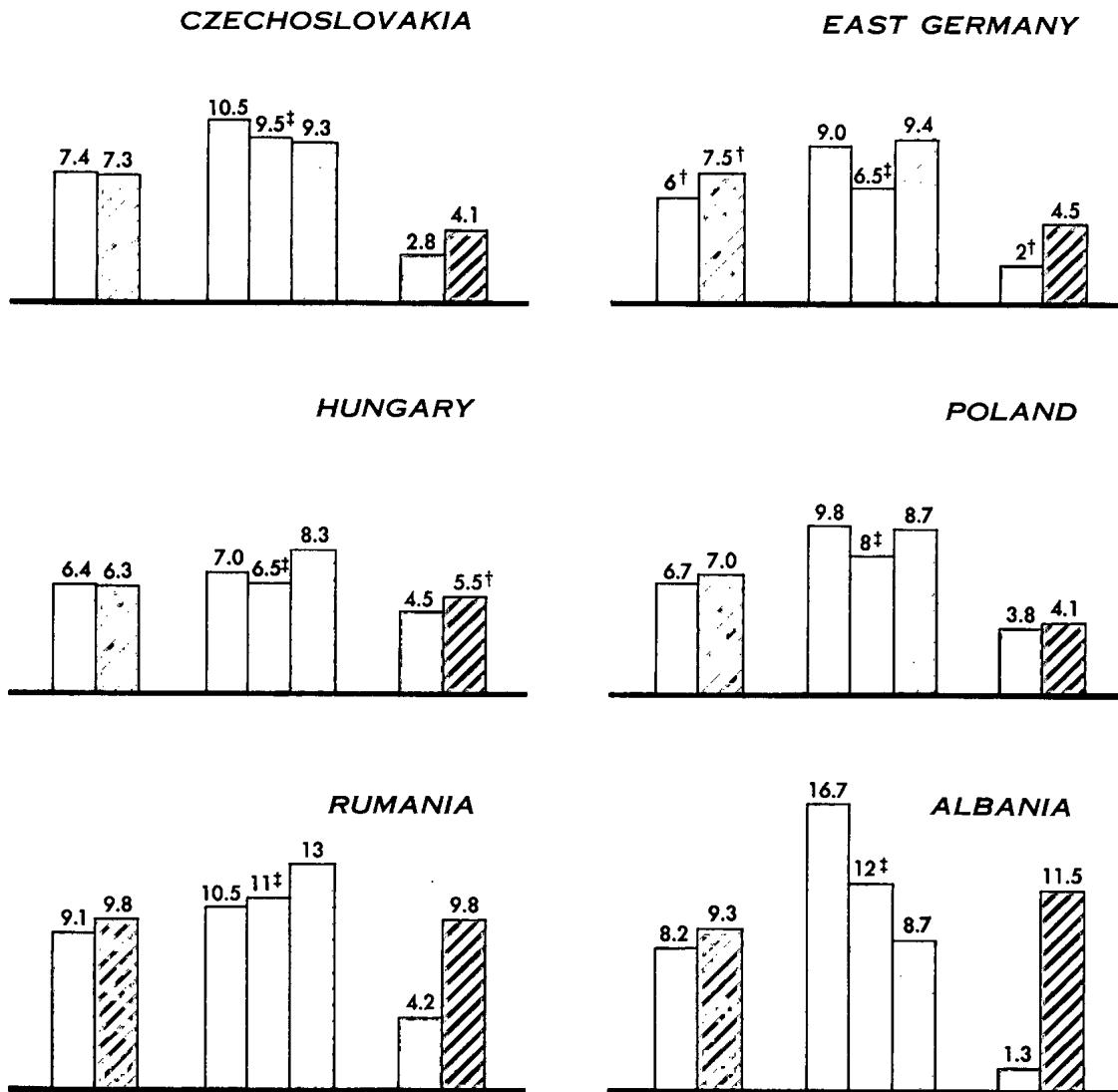
Figure 1

SIX EUROPEAN SATELLITE COUNTRIES Rates of Economic Growth 1955-59* and Plan for the Period Ending in 1965**

AVERAGE ANNUAL PERCENTAGE INCREASES



(Official data except as noted)



*1956-60 for Poland and Albania.

**The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries. Some plan data are midpoints of a range.

***Planned increases in gross production may be compared most appropriately with estimated increases in net production during the preceding period.

† Estimated.

‡ Estimated increase in net industrial production.

Table 1

Six European Satellite Countries and European Member Countries of OECD
Comparison of Increases in Production in Selected Branches of Industry a/
Recent Five Year Period and Plan for the Period Ending in 1965

Branch of Industry	Rank of Percentage Increases, in Descending Order											
	Czechoslovakia		East Germany		Hungary		Poland		Rumania		Albania	European Member Countries of OECD 1955-59
	1955-59	Plan for 1961-65	1954-58	Plan for 1959-65	1954-58	Plan for 1961-65	1955-59	Plan for 1961-65	1954-58	Plan for 1960-65	Plan for 1961-65	
Electric power	4	4	2	7	3	3	3	3	3	2	4	2
Mining and petroleum extraction b/	5	8	5	9	7	7	8	9	6	7	6	7
Metallurgy b/	6	5	6	5	8	4	6	5	5	3	N.A.	5
Metalworking	3	3	1	2	4	2	2	2	2	4 c/	1	3
Chemicals	1	1	3	3	2	1	1	1	1	1	2	1
Building materials	2	2	4	1	5	5	4	4	7	6	3	4 d/
Textiles	{ 7 e/	9	{ 8 e/	6	6	9	7	6	8	{ 5 e/	{ 5 e/	8
Clothing		7 f/		4 f/	1 f/	8 f/	5 f/	7 f/	N.A.			6
Food processing	8	6	7	8	6	6	7	8	4	6	7	6

a. Data for the European Satellites during a recent 5-year period are based on estimates of the growth of net industrial production. The estimates for Hungary and Rumania do not include handicraft production. In some instances, such as production of clothing in Hungary and food processing in Rumania, the calculated rates of growth almost certainly exaggerate the actual accomplishment because of the absorption of handicrafts by the socialist sector of industry. Unless otherwise indicated, plan figures are based on data in the plan documents listed in Appendix B. Data for European member countries of OECD (Organization for Economic Cooperation and Development), formerly OEEC (Organization for European Economic Cooperation), are based on source 1/. (For serially numbered source references, see Appendix B.)

b. Ore mining is included in "Metallurgy" for Czechoslovakia, Poland, and Rumania.

c. Machinery and equipment only.

d. Rank based on data for cement only.

e. Including leather, footwear, and furs.

f. Excluding leather, footwear, and furs.

Table 2

Six European Satellite Countries and European Member Countries of OECD
Indexes of Output Per Capita of Selected Industrial Products a/
1960 and Plan for 1965

Output Per Capita in European Member Countries of OECD in 1960 = 100									
	Electric Power	Coal <u>b/</u>	Crude Steel	Primary Aluminum	Sulfuric Acid <u>c/</u>	Chemical Fertilizers <u>c/d/</u>	Cement	Motor Vehicles <u>e/f/</u>	Agricultural Tractors <u>f/g/</u>
Output per capita in 1960									
European member countries of OECD	100	100	100	100	100	100	100	100	100 <u>g/</u>
Of which:									
France	98	83	117	203	95	185	112	167	91
Italy	70	14	51	66	98	54	111	73	52
West Germany	136	226	197	124	130	200	164	214	151
Czechoslovakia	113	242	153	149	95	62	130	30	159
East Germany	148	292	68	80	99	359	102	25	35
Hungary	48	89	58	194	42	31	55	3	17
Poland	63	215	70	35	54	48	78	7	17
Rumania	26	13	30	0	29	12	58	4	62
Albania	7	4	0	0	0	0	16	0	0
Planned output per capita in 1965									
Czechoslovakia	174	292	230	236	165	123	217	52	203
East Germany	229	357	92	N.A.	166	480	161	40	N.A.
Hungary	69	102	78	218	91	81	89	N.A.	33
Poland	91	231	90	93	98	81	123	12	57
Rumania	61	18	53	51	89	77	117	N.A.	87
Albania	11	7	2	0	88	85	44	0	0

a. The underlying data on production in the European Satellites are largely from the latest editions of their official statistical yearbooks and the plan documents listed in Appendix B. Projections of population in 1965 were obtained from the Foreign Manpower Research Office, US Bureau of the Census. Data for the European member countries of OECD (Organization for Economic Cooperation and Development), formerly OEEC (Organization for European Economic Cooperation), are from sources 2/ and 3/.

b. Estimates for all types of coal are in terms of standard fuel units of 7,000 kilocalories per kilogram.

c. Output per capita in the European member countries of OECD in 1959 = 100.

d. Based on output data expressed in terms of nutrient content.

e. Automobiles and commercial vehicles.

f. The data are based on output in physical units, and the comparisons, therefore, are very rough because of variations from country to country in the average size and other characteristics of the items produced.

g. Output per capita in France, Italy, and West Germany in 1960 = 100.

of electric power, coal, and chemical fertilizers, which in 1960 were somewhat higher than in West Germany. Per capita outputs of crude steel and motor vehicles, however, would remain much lower in East Germany in 1965 than in West Germany in 1960. Per capita outputs in Czechoslovakia, which in 1960 surpassed those in West Germany only for coal and aluminum among the nine products under consideration, are scheduled by 1965 to exceed considerably the recent West German levels for electric power, crude steel, sulfuric acid, cement, and tractors.

The per capita outputs of these products in the other Satellites, except for such specialties as coal in Poland and aluminum in Hungary, are substantially lower than the averages for OECD countries in 1960, which reflect the low levels of output of such countries as Greece, Spain, and Turkey as well as the high levels of Northwestern Europe. Realization of goals for 1965 in Poland, Hungary, and Rumania generally would not result in per capita outputs of these products as high as the OECD averages of 1960, but their outputs would compare favorably with recent levels in Italy. Data that would permit comparisons of this kind for consumer goods are not readily available, but it seems likely that on the whole they would be less favorable to the Satellites than the foregoing comparisons for producer goods.

b. Agriculture

Agricultural goals in the Satellites typically reflect ideology and wishful thinking more than serious economic calculation. This deficiency has not been avoided entirely in the new agricultural plans, some of which clearly are unrealistic. In Rumania and Albania the planned increases of 9 to 11.5 percent annually greatly exceed what has proved possible in recent years, as shown in Figure 1.* The annual rate of growth of about 5.5 percent implied by the recently approved plan for Hungary is even higher than the rate reported for 1955-59, which reflects the record output of 1959. Czechoslovakia, East Germany, and Poland have planned rates of 4 to 4.5 percent, representing a moderate increase above the gains of recent years in Czechoslovakia and Poland and a substantial increase above the estimated gain in East Germany. The ambitiousness of these plans is underlined by the fact that production in the base year of the plan periods was at a postwar high in Czechoslovakia, East Germany, Poland, and Rumania and exceeded the average of 1956-60 by 4 percent in Hungary.

The relationship of the planned increases in production to the increases in 1955-59 is affected, of course, to varying degrees by

* Following p. 10, above.

weather conditions during the years concerned. This difficulty can be minimized by comparing average annual levels of production for 5-year periods, assuming in the case of the plans that the regimes would expect steady rates of growth in the absence of variations in weather. The following tabulation shows how the implicit planned increase in the average levels of gross agricultural production from 1956-60 to 1961-65 compares with the reported increase in production from 1951-55 to 1956-60:

	Increase in Average Annual Production (Percent)	
	<u>1951-55 to 1956-60</u>	<u>Plan for 1956-60 to 1961-65*</u>
Czechoslovakia	10	17
East Germany**	8	26
Hungary	14	22
Poland	22	19
Rumania	12	54
Albania	26	41

These comparisons show that most of the regimes are hoping for spectacular improvement in the performance of agriculture even though they face many difficulties in getting satisfactory results from collective and state farms, as indicated in III, 5, below.

The present unsatisfactory state of agricultural development is much more a consequence of neglect and the impact of institutional changes during the first long-term plans than of the failure of production to rise in recent years. The range of recent rates of growth for gross agricultural production in the Satellites is quite similar to that in Western Europe. But it is only since about 1955 that the prewar level of production has been restored in the Satellites, whereas Western Europe achieved this level at least 5 years earlier. Even if recent rates of growth in the Satellites can be maintained or improved on as the regimes

* Using midpoints of planned ranges of increase in Czechoslovakia, Hungary, and Rumania. The calculations for East Germany and Rumania reflect the growth that will be necessary in 1961-65 if the 1965 goal is to be reached in spite of the lack of progress during the first part of the plan period.

** Estimated.

attempt to raise production substantially above prewar levels, the Satellites will continue to lag well behind Western Europe in agricultural development in 1965.

East Germany, Poland, and Rumania have scheduled a more rapid development of output of livestock products than of crops in anticipation of substantially increased demand for high-quality foods as consumer incomes rise and in order to raise the value of output per unit of land. Czechoslovakia and Hungary, however, have scheduled a more balanced growth of crops and livestock products to provide more adequate supplies of feed and to improve the trade balance in grains. The following are the percentage increases planned during the period ending in 1965 for certain categories of agricultural production*:

	<u>Czechoslovakia</u>	<u>East Germany</u>	<u>Hungary</u>	<u>Poland</u>	<u>Rumania</u>
Total production	22 to 23	36	22 to 23	22	70 to 80
Crops	23	N.A.	24	16	N.A.
Of which:					
Grain	22**	21	N.A.	5	32 to 50
Potatoes	18	64	N.A.	11	55 to 73
Sugar beets	11	23	N.A.	12	47
Livestock products	22	N.A.	20	31	N.A.
Of which:					
Meat	24	N.A.	27 to 29***	33	100
Milk	38	N.A.	25 to 27	28	100
Eggs	18	N.A.	23 to 25	27	108 to 131

* For Czechoslovakia and East Germany the goals for individual products refer to planned increases in production per hectare of sown area for crops and per hectare of agricultural land for livestock products. Planned increases in Czechoslovakia are based on planned levels of production in 1960. The data for Hungary refer to the increase from the 1956-60 average to the 1961-65 average for the total production and crops and the increase from 1960 to 1965 for livestock products.

** Breadgrains and barley.

*** Hogs for slaughter. The planned increase in production of cattle for slaughter is 8 to 10 percent.

With reference to crops the greatest emphasis is placed on corn and other fodder crops needed to support the plans for animal husbandry. No significant growth in the total area of arable land is scheduled except in Albania, where it is to be expanded 13 percent, but the area planted to fodder crops is supposed to increase appreciably in several countries. Goals for crops generally are predicated on further increases in yields, which have finally reached or moderately surpassed prewar levels for grains but not for potatoes or sugar beets. In Czechoslovakia and East Germany, which have the highest grain yields among the Satellites, the plans call for increases of 20 to 25 percent, to levels resembling those recently achieved in France but still well below those in West Germany and the UK. The sizable gains planned in output of livestock products are based to a substantial extent on increased yields per animal, but with the exception of Czechoslovakia a significant expansion of livestock numbers also is contemplated, as shown in the following tabulation*:

	<u>Czechoslovakia</u>	<u>East Germany</u>	<u>Hungary</u>	<u>Poland</u>	<u>Rumania</u>
	Planned Number in 1965 (Thousand)				
Cattle	4,800	5,030	2,270	10,500	5,800
Of which:					
Cows	2,300	2,600	1,110	6,600	2,900
Hogs	5,500	8,730	6,990	15,500	7,500
Sheep	600	2,600	2,450	3,900	13,000
	Planned Increase During the Period Ending in 1965 (Percent)				
Cattle	10	21	15	21	30
Of which:					
Cows	9	22	17	12	35
Hogs	3	16	31	19	74
Sheep	-14	23	3	6	16

* The figures for East Germany are based on planned numbers per hundred hectares of agricultural land, and the planned increases in Czechoslovakia are based on planned numbers in 1960.

2. Distribution of Output by End-Use

a. General Relationships

The new plans generally call for emphasis on investment combined with continuing improvement of living conditions -- that is, a policy that avoids the extremes of some earlier years. All the countries except possibly Albania plan a more rapid growth of investment than of consumption during the period ending in 1965, ruling out sharp improvements in living conditions like those of 1956-57, but no return to the overwhelming priority accorded investment in the early 1950's is indicated.

Polish plans for investment and consumption are strongly influenced by the assumption that the sizable import surpluses of recent years will have to be reduced during the first part of the period and that export surpluses will have to be established in 1964-65. As a result, the rate of growth for national income available for domestic use* is scheduled to drop from an average of nearly 7 percent in 1956-60 to 6 percent in 1961-65, even though the rate for national income is to increase slightly to 7 percent. The burden of this readjustment is planned to fall on both consumption and investment, although least of all on personal consumption of goods, which is to rise 5.7 percent annually under the present plan compared with 6.3 percent in 1956-60 (see Figure 2** and Table 13***).

This plan assumes that Poland will not receive additional long-term credits during the period, but the regime has indicated that such credits will be accepted if offered on favorable terms. Credits covering about \$45 million worth of surplus agricultural products were obtained from the US in 1961, and further credits probably will be sought from the US and other countries in the course of the plan. Receipt of additional credits, of course, would reduce pressure on living standards as the Gomulka regime simultaneously attempts to make the large investments necessary for future economic growth and to start repaying earlier credits.

The Czechoslovak plan also provides for a more rapid growth of national income than of national income available for domestic use, in keeping with the growing importance of the country as a source of economic assistance for other Satellites and underdeveloped countries outside the Bloc. National income is to increase at about the same

* National income available for domestic use equals national income plus net imports or minus net exports.

** Following p. 18.

*** Appendix A, p. 86, below.

rate as in 1955-59, but rapidly rising export surpluses apparently will prevent an equivalent gain in national income available for domestic use. Credits extended by Czechoslovakia during the past 5 years ranked second in volume to those of the USSR among Bloc countries and were by far the largest in the Bloc on a per capita basis. The new plan appears to provide both for the completion of deliveries scheduled under these credits and for the extension of additional credits during the plan period.

In adjusting its plans for domestic consumption and investment to the requirements of its foreign investment program, the Czechoslovak regime so far shows no marked tendency to sacrifice living standards. Consumption of goods will grow only a little less rapidly than in 1955-59 if the plan is fulfilled. The growth of fixed investment, however, is to be considerably less rapid than in 1955-59, when a sustained drive took place.

The East German plan, as originally published, provides for rates of growth of some 9 or 10 percent for the total net investment and 11 percent for the gross fixed investment compared with an estimated rate of roughly 6 percent for the total consumption of goods. Moreover, the plan was supposed to be launched with especially large increases in investment -- 20 percent in 1959 and 14 percent in 1960. The planned increases for 1959-60 proved to be beyond the capacity of the economy, however, and the regime has substantially reduced the goal for investment in 1961 and presumably that for 1965 as well.

The large increase planned in the national income of Rumania embodies high goals for both investment and consumption, but the most intensive effort clearly is aimed at investment. In Rumania, as in East Germany (under its original plan) and Poland, the pressure of investment on available resources is planned to be especially strong during the early years of the period, requiring the postponement of major gains for consumers until the later years. The actual increases in Rumanian investment in 1960 and 1961 were so large that a rate of growth of only 7 percent in 1962-65 would be sufficient to produce the upper limit of the range announced for the total investment during the Six Year Plan.

The Albanian plan apparently calls for a somewhat lower rate of growth for gross fixed investment than for consumption of goods. Albania is as eager as the other Satellites to build up its stock of capital rapidly, but virtually all investment in machinery and equipment depends on imports, and considerable technical assistance on investment projects is required from other countries. Moreover, some of these requirements must be financed by credits because of Albania's limited ability to export. The value of gross fixed investment scheduled by the regime for 1961-65 reflects rather moderate expectations of foreign assistance and can be realized with an increase of only 36 percent during

Figure 2

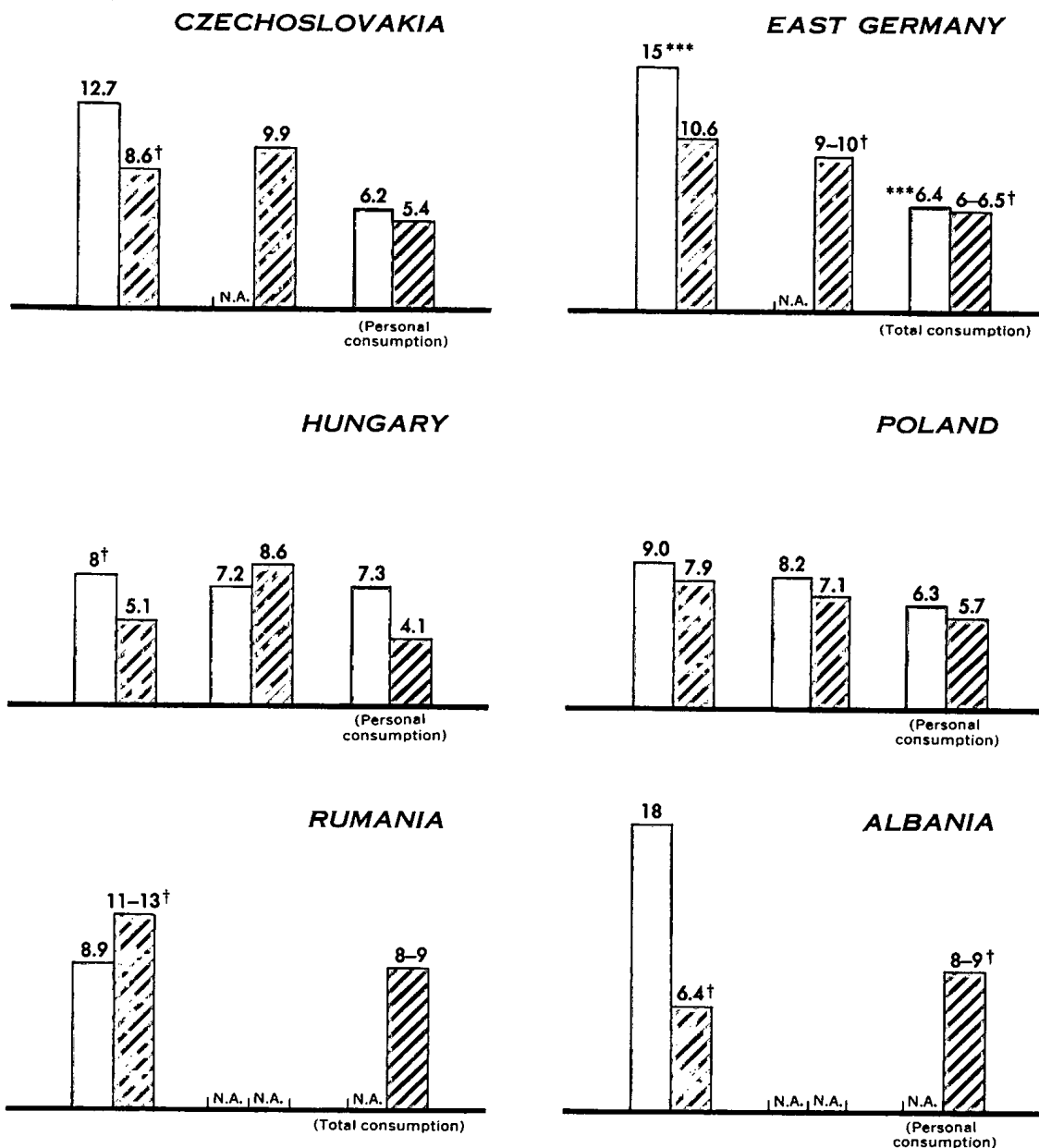
SIX EUROPEAN SATELLITE COUNTRIES Growth of Investment and Consumption 1955-59* and Plan for the Period Ending in 1965**

AVERAGE ANNUAL PERCENTAGE INCREASES

1955-59* Plan for the period ending in 1965**

Gross fixed investment		
Total net investment (Accumulation)		
Consumption of goods		

(Official data except as noted)



* 1956-60 for Poland and Albania and for gross fixed investment in East Germany.

** The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.

*** At current prices, which may exaggerate the actual increase in volume.

† Estimated.

the period if the rate of growth is steady. Consumption of goods, in contrast, is planned to rise by 30 to 35 percent per capita (judging from the goals for real income or wages), or some 50 to 55 percent in all. This goal for consumption is as unrealistic as the goal for agricultural production, on which it is largely based.

The recently approved Hungarian plan for 1961-65 contrasts sharply with those of the other Satellites in its relaxation of the investment drive of recent years. The original plan directives of 1959 specified a total of gross fixed investment in 1961-65 that could have been realized with a moderate rate of growth after the large increases of the preceding 3 years. Planned investment in 1961 was set at only five-sixths of that in 1960, however, and the planned total for 1961-65 has been reduced from a range of 200 billion to 205 billion forints at 1959 prices to about 192 billion forints.

The Hungarian regime apparently has scheduled moderate increases or small decreases in investment expenditures for the first years of the period, to be followed by large increases during the later years that would make planned investment in 1965 about 28 percent higher than investment in 1960. According to the announcement of the Hungarian plan, the cut in the investment goal for 1961-65 was both possible because of the considerable overfulfillment of earlier investment plans and necessary because of stepped-up expenditures for national defense. The 4-percent annual rate of growth scheduled for personal consumption is somewhat lower than the rate planned for gross fixed investment and considerably lower than the rate claimed for personal consumption in 1955-59. Although national income is supposed to increase 6.3 percent annually, the planned rate for national income available for domestic use apparently has been held to approximately 5 percent so that the regime will have the resources necessary for payments on its foreign debts.

b. Specific Plans for Consumption

Consumers in all of the countries have prospects of materially improved living conditions if the plans for consumption of goods are carried out. On a per capita basis the planned annual increases in personal consumption amount to about 3.5 percent in Hungary, 4.5 percent in Poland, and -- much less reasonably -- about 5 or 5.5 percent in Czechoslovakia and Albania. The planned annual increases per capita in East Germany and Rumania are still higher, amounting to about 6 and 8 percent, respectively. Sustained gains of this magnitude seem unlikely under almost any circumstances, and East Germany and Rumania probably

will have difficulty exceeding much more than one-half of the planned increases in consumption. But even this degree of success would mean appreciable improvement of living standards. The increases planned in the consumption of the urban population and the rural population appear to be fairly similar in each country, but, as noted previously, the goals established for the latter group are based on objectives for agricultural growth that are very unrealistic in some instances.

Planned changes in the composition of consumption of goods continue the trends of recent years with few known exceptions. One of the principal objectives of the agricultural plans is an improvement in the quality and variety of the diet by increasing supplies of livestock products, fruits, and vegetables. At the same time, the regimes would like to reduce the proportion of the total food supply that is imported. Per capita consumption of meat is scheduled to rise by one-sixth to one-fifth in Czechoslovakia, East Germany, Hungary, and Poland -- the four countries for which data are available -- and the increases for milk and milk products are still larger in Czechoslovakia, East Germany, and Hungary (see Table 3*).

Provision is made in most of the plans for an increased proportion of goods other than food in total consumption, especially of durable consumer goods. Sizable increases in the consumption of certain textiles and shoes are envisioned in East Germany, as shown in Table 4.** Such is not the case, however, for shoes in Czechoslovakia, which is comparatively well off in this regard, or for fabrics and shoes in Poland, where consumers seem more interested in increasing their purchases of foods than of soft goods -- in part because of the relatively high prices and often poor quality of such goods.

An impression of the advances planned in supplies of durable consumer goods is provided by the following data for certain electrical household appliances:

* Table 3 follows on p. 22.

** Table 4 follows on p. 23.

	<u>Year Preceding the Plan Period</u>	<u>Plan for 1965</u>
<u>Stock per Hundred Households (Units)</u>		
Czechoslovakia		
Television sets	21	56
Refrigerators	11	33
Washing machines	56	67
East Germany		
Television sets	6	77
Refrigerators	2	27
<u>Stock per Hundred Inhabitants (Units)</u>		
Poland		
Television sets	1.5	6.4
Radios	13.6	18.9
Refrigerators	0.5	2.0
Washing machines	4.7	12.5
<u>Retail Sales per Thousand Inhabitants (Units)</u>		
Hungary		
Television sets	1.4*	12.0**
Refrigerators	0.4*	2.5**
Rumania		
Television sets	N.A.	6.7
Radios	N.A.	15.5
Refrigerators	N.A.	2.6

Although it is obvious that a considerable improvement is to be made in supplies of these products, especially of television***

* 1958 rather than 1960.

** Approximate average annual sales during 1961-65.

*** Text continued on p. 24.

Table 3

Four European Satellite Countries
Planned Growth of Consumption Per Capita of Selected Foods
During the Period Ending in 1965 a/

Consumption Per Capita				
Unit of Measure	Year Preceding the Plan Period b/	Plan for 1965	Planned Increase (Percent)	
Czechoslovakia				
Flour	Kilograms	132	127	-4
Potatoes	Kilograms	121	124	2
Vegetables	Kilograms	78	83	6
Sugar	Kilograms	36.2	39.2	8
Meat	Kilograms	56	65	16
Milk and milk products (milk equivalent)	Kilograms	196	247	26
Fats and oils (pure fat equivalent)	Kilograms	20.3	22.5	11
Eggs	Number	179	200	12
East Germany				
Meat	Kilograms	50.8	59.2	17
Milk	Kilograms	97.4	141	45
Butter	Kilograms	11.9	13.5	13
Margarine	Kilograms	10.4	10.4	0
Cheese	Kilograms	3.8	5.2	37
Eggs	Number	181	250	38
Hungary				
Sugar	Kilograms	26	30.7	18
Meat	Kilograms	45.2	53.2	18
Milk and milk products (milk equivalent)	Liters	148.1	200	35
Eggs	Number	156	187	20
Poland				
Grain (processed)	Kilograms	144.4	135.0	-7
Sugar	Kilograms	28.3	35.0	24
Meat	Kilograms	4.5	5.2	16
Milk and milk products (milk equivalent)	Kilograms	37.3	44.9	20
Butter	Kilograms	211.9	240.9	14
Eggs	Number	143.9	166.4	16

a. The plan period is 1959-65 for East Germany and 1961-65 for the other countries. Data for Czechoslovakia are from source h/, and data for the other countries are from the plan documents listed in Appendix B. Data shown for the year preceding the plan period differ in some instances from data in the latest official statistical yearbooks. Although useful as indicators of the planned growth of consumption, the data differ in coverage in some instances and thus are not necessarily comparable internationally.

b. Planned consumption for Czechoslovakia.

Table 4

Three European Satellite Countries
Planned Growth of Consumption Per Capita
of Selected Textiles and Shoes
During the Period Ending in 1965 a/

	Consumption Per Capita			Planned Increase (Percent)
	Unit of Measure	Year Preceding the Plan Period	Plan for 1965	
Czechoslovakia				
Knitwear	Pieces	5.8 <u>b/</u>	6.4 <u>c/</u>	10 <u>c/</u>
Shoes	Pairs	4.2 <u>b/</u>	4.4 <u>c/</u>	5 <u>c/</u>
East Germany				
Cotton and cotton-type fabrics	Square meters	20	33	65
Wool fabrics	Square meters	2	4.5	125
Knitwear	Pieces	6.6	8.2	24
Leather shoes	Pairs	1.2	2.1	75
Poland				
Cotton and cotton-type fabrics	Linear meters	18.5	20.3	10
Wool and wool-type fabrics	Linear meters	2.18	2.48	14
Knitwear (as yarn)	Kilograms	0.66	1.07	62
Leather shoes	Pairs	1.32	1.53	16

a. The plan period is 1959-65 for East Germany and 1961-65 for the other countries. Unless otherwise indicated, data are from the plan documents listed in Appendix B.

b. 5/

c. This goal was raised significantly in the second half of 1961.

sets, a great variety of other types of household appliances now fairly common in the industrialized countries of the West are still scarce in the Satellites. Plans for supplies of passenger automobiles are especially interesting in the light of long-term goals of catching up with Western countries. Stocks of automobiles are very small throughout the area at present, and even Czechoslovakia plans retail sales of only three automobiles per thousand inhabitants in 1965. As a substitute, supplies of motorcycles, motorscooters, and motorized bicycles as well as ordinary bicycles will continue to be increased substantially.

All of the new plans include housing programs that are significant not only for the moderate benefits that they promise during the period but also as a test of the willingness of the regimes to make the sustained 15-year or 20-year efforts needed for real improvement of housing conditions. As shown in Table 5,* the highest announced goal in terms of the number of dwellings to be constructed per thousand inhabitants is found in Czechoslovakia. By raising the annual output of dwellings 60 percent above that of 1955-59, the Czechoslovak regime hopes to produce an average of seven dwellings annually during 1961-65 for each thousand inhabitants. The official view is that this program will solve the housing problem in Prague and other industrial centers such as Karlovy Vary, Usti-on-Elbe, and Ostrava but that 5 more years will be required elsewhere. The objectives in Poland and East Germany are nearly as high, amounting to nearly 6.5 dwellings per thousand inhabitants. These goals require a two-thirds increase in the annual output of dwellings in Poland and a doubling of the annual output in East Germany above that of 1955-59.

Rumania plans to triple the number of dwellings constructed by the state or with financial assistance from the state, but this program accounts for only a fraction of the total. No goals have been announced for private construction not financed by the state, which increased rapidly in 1956-58 but declined in 1959. It may be noted, however, that if private activity merely continues at the level of 1959 (104,000 dwellings) and if the plan for state and state-aided construction is fulfilled, the total annual construction during the Six Year Plan would average about 8.5 dwellings per thousand inhabitants, or more than is planned in any of the other countries.

In Hungary, housing conditions, although poor, are not quite so bad as in Poland, Rumania, and Albania. Hungary's plan to construct five dwellings annually per thousand inhabitants will require only a small boost in its recent efforts. Like Poland, Hungary plans to make a greater effort in urban areas than in rural areas. In Albania the plan gives a goal only for urban dwellings; 1,360,000 square meters of

* Table 5 follows on p. 25.

Table 5
 Five European Satellite Countries
 Construction of Dwellings a/
 1955-59 and Plan for the Period Ending in 1965 b/

	Thousand Dwellings				Planned Average Annual Number of Dwellings as a Percent of the Average Annual Number Constructed in 1955-59	Planned Average Annual Number per Thousand Inhabitants <u>c/</u>
	Average Annual Number		Planned Total for the Period Ending in 1965	Planned Average Annual Number of Dwellings as a Percent of the Average Annual Number Constructed in 1955-59		
	1955-59	Plan for the Period Ending in 1965				
Czechoslovakia	60.1	96.4	482	160	7.0	
East Germany <u>d/</u>	54.0	110.3	772	204	6.4	
Hungary	39.3 <u>e/</u>	50	250	127	5.0	
In Budapest	7.6	11.2	56 <u>f/</u>	147	6.2	
Outside Budapest	31.7	38.8	194 <u>f/</u>	122	4.7	
Poland <u>g/</u>	113.8	187.0	935	164	6.3	
Urban	66.3	122.4	612	185	8.7	
Rural	47.5	64.6	323	136	4.2	
Rumania						
State and state-aided <u>h/</u>	16.4	50	300	305	2.7	

a. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B.

b. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.

c. Based on the population at the beginning of the plan.

d. The plan includes a total of 81,000 dwellings, or 11,600 per year, to be obtained through remodeling and repair or through conversion of space from other uses.

e. Including additions through conversion of space from other uses and through subdivision of existing dwellings.

f. 6/

g. Assuming the same average number of rooms per dwelling in urban and rural areas in 1955-59 and an average of 2.94 rooms per dwelling in rural areas in 1961-65.

h. Private construction not financed by the state accounted for 84 percent of the total number of dwellings built in 1955-59.

housing space are supposed to be built, or 75 percent more than in 1956-60. Because population is expected to grow more rapidly in Poland and Rumania and especially in Albania than in the other countries, the regimes will have to devote a larger share of housing construction to the satisfaction of new needs and will have a smaller share available for improving the housing of the present population.

In terms of the number of dwellings to be constructed per thousand inhabitants, the objectives of the new Satellite plans are quite similar to recent achievements in most Western European countries (although much lower than in West Germany and Sweden). Qualitatively and in the amount of space provided per person, however, the Satellite programs compare less favorably with housing efforts in Western Europe, and even if the plans are fulfilled, the Satellites will have on the whole much less adequate housing than Western European countries in 1965.

III. Factors in Planned Economic Development

1. Employment and Labor Productivity

Circumstances affecting the expansion of employment have differed considerably among these countries in recent years and will continue to differ through 1965, making increases in employment much more important in some of the plans than in others. Trends in the population of working age (defined here as ages 15 through 64 for both men and women) probably will be a little more favorable in each country than in recent years. The percentage increase in the population of working age is expected to be slightly larger in 1961-65 than in 1956-60 in Czechoslovakia, Hungary, Rumania, and Albania and appreciably larger in Poland, and the decline in East Germany is expected to be slightly smaller than in 1956-60. In most of the countries the increase in 1961-65 equals or exceeds the prospective increase in the total population, as the following tabulation shows,* but the age composition of the population in East Germany is such that a 5-percent decline in the population of working age is in prospect, even though the total population is expected to increase slightly.

	Percent		
	Estimated Increase in Population of Working Age		Estimated Increase in Total Population (1961-65)
	<u>1956-60</u>	<u>1961-65</u>	
Czechoslovakia	4.1	4.9	3.4
East Germany**	-5.9	-4.7	0.6
Hungary	1.5	2.8	2.4
Poland	3.4	8.4	7.0
Rumania	4.3	5.2	4.6
Albania	13	15	15

The ratio of actual employment to the population of working age will be affected by a number of factors, the net effect of which is

* The data refer to populations on 1 July and were obtained from the Foreign Manpower Research Office, US Bureau of the Census.

** Assuming that net emigration during the remaining years of the plan period will be negligible. The estimated decline in the population of working age during the period of the Seven Year Plan (1959-65) is 6.7 percent.

expected to be a small decline in the ratio in Czechoslovakia, Poland, and Albania; a small rise in Hungary; and no essential change in East Germany and Rumania. Each country is extending its compulsory requirements for education, but the nature and timing of these reforms are such that a significant effect on the size of the labor force during the period under consideration is anticipated only in Czechoslovakia, Hungary, and East Germany. In Czechoslovakia, full implementation of plans to make the ninth grade compulsory would increase school enrollment by 300,000 persons of working age, according to an official estimate, or about three-fourths of the expected increase in the population of working age. It is unlikely, however, that the plans will be fully implemented by 1965, and the loss in the number of employable persons may be well below 300,000. The reform in Hungary, which decrees compulsory education until the age of 16 except for persons who have completed 8 years of school and are working more than 4 hours a day, is expected to have a comparatively small effect on the size of the labor force. East Germany raised its requirement for compulsory schooling in 1958 but softened the effect on the already strained labor supply by instituting work programs in the schools and requiring that students work a year before starting programs of higher education.

A continuing shift of people to urban areas also will tend to reduce participation rates because the proportion of women taking jobs is lower in cities and towns than in the countryside. Participation rates will be affected favorably in each country, however, by a growing proportion of men in the population of working age. Moreover, the regimes plan vigorous efforts to increase participation rates among urban women of working age as well as among older men and women. The importance of the campaign to recruit more women is illustrated by the Czechoslovak plan, which assumes that three-fifths of the planned increase in wage and salary earners will be women.

Published goals are incomplete, but it appears that the major components of employment are scheduled to increase approximately as follows compared with the increases during the preceding period of equal length*:

* Published data on employment have been supplemented with estimates and projections obtained from the Foreign Manpower Research Office, US Bureau of the Census. The planned changes shown for agricultural employment in Rumania and Albania in particular should be regarded as approximations because they were derived as residuals.

	Increase (Percent)			
	<u>Nonagricultural Sectors</u>			
	<u>Total</u>	<u>Total</u>	<u>Industry</u>	<u>Agriculture</u>
Czechoslovakia				
1956-60	2	14	17	-23
Plan for 1961-65	3	11	9	-19
East Germany				
1952-58	9	14	12	-9
Plan for 1959-65	-6	-1	1	-29
Hungary				
1956-60	3	13	17	-11
Plan for 1961-65	6	12	12	-4
Poland				
1956-60	7	12	11	3
Plan for 1961-65	6	11	9	1
Rumania				
1954-59	9	12	16	8
Plan for 1960-65	6	33	27 to 31	-5
Albania				
1956-60	13	34	39	7
Plan for 1961-65	12	25	20	8

These figures show that the planned changes in total employment and its major components differ considerably among the countries and in some instances contrast greatly with the changes of earlier years. In East Germany, for example, rising employment made a significant contribution to economic growth during the 7 years preceding the present Seven Year Plan, but the unfavorable age composition of the population and continuing emigration during 1959-61 have combined to make the supply of labor a major constraint on economic growth during the new plan period. An appreciable decline in total employment seems unavoidable, and even if the Ulbricht regime is able to reduce agricultural employment by 29 percent, as planned, employment in the nonagricultural sectors is likely to decline slightly.

Employment in Czechoslovakia is scheduled to develop in much the same way as in 1956-60. The gain in total employment will be small, but a further substantial transfer of labor from agriculture is supposed to permit sizable gains in industry and other nonagricultural sectors. This shift of labor will have somewhat less effect on the growth of nonagricultural employment than in the past, however, for agricultural employment and the planned cut in it are smaller than before, and nonagricultural employment is larger. For industrial employment, therefore, the planners could foresee a rate of growth only one-half as high as in 1956-60. The Czechoslovak plan for manpower appears to be generally feasible. In fact, it seems conservative in its objective for industrial employment, which in 1960 and 1961 grew at a rate much higher than that planned for 1961-65.

No great pressure on labor resources has yet developed in the other countries nor seems likely to develop for some time. Total employment is expected to rise more rapidly in these countries than in Czechoslovakia and East Germany, and they continue to have underemployed labor in agriculture. To a great degree, the planned increases in nonagricultural employment in these countries show how much labor the regimes believe can be absorbed efficiently and not the maximum amount that can be made available. The problem is not so much one of simply increasing the number of workers outside agriculture as of training and equipping them and providing food supplies, housing, and municipal services for them when they move to urban centers.

It appears, then, that during the current plan periods as in earlier years, the size and rate of development of industry and other nonagricultural sectors in these countries generally will permit only a small reduction in agricultural employment, although increases probably will be avoided except in Albania. The Rumanian plan seems especially ambitious in this respect, for it implies that the persistent rise in agricultural employment in the 1950's is to be halted and reversed through an increase of one-third in nonagricultural employment. Poland's intention of continuing agricultural employment at the 1960

level and limiting the increase in nonagricultural employment to only 11 percent apparently reflects the emphasis of the regime on agricultural development and the assumption that agriculture will remain largely uncollectivized in 1965. The Hungarian regime plans that agricultural employment will decline much less in 1961-65 than in 1956-60. This plan reflects increased emphasis on agricultural development as well as completion of the drive to socialize agriculture, which contributed to the reduction in agricultural employment in 1956-60. Total employment is planned to grow more rapidly than in 1956-60, however, and this growth will permit nonagricultural employment to expand at about the same rate as in 1956-60.

In Czechoslovakia and East Germany, the programs for much greater mechanization of farm work are a vital part of the plans to transfer workers from agriculture to other sectors while agricultural production is being raised. Further mechanization is required also in the other four countries, for production per worker is supposed to increase, and some countries -- particularly Poland -- are eager to substitute machinery for animal draft power in order to save feed and to improve the efficiency of farming operations. The mechanization programs in these four countries seem to go further than necessary, however, and the plans for mechanization appear to have been inspired more by the ideology of agricultural socialization and large-scale farming methods than by urgent economic need.

In spite of the high priority of industry in the plans, a further shift of emphasis from production-at-any-cost to improved levels of labor productivity is evident, and most of the regimes therefore have scheduled only moderate increases in employment. Because of excess labor in industry, the Polish regime in particular has been successful in maintaining a rapid rate of industrial growth in recent years with little increase in employment, and it plans a rate of growth for employment during 1961-65 that is even smaller than the rate in 1956-60 (although larger than that of 1958-60). Industrial employment also is planned to grow less rapidly than in recent years in each of the other countries except Rumania and is to grow less rapidly than total nonagricultural employment in most of the countries, as shown in the preceding tabulation.*

Plans for industrial employment in Czechoslovakia, Hungary, Poland, and Albania probably can be realized and even exceeded without strain. The increase of 4-percent planned for state industry in East Germany may be fulfilled through further absorption of private and cooperative enterprises, but the regime will do well to keep total industrial employment at the 1958 level. Rumania's rather high goal raises some difficulties -- particularly in regard to the availability

* P. 29, above.

of workers with suitable training and experience -- and probably will not be realized fully even though the increase in 1960 reached the planned rate.

Employment in construction is supposed to be increased significantly in most of the countries as part of the effort to overcome shortcomings in the past performance of the construction sector and accomplish the formidable tasks assigned to it. Czechoslovakia and East Germany, however, will rely very heavily on increases in the productivity of the existing work force. The Polish plan stipulates rather large gains in employment in the fields of education, cultural activities, social welfare, and municipal services. The other countries also have promised large gains in services of these kinds, and except possibly in East Germany, some provision has been made for increased employment in these fields.

Although the contribution of additional workers to the growth of industrial production is important in most of the plans, the predominant part of this growth is to be derived from increases in labor productivity. Rising productivity is supposed to account for nearly all of the industrial expansion in East Germany and for two-thirds or more of the expansion in all the other countries except Albania. In terms of net production per worker, the East German plan specifies a much more rapid rate of growth for labor productivity than is believed to have been achieved in recent years, and this goal will have to be abandoned. The rate planned in Rumania is also high, although not higher than that estimated for 1955-59. The goals for industrial labor productivity in Czechoslovakia, Hungary, and Poland are less extreme but call for some improvement over the estimated accomplishments of 1955-59,* as shown in the following tabulation:

	Average Annual Increase (Percent)		Planned Total for the Period Ending in 1965 (Percent)
	Estimated 1955-59	Plan for the Period Ending in 1965	
Czechoslovakia	6.5	7.4	43
East Germany	5.5	9.3	86
Hungary	4	5.7 to 5.9	32 to 33
Poland	6	7.0	40
Rumania	8.5	8.1 to 8.7	60 to 65
Albania	5	4.9	27

* The Polish goal, however, is no higher than the increase achieved in 1958-60.

Because working hours are supposed to be reduced, output per man-hour in several of the countries will have to increase even more than the rates shown above in order to realize the goals for labor productivity. This factor is particularly important in Czechoslovakia, which has scheduled a cut in the work week from the present 46 hours to 40 hours in underground mines and 42 hours in other industrial activities. As a result, the regime expects the number of man-hours worked to be roughly the same in 1965 as in 1960. Hungary intends to continue its program of reducing the work week to between 36 and 42 hours in jobs that threaten health, and Albania plans to cut the work day for workers in underground mines and construction from 8 to 7 hours.

To support the large improvements scheduled in labor productivity, considerable investment in industry is called for in each country, as shown in the following section. If these plans are carried out, the stock of fixed assets per industrial worker will grow by roughly one-fourth in Poland, one-third in Czechoslovakia, and one-half in East Germany and Rumania. Even if the investment plans are not completely successful, as will most likely be the case, increases in fixed assets per worker probably will be substantial.

All of the plans stress the importance of raising the technical level of industry by modernizing old plants and incorporating the newest technology in new plants, and although the primary aim in some instances is to reduce capital or material costs, most of the desired technical advances are laborsaving. Increases in labor productivity should be especially large in such industries as chemicals, in which mechanization and even automation of operations is to be greatly expanded.

The regimes also expect labor productivity to be stimulated by strengthened work incentives, improved labor skills, a smoother flow of materials, and better organization of work within the enterprise. Attempts will be continued in East Germany and Poland to broaden the application of "technically determined" work norms, although opposition to them is very strong. Even in countries such as Czechoslovakia and Rumania, where basic changes in work norms and wage rates were instituted fairly recently, further changes may well be introduced in order to keep up the pressure for higher production. "Socialist competitions" and other types of drives for productivity no doubt also will continue to be used to this end. All of the plans rely on further training to increase the productivity of workers, and incentive systems for managers have in some cases been modified in ways that will encourage them to give more attention to labor productivity and other factors affecting the profitability of production.

The Satellites generally have found it difficult to reach their goals for labor productivity in industry, and although the measures planned by the regimes promise continuing rapid growth of labor productivity, they probably will not be sufficient to permit plan goals to be reached in several of the countries. In Czechoslovakia, output per man-hour may continue to grow at rates equaling or exceeding those of 1955-59, but output per man-year seems likely to grow somewhat less rapidly than before if hours of work are reduced as planned. Achievement of production goals consequently will require considerably larger increases in industrial employment than have been planned.

Also, it seems doubtful that Rumania can maintain the rate of 8.5 percent estimated for 1955-59 if employment is boosted by more than one-fourth, as now planned. But with a more moderate and judicious expansion of employment, recent gains in labor productivity in Rumania probably can be continued and the productivity plan (although not the production plan) probably can be fulfilled. Labor productivity in Poland probably will grow at much the same rate as in 1955-59, and a slight improvement over the achievement of that period may be possible in East Germany, resulting in an annual rate of approximately 6 percent in contrast to the rate of 9 percent that was planned initially. Because of the adverse effect of the 1956 revolt on the growth of labor productivity during 1955-59, Hungary probably also will be able to improve on its past performance -- possibly to the extent of reaching the planned rate of nearly 6 percent annually.

2. Investment

a. Volume and Distribution

One of the most fundamental decisions underlying the plan of each country except Albania and Hungary is that the already high proportion of national income devoted to investment in fixed capital should be increased further. Only in this way, it appeared to the regimes, could satisfactory rates of economic growth be maintained through 1965 and during the ensuing period of 10 or 15 years that is also taken into account. In pursuit of this objective, Czechoslovakia and Poland have raised the goals for investment as originally announced. Hungary, however, has cut its initial goal for the reasons stated above. Czechoslovakia, Hungary, Poland, and Albania now plan totals of gross fixed investment in 1961-65 that are 50 to 60 percent greater than the totals in 1956-60 (see Table 6*). For East Germany, the increase originally scheduled in investment during the Seven Year Plan above actual investment during the preceding 7 years is not known precisely but undoubtedly is rather large. The investment goal in Rumania -- like the

* Table 6 follows on p. 35.

Table 6

Six European Satellite Countries
Planned Value of Gross Fixed Investment
During the Period Ending in 1965 a/

	Reported Average Annual Increase <u>1955-59 c/</u>	Plan for the Period Ending in 1965	
		Average Annual Increase	Total Increase
		Percent	
Gross fixed investment <u>d/</u>			
Czechoslovakia	12.7	8.6	51
East Germany	15 <u>e/</u>	10.6 <u>f/</u>	103 <u>f/</u>
Hungary	8 <u>g/</u>	5.1	28 <u>h/</u>
Poland	9.0 <u>i/</u>	7.9	46 <u>j/</u>
Rumania	8.9	10.6 to 12.9	83 to 107
Albania	18	6.4	36
Total net investment (accumulation)			
Czechoslovakia	N.A.	9.9	60 <u>k/</u>
East Germany	N.A.	8.8 to 10.0 <u>l/</u>	80 to 95 <u>l/</u>
Hungary	7.2	8.6	51
Poland	8.2 <u>i/</u>	7.1	41
Personal consumption of goods			
Czechoslovakia	6.2	5.4	30
Hungary	7.3	4.1 to 4.2	22 to 23
Poland	6.3 <u>i/</u>	5.7	32
Albania	N.A.	8.4 to 9.2 <u>l/</u>	50 to 55 <u>l/</u>
Total consumption of goods			
East Germany	6.4 <u>m/</u>	6.0 to 6.5 <u>l/</u>	50 to 55 <u>l/</u>
Poland	6.5 <u>i/</u>	5.5	31 <u>j/</u>
Rumania	N.A.	8.1 to 9.2	60 to 70
National income available for domestic use			
East Germany	N.A.	6.8	59
Poland	6.8 <u>i/</u>	6.0	34 <u>j/</u>

a. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B.

b. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.

c. 1956-60 for Poland and Albania.

d. The data refer to total investment in Czechoslovakia, East Germany, and Poland and investment in the socialist sector in Hungary, Rumania, and Albania except for the apparent exclusion of investment by collective farms from their own funds in the last two countries. Capital repairs are included only for Czechoslovakia and East Germany. Planned increases shown for Czechoslovakia and Albania are projections based on the assumption of a constant rate of growth during the plan period. The planned increase shown for Rumania is a projection based on actual investment in 1960-61 (estimated in terms of 1955 prices) and the assumption of a constant rate of growth in subsequent years.

e. 1956-60, at current prices, based on data in sources 44/, 45/, 46/, and 47/.

f. Approximate increase, including construction, in source 48/.

g. Estimate based on official data at current prices and an estimated price index for investment goods.

h. 49/

i. 50/

j. 51/

k. 52/

l. Estimated.

m. At current prices. 53/

production goals -- is extremely ambitious, specifying an approximate doubling of investment from 1954-59 to 1960-65.

The planned increases in investment from the year preceding the plan period to 1965 are a more meaningful measure of the intensity of the investment programs, however, because they may appropriately be compared with the planned increases in national income during the period. As shown in Table 6,* the scheduled increase in investment during the period is significantly smaller than the scheduled increase in the 5-year or 6-year totals in all five countries for which the comparison can be made. This relationship generally reflects the recent upsurge of investment activity, which raised to a comparatively high level the value of investment in the year preceding the period of the new plans. For East Germany and Poland this relationship also reflects the planned decline in annual rates of growth of investment during the period.

The planned increases in investment in major economic sectors reveal some similarities and also some important differences in emphasis among the countries, as shown by the data in Table 7.** Industrial investment is scheduled to rise much faster than total investment in Czechoslovakia and Albania and somewhat faster than the total in East Germany, Hungary, and Rumania. Hungary's draft plan of 1959 specified a less rapid growth of investment in industry than in the economy as a whole, but this relationship was sharply reversed in the new plan law, which raised the goal for industrial investment even though the goal for total investment was reduced. In Poland, the plan provides that industrial investment will grow less rapidly than total investment -- although the gap between the two rates has been progressively reduced in the various versions of the plan -- and there is correspondingly greater emphasis on agricultural investment than in most of the other countries. A sizable increase is indicated for investment in transportation and communications facilities in each country because opportunities to use existing capacity more intensively are diminishing, but only Czechoslovakia and Poland plan to raise the share of this sector of the economy in the total investment.

In the case of "nonproductive" investment, which comprises expenditures on housing and social and cultural facilities and thus supports economic growth only indirectly, no pronounced change in the percentage allocation of recent years is indicated by the scattered figures now available except in Hungary. The new Hungarian plan substantially reduces the increase previously planned for "nonproductive" investment together with investment in construction and trade. Fulfillment of the previously announced objective of building 250,000 dwellings in 1961-65 is to be achieved with about the same amount of investment as in 1956-60,

* P. 35, above.

** Table 7 follows on p. 37.

Table 7
Six European Satellite Countries
Planned Growth of Gross Fixed Investment, by Economic Sector
Under the Plan Ending in 1965 a/

	Increase Between the Indicated Periods (Percent)							
	Czechoslovakia (1956-60 to 1961-65)	East Germany (1958 to 1959-65 Average) b/	Hungary (1956-60 to 1961-65)		Poland (1956-60 to 1961-65)		Rumania (1954-59 to 1960-65) g/	Albania (1956-60 to 1961-65)
			Draft Plan e/	Plan Law d/	Draft Plan e/	Plan Law f/		
Total	67	65	56 to 60	40	51	53	98 to 110	51
Industry	88	76	45	50 h/	45	49	110 to 125	85
Agriculture and forestry	60	54	75 to 84	70	83	82	100	12
Transportation and communications	77	N.A.	54	43	61	78	100	40
Construction	32	89	{ 61 to 69	N.A.	40	15	90	N.A.
Trade	40	N.A.		-29	-1	9	N.A.	N.A.
Housing	40	59		3	50	37	150	{ 30
Education and culture	68	N.A.		48	54	41	85	
Health and social welfare	103	N.A.		16	48	45	N.A.	
Municipal services	{ 26	N.A.	1	18	N.A.	N.A.		
Other		N.A.	18	N.A.	N.A.			

a. Unless otherwise indicated, data are from the official statistical publications and plan documents listed in Appendix B. The coverage and price basis of the underlying values are as described in Table 6, footnote "c," except that capital repairs are not included in the data for Czechoslovakia in this table, and the data used here for planned investment in Hungary under the plan law are less comprehensive than the data in Table 6.

b. The increases are based on data in source 11/ for the total, source 12/ for industry, sources 13/ and 14/ for agriculture and forestry, source 15/ for construction (which covers only the state construction industry), and sources 16/ and 17/ for housing, together with data in the plan law.

c. The increases are based on estimated investment in 1956-57 in terms of 1959 prices, reported investment in 1958-60 in source 18/, and planned investment under the draft plan of September 1959. 19/

d. The increases are based on estimated investment in 1956-57 in terms of 1959 prices, reported investment in 1958-60 in source 20/, and planned investment under the plan law of October 1961, as indicated by a percentage breakdown of planned total investment in source 21/. Because this breakdown is believed to refer to the planned investment total of 180 billion forints specified in the plan law rather than the more comprehensive total of 192 billion forints mentioned in the source, the increase shown here for total investment is smaller than that shown in Table 6, and the increases shown for the various economic sectors are understated in varying degree.

e. 22/

f. Except for the total increase, which is given in the plan law, the increases are based on data for 1956-60 in source 23/.

g. The increases are estimates based on data in the draft directives and source 24/.

h. Including the construction sector.

and other "nonproductive" investments now are scheduled to rise only one-sixth.

The planned distribution of investment during the period ending in 1965 generally is similar in the various countries, but there are some important differences, as shown in the following percentage breakdowns*:

	<u>Czecho- slovakia</u>	<u>East Germany</u>	<u>Hungary</u>	<u>Poland</u>	<u>Rumania</u>	<u>Albania</u>
Total	<u>100.0</u>	<u>100.0</u>	<u>100</u>	<u>100.0</u>	<u>100</u>	<u>100</u>
Industry	45.6	42.2	48**	40.1	59	54
Agriculture and forestry	15.4	9.8	20	14.8	13	13
Construction	2.2	1.0***	N.A.	2.1	2	N.A.
Transportation and communi- cations	10.5	9.8†	11	11.1	9	13
Trade	2.6	N.A.	2	2.2	N.A.	N.A.
Housing	13.9	13.3	8	18.3	7 to 8	} 15
Education, cul- ture, health, and social welfare	5.5	3.0	N.A.	6.4	3 to 4	
Sectors not ac- counted for	4.3	20.9	11	5.0	6	5

* The coverage and price basis of the underlying values are as described in Table 6, footnote "c," except that the Czechoslovak data in this tabulation do not include capital repairs.

** Including construction.

*** State construction industry only.

† Transportation only.

The shares of total investment allocated to industry are characteristically large, the proportion in Rumania being particularly notable. However, the exclusion of private and some cooperative investment from the data on Rumania results in an overstatement of the share of industry and an understatement of the share of housing (and possibly of agriculture).

In spite of the gains of recent years and the further gains that are planned, the allocations for agriculture continue to be relatively small. The especially large increase planned in agricultural investment in Poland would not give the sector an unusual share of total investment, even by Satellite standards. Only in Czechoslovakia and East Germany is the percentage share at all comparable to the share of agriculture in the national product. Programs for the expansion and modernization of transportation and communications facilities will continue to absorb a sizable share of total investment in each country, as will housing, but the shares designated for the construction sector are consistently small in spite of the large percentage increases planned in some countries for investment in this sector.

Plans for investment within the industrial sector show strong support for development of the chemical industry. The percentage allocation for this branch apparently is planned to rise in each country, generally reaching between one-fifth and one-sixth of total industrial investment. Beyond this, the scattered information now available indicates (1) larger shares of industrial investment for the mining of metals and metallurgy in Czechoslovakia and Poland; (2) larger shares for electric power in East Germany and Hungary; (3) smaller shares for fuel extraction in East Germany, Poland, and Rumania (but not Czechoslovakia), reflecting greater reliance on imported crude oil in most instances; and (4) smaller shares for the machinery and equipment industries as a group in all countries except possibly Rumania and Albania because moderate expenditures on the expansion and modernization of existing plants are considered sufficient to permit much higher output. The share of light industry and food processing in total industrial investment generally is planned to be about the same as in recent years or slightly higher.

The scheduled increases in agricultural investment of between 54 and 100 percent (excluding the surprisingly small increase planned in Albania*) allow for greatly expanded purchases of tractors,

* According to Premier Shehu, an increase of only 12 percent is planned in agricultural investment because some of the most important reclamation projects were completed during the previous Five Year Plan. Nevertheless, the investment allocation for agriculture is difficult to reconcile with the planned doubling of the tractor park and the planned 13-percent increase in the arable land area.

combines, and other types of farm equipment. With farm collectivization now basically complete except in Poland, the regimes believe that they have the organizational basis for effective use of machinery, permitting production to be raised with no increase -- and in some countries, a substantial decrease -- in employment. The planned increase in the park of agricultural tractors, for example, ranges from 63 percent in Czechoslovakia to about 200 percent in Rumania (see Figure 3* and Table 14**).

Even with increases of this magnitude, agriculture generally would remain less mechanized in the Satellites than it is now in Western Europe. Differences in the average size of tractors prevent precise comparisons, but it appears that the planned amount of arable land per tractor in Czechoslovakia in 1965 is of the order of two or three times that in West Germany, Austria, and the UK in 1959 and somewhat larger than in France. The relationships planned in Hungary, Poland, and Rumania are somewhat less favorable than the ratio in Italy in 1959, but they are much more favorable than the ratios of 1959 in such countries as Greece and Yugoslavia.

Large amounts of investment funds also are expected to be used for farm buildings. Many more buildings will be needed as numbers of livestock and farm machines rise, and with the recent enlargement of the collectivized area and consequent greater centralization of farm operations, there is an additional need for new facilities. Extensive programs of land improvement constitute another major claim on investment funds. In addition to the efforts planned throughout the area to improve land drainage, substantial enlargement of irrigated areas is envisioned in Czechoslovakia, Hungary, Rumania, and Albania.

In Poland the success of the program for agricultural investment depends to an unusual degree on the response of private peasants, whom the regime expects to make large expenditures for investment. The plan calls for private investment in 1961-65 to be nearly three times as large as in 1956-60, rising from 38 percent to 57 percent of the total investment in agriculture. To make such a plan more palatable, Party Secretary Gomulka has emphasized that state investments in industrial plants manufacturing farm equipment, fertilizers, and chemicals for plant protection support the agricultural program very directly. It remains to be seen whether or not the peasants are sufficiently confident about the future of private farming in Poland to make such expenditures, especially since Gomulka feels compelled to state at intervals that socialized agriculture is superior and that peasants eventually will want to join collective farms.

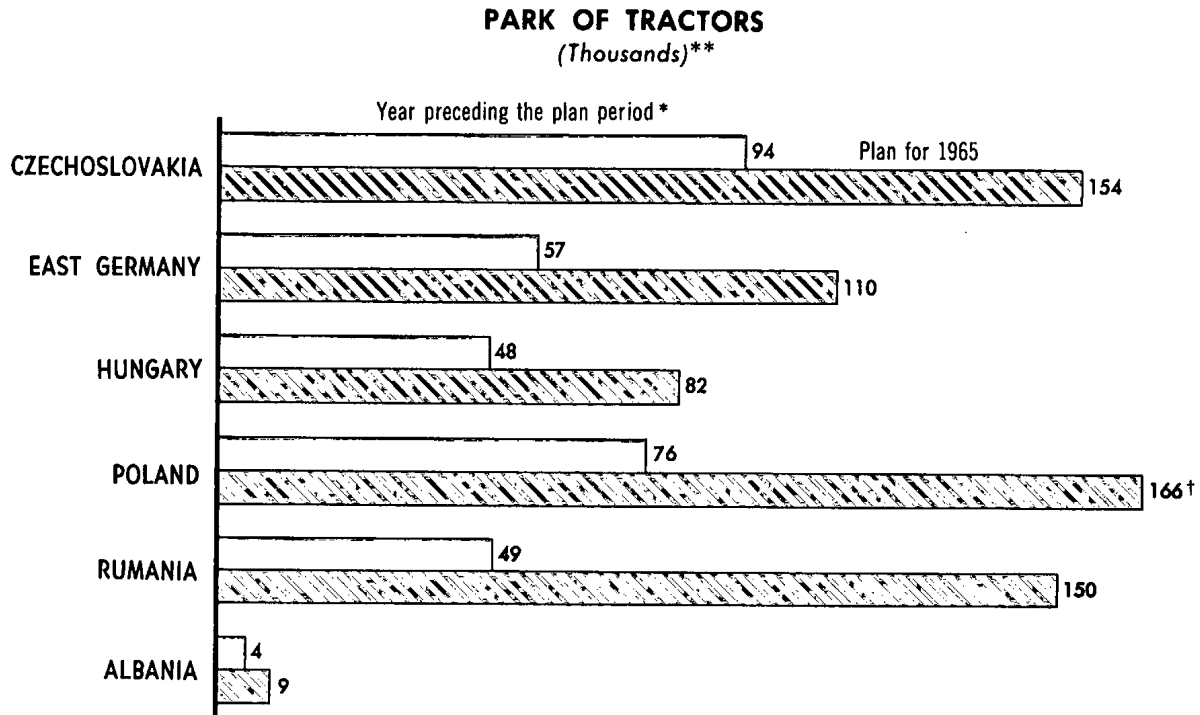
* Following p. 40.

** Appendix A, p. 87, below.

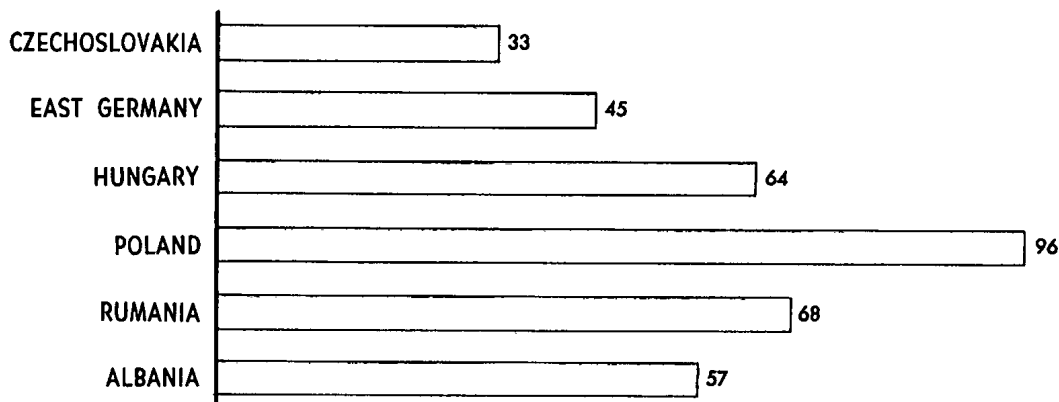
Figure 3

SIX EUROPEAN SATELLITE COUNTRIES

Planned Growth of the Park of Agricultural Tractors During the Period Ending in 1965* and Planned Amount of Arable Land per Tractor in 1965



PLANNED AMOUNT OF ARABLE LAND PER TRACTOR** IN 1965 (Hectares)



*The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.
Some plan data are midpoints of a range.

**In terms of 15-horsepower equivalents.

†Estimated.

b. Prospects for Fulfillment of Investment Plans

Many of the problems that the Satellites have encountered in the past in carrying out their investment programs undoubtedly will continue to plague them, and these problems are likely to prevent several of the countries from reaching their goals for investment during the period ending in 1965. The countries frequently have experienced difficulties in producing the machinery and equipment earmarked for the investment plans and in importing the scheduled amounts because of production problems in the supplying country or (where Western suppliers are involved) insufficient foreign exchange. The objectives that have been fixed for the metalworking industries are very high -- typically calling for an annual growth of production of 10 to 14 per cent -- and will not be reached easily. As pointed out later, it is questionable whether some of the countries will be able to produce the amount of steel scheduled for 1965 and whether any of them will be able to manufacture the planned amounts of machinery and equipment even if planned supplies of steel are available. Moreover, the planners were optimistic about the extent of excess capacity in the metalworking industries and allocated investment funds to these branches accordingly.

Shortcomings in the performance of the construction industry, however, often have been a greater problem than lack of machinery and equipment and may be so again. Even if all the necessary machinery and equipment is available, productive facilities in the key industrial sector cannot be commissioned as planned if construction work falls behind schedule. Planned values of construction have not been reached as a rule, although this fact sometimes is obscured by inflated pricing of construction, and the planners have had a strong tendency to overestimate the extent of possible reductions in costs. As a result, major projects usually have not been completed on schedule or at the planned cost. In some instances, projects have cost twice as much as planned or taken twice as long to complete.

Timely and economical construction of numerous productive facilities is one of the most crucial tasks of the new plans, as of earlier ones, and the stepped-up programs of housing construction also will make large demands on the capacity of the industry. The regimes have attempted in the past to hold down and even reduce the proportion of construction and assembly work in total investment in the belief that this action would facilitate fulfillment of the plan and raise the productivity of investment. However, little change is contemplated from the proportions of recent years or seems possible under the circumstances. Modernization of existing facilities through the installation of new equipment is stressed in the plans, but construction of major new industrial capacities is also essential in each country, and a substantial effort to give the population more adequate housing is

long overdue. It is not surprising, therefore, that the regimes continue to stress "faster, better, and cheaper" construction work, although these aims are partly contradictory.

The planned annual rates of growth in construction output range from about 7 percent in Hungary to 12 percent in Rumania, as shown in Table 8.* Czechoslovakia and Hungary have reported gains in 1955-59 that equal or exceed those now planned, but these claims may exaggerate their actual achievements. The Polish plan calls for some increase above the moderate rate of growth in 1955-59, and the East German plan calls for a small increase above the high rate of that period. The rate of growth planned in Rumania is much higher than the rate achieved during 1955-59, a period that was marked by large gains in construction output in some years but a decline in 1957.

The relative importance of employment and labor productivity in the expansion of construction output is scheduled to change appreciably in most of the countries. The Czechoslovak plan specifies a negligible rise in employment, in contrast to the 21-percent increase of 1955-59, and a considerably more rapid growth of labor productivity. If labor productivity does not develop as expected, however, employment probably can be increased as a compensating measure. Poland expects both employment and labor productivity to rise a little more rapidly than in 1955-59. The very high goal for labor productivity in East Germany almost certainly will prove to be unattainable, and the stringent labor situation probably will preclude offsetting increases in employment.

Because construction employment was raised to an unnecessarily high level in Hungary and Rumania in the early 1950's, these countries were able to increase construction output significantly in 1955-59 with a stable or declining number of workers. Under the new plans, however, employment is supposed to rise by one-sixth in Hungary and one-third in Rumania. The planned rates of growth for labor productivity in construction are smaller than those claimed for 1955-59, especially in Hungary, but they will not necessarily be easy to achieve now that the labor force is being used more efficiently.

A large part of the planned improvement in output per worker is supposed to come from an increase in the mechanization of building operations, which has not advanced very far in the Satellites. The scheduled increases in investments in the construction sector, which consist mostly of machinery and equipment, are especially large in East Germany and Rumania. An increase of 90 percent in Rumania is intended to permit mechanization of 85 percent of the excavation work, 95 percent

* Table 8 follows on p. 43.

Table 8

Six European Satellite Countries
Development of Construction
1955-59 and Plan for the Period Ending in 1965 a/

	Percent				
	Average Annual Increase in Gross Construction Output		Planned Total Increase for the Period Ending in 1965		
	1955-59	Plan for the Period Ending in 1965	Gross Construction Output	Employment in Construction	Output per Worker in Construction
Czechoslovakia	10.6	9.4	57	2	54
East Germany	10 <u>b/</u>	11.0	108	-6 <u>c/</u>	121
Hungary	9.0 <u>d/</u>	7.0	40	17 <u>e/</u>	20
Poland	5.9	7.9	46	11	32
Rumania	5.9	12	100	33	50
Albania	9.6 <u>f/</u>	9.9 <u>g/</u>	60 <u>g/</u>	24 <u>g/</u>	29 <u>g/</u>

a. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B. Planned increases in output per worker in East Germany and Hungary were derived from the goals for output and employment. Planned increases in employment in the other countries were derived from the goals for output and output per worker.

b. Estimated.

c. Estimate based on source 25/.

d. Net construction output.

e. 26/

f. Increase from 1951-55 to 1956-60, as anticipated in October 1960.

g. Planned increase from 1956-60 to 1961-65.

of the preparation of concrete, and 85 percent of the handling of aggregate at the principal projects. Closely allied with plans for greater mechanization are the demands of the regimes that industrial methods be adopted more widely. This objective requires greater use of standardized building designs and prefabricated elements as well as larger stocks of construction equipment.

All of the plans call for production of cement to increase considerably faster than the volume of construction, even though it is supposed to be used more economically than in the past. This relationship will permit concrete to be substituted increasingly for such materials as bricks, steel, and wood, which either cost more or require more labor to put in place. The projected capacity of the cement industry seems insufficient to meet the goals in some countries, but this deficiency may be overcome through increased use of blast furnace slag to stretch out the supply of regular portland cement. Use of slag is an economical way of augmenting the cement supply, but the resulting product is not entirely satisfactory for some uses, notably the manufacture of precast concrete constructions for dwellings and other structures of standardized design. Because such concrete takes longer to set, it slows down the manufacturing process and prevents full realization of the economies of mass production.

On the whole, it appears that the weakness of the construction plans lies not so much in the plans for inputs as in the volume of completed facilities expected from these inputs. Planners in the Satellites tend to be overoptimistic about time schedules and possible economies in the use of labor and materials -- in part because ambitious norms exert pressure on the industry to make progress. Problems in producing or importing materials and equipment are difficult to foresee, and insufficient allowance is usually made for resulting delays. Lags in construction also stem from the tendency of planners to schedule too many projects at once, unduly dispersing construction capacity. This tendency is strengthened by the desire of industrial managers to get a "foothold in the plan," as a Polish official expressed it, by having work begin as soon as possible on their projects.

Most if not all of the plans are predicated on reductions in construction periods -- some of them quite large. Czechoslovakia, for example, hopes to speed up the commissioning of productive facilities by a reduction of 40 percent from 1959 to 1965 in the average construction period of centrally managed projects. In Rumania, the first unit of the powerplant at Ploesti is supposed to be commissioned in 18 months compared with the 30 months required for the first units of three other powerplants constructed recently.

The regimes recognize that the capabilities of the construction sector have been spread too thin in the past and that a concentration

of effort on a reasonable number of projects at one time is essential in reducing the length of construction periods. However, the pressure from industrial managers for new capacities is very strong, and there is some evidence that rather large numbers of projects have been scheduled. The Rumanian plan states, for example, that 180 new plants and 300 additions to existing plants are to be undertaken for centrally administered industry during 1960-65, compared with about 200 new plants or additions in the producer goods industries, 20 plants or additions in the footwear and textile industries, and an unspecified but probably small number of plants or additions in other light industries in 1956-59.

Some improvement in the efficiency of construction work undoubtedly can be expected in the Satellites, if only because of the many opportunities for it and the accumulation of experience. The fact remains, however, that the planned increases in output are relatively large, and it would be surprising if problems were not encountered in the effort to achieve them. Hungary's construction goal is not especially high compared with the increase during 1955-59, but output in construction declined slightly in 1961, and the sector will have to make a considerable effort during the remainder of the period in order to reach the 1965 goal.

Although official Czechoslovak data show a rate of growth for construction output in 1955-59 higher than the rate planned for 1961-65, there is reason to believe that Satellite statistics on the volume of construction generally have an upward bias and that the construction sector in Czechoslovakia will have to improve somewhat on its past performance to fulfill the plan. Familiar weaknesses in construction activity continued to be evident in 1961, and the Czechoslovak regime has expressed its concern over the dispersal of construction capacity and the consequent failure to reach the planned volume of construction and complete important projects on schedule.

In Poland, the trend in construction work in 1961 was more favorable, but some question remains whether output can be raised an average of 8 percent annually compared with the 6 percent or less achieved in 1955-59. Even if the Polish objective for the volume of construction is reached, some major projects are unlikely to be completed within the stipulated periods of time. In East Germany, a substantial underfulfillment of the construction and investment plans is in prospect. The planned increase for labor productivity in construction is excessive, as the regime admitted by cutting the goal for 1961. Work on some projects has been suspended, starts on others have been postponed, and the housing program may well have to be scaled down. In Rumania, however, construction activity proceeded favorably in 1960 and 1961, and if the rate of growth of these years is maintained, the 1965 goal will be exceeded. Nevertheless, the 1965 goal is very high, and

Rumania has not been able to achieve an uninterrupted rise in construction output in the past.

c. Investment Costs in Industry

Apart from possible difficulties in fulfilling planned investment tasks in the key industrial sector, there is the question of whether or not the investments provided in the plans would permit production goals for 1965 to be reached. In other words, does the planned change in investment costs per unit of increase in output seem reasonable under the circumstances? The changes in investment costs implied by the plans can be determined as a range of estimate for most of the countries, and some information is available on the principal factors influencing these costs. The effects of these factors, however, are difficult to ascertain, even as to direction in some instances, and thus only the most general impression can be formed of the adequacy of the investment programs.

Of the five countries for which the calculation can be made, only Czechoslovakia has provided for an appreciable increase in investment costs per unit of increase in output in comparison with recent years (see Table 9*). The Czechoslovak plan allows for an increase in costs of the order of 20 percent if capital repairs are included and of 30 percent if they are excluded, and even these figures represent a scaling down of the rise implied by the investment and output goals in the draft plan of 1959.

The planned change in investment costs in East Germany contrasts sharply with that in Czechoslovakia, in that a significant decline is indicated.** The reasonableness of this objective is difficult to appraise even at this point in the plan period. Failure to reach scheduled levels of industrial production and investment in 1960 apparently has led to a downward revision of the original goals for 1965, but it is not known whether the planners concluded that the original relationship of investment to output is unrealistic and therefore have reduced the production goal proportionately more than the investment goal.

* Table 9 follows on p. 47.

** It must be emphasized that the changes in investment costs shown in Table 9 are based on estimates of the growth of net industrial production in 1955-59 (or similar period) and that they may differ considerably from figures based on official indexes of the growth of net production or gross production. This fact is well illustrated by the East German plan, which implies a sizable rise rather than a decline in investment costs if the official index of gross industrial production in recent years is used.

Table 9
Five European Satellite Countries
Relation of Gross Fixed Investment and Growth of Output in Industry ^{a/}
Recent Five Year Period and Plan for the Period Ending in 1965 ^{b/}

	Recent Five Year Period			Plan for the Period Ending in 1965			Implicit Planned Increase in Investment per Unit of Increase in Output (Percent)
	Investment (Billion Units of National Currencies) ^{c/}	Increase in Output (Index Points) ^{d/}	Investment per Unit of Increase in Output (Billion Units of National Currencies)	Investment (Billion Units of National Currencies) ^{e/}	Increase in Output (Index Points) ^{d/}	Investment per Unit of Increase in Output (Billion Units of National Currencies)	
Czechoslovakia							
Including capital repairs	71.7	33	2.14 to 2.20	146.6 ^{e/}	56	2.59 to 2.64	18 to 23
Excluding capital repairs	57.2	33	1.71 to 1.76	126.8	56	2.24 to 2.28	27 to 33
East Germany	26.9 ^{f/}	34	0.78 to 0.80	60	88	0.67 to 0.69	-12 to -16
Hungary	55 ^{g/}	31	1.73 to 1.82	83 to 85	48 to 50	1.67 to 1.76 ^{h/}	+2 to -8
Poland	167.6 ^{i/}	32	5.16 to 5.32	250.5	51.9	4.83	-6 to -9
Rumania	40.2 ^{j/}	41	0.97 to 0.99	100 to 106 ^{k/}	105 to 115 ^{l/}	0.91 to 0.96 ^{h/}	-1 to -8

a. The increases shown for output during a recent 5-year period are estimates. Unless otherwise indicated, other data are from the official statistical year-books and plan documents listed in Appendix B. Certain figures are shown as ranges because of the imprecision of the underlying estimates and the rounding of published data.

b. The recent 5-year period is 1955-59 for Czechoslovakia and Rumania and 1956-60 for the other countries, and the plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.

c. The coverage and price basis of these values are as described in Table 6, footnote "c," except that the East German data for 1956-60 are for state industry only, at current prices.

d. An index point is defined as 1 percent of output in the year preceding the plan period.

e. Assuming that industry is scheduled to receive the same share of total capital repairs (44.8 percent) as in 1955-59.

f. ^{27/}. This value includes a small amount of investment in the construction sector.

g. Based on estimated investment in 1956-57 in terms of 1959 prices and reported investment in 1958-60 in source ^{28/}.

h. The upper and lower limits of the planned increase in output are considered to be related to the corresponding limits of the planned range of investment.

i. ^{29/}

j. Based on data for 1955-58 in source ^{30/} and data for 1959 in source ^{31/}.

k. ^{32/}

l. The plan states that industrial production in 1965 is scheduled to be about 2.1 times that of 1959. The planned increase is shown as 110 percent in Table 12, but a range of 105 to 115 percent seems more appropriate for the present purpose.

The first version of Poland's plan implied a substantial decrease in investment costs. In subsequent revisions of the plan, however, planned investment in industry was raised relative to the planned increase in output, so that only a moderate decline is now implied. The Hungarian and Rumanian plans apparently also provide for a small decrease in investment costs. In all five countries, however, the extent of the scheduled change is difficult to determine accurately because of the crudeness of the data. Additional uncertainty is injected into the calculations for Hungary, Poland, and Rumania by the lack of data for capital repairs, which -- as the Czechoslovak example shows -- can make a significant difference in the result. The importance of including data on capital repairs arises from the fact that a shift of emphasis from capital repairs to new investments is planned in Czechoslovakia and no doubt in at least some of the other countries -- apparently in connection with the aim of modernizing the stock of industrial assets.

One development that may significantly affect investment costs is a change in the relationship of investment expenditures to the net increase in the stock of fixed assets. This relationship depends on the value of productive facilities actually completed and put into use -- which is influenced by the number and timing of large projects, the construction period for which is longer than the plan period, and by changes in the average length of construction periods -- and by the rate of retirement of old facilities. In the case of a large project, the increase in output per unit of investment may be very small -- even zero -- during a particular plan period because the project (or a particular section of it) is not finished until later. Conversely, the increase in output per unit of investment might be extremely large if the project were carried over from the previous period and needed only a little more expenditure to be completed.

How the varying phases of large numbers of projects combine to affect the relationship of investment expenditures to investments put into operation is difficult to determine, especially for a future period. In the case of Czechoslovakia, at least, it seems clear that one of the principal reasons for the planned increase in investment costs in spite of the substantial reduction stipulated for construction periods is that several major projects will be in an early phase of work during the plan period. Czechoslovak investment costs also will tend to be increased by the accelerated rate of retirements associated with the modernization program.

The other countries have similar plans to modernize industrial facilities, but they apparently hope to improve or at least to maintain the recent relationship of investment expenditures to the value of investments put into operation by shortening the average construction period and avoiding a pronounced cycle for large, long-term

projects. The relationship of investments put into operation to investment expenditures may be particularly favorable in Hungary during the new Five Year Plan. In raising expenditures for industrial investment by about 125 percent from 1957 to 1960 and substantially increasing the volume of investment projects in progress, the country apparently has begun a variety of industrial projects that will be completed and put into operation during 1961-65. Such an interpretation also helps to explain the moderate increase in industrial investment that is planned.

In most of the countries, investment costs will tend to be increased by a rise in the share of investment allocated to the capital-intensive industries -- predominantly those engaged in the extraction and primary or intermediate processing of raw materials. In the East German and Polish plans, larger shares for the electric power and chemical industries (including petroleum refining) more than offset the considerably reduced shares for coal mining and processing. An especially important factor underlying the de-emphasis of investment in coal mining and processing in East Germany is the savings in investment costs expected from the shift from synthetic petroleum derived from brown coal to crude petroleum imported from the USSR. In Czechoslovakia the planned shift in investment favors fuel processing and metallurgy as well as chemicals. Hungary also has earmarked a larger share of industrial investment for the capital-intensive industries, principally chemicals, and the impact of this shift is planned to fall entirely on the metalworking industries. No pronounced change of this sort, however, is evident in the Rumanian plan. The proportion of industrial investment allocated to chemicals is supposed to increase appreciably -- possibly to the extent of doubling -- but the share of electric power and fuel extraction is planned to decline.

A third factor affecting investment costs is the efficiency of investment in specific lines of production. Technological advances offer some opportunities for making investments that reduce investment costs per unit of productive capacity. The use of oxygen in steelmaking and of large turbines in electric powerplants are two familiar examples of such capital-saving investments. Also it seems possible that there are some instances in these countries in which a shift to a larger scale of operations -- either in the form of larger plants or combines of related plants -- would permit economies in investment. Most of the technological improvements, however, seem to be intended to save labor or materials, as indicated in 4,* and may tend to raise investment costs.

Aside from the nature and maturation of investment projects, investment costs per unit of increase in output will be affected by various factors that determine how efficiently both old and new productive

* P. 61, below.

facilities are used -- notably the amount and quality of labor; the amount, quality, and regularity of supply of materials; the system of wage rates and work norms; the degree of specialization of manufacture in particular plants; and the efficiency of management (discussed briefly in 5,*). All of the countries expect to make substantial progress along these lines, as noted previously, but these efforts will tend to reduce investment costs only to the extent that the accomplishments of recent years can be improved. Such improvements appear to be feasible in certain respects but not in others, and although some net gain cannot be ruled out, it is unlikely to be sufficiently large to permit investment costs to be reduced to the extent planned in East Germany or to the limit of the ranges of estimate for Hungary, Poland, and Rumania, as shown in Table 9.** The impact of such measures on production obviously depends in no small way on the extent of unused capacity in industrial enterprises. One reason for anticipating rather moderate effects on the level of production and thus on investment costs is the progressive exhaustion of the more easily exploited reserves of productive capacity that is believed to have occurred in recent years.

Industrial employment in Hungary, Poland, and Rumania can easily be increased at the same rate as in recent years if the regimes so desire, although less rapid growth is now planned in the first two countries. Industrial employment in Czechoslovakia may well grow more rapidly than is now scheduled, but the rate of growth is likely to be lower than during the preceding period. In East Germany, industrial employment undoubtedly will grow much less than before. Provision of more adequate supplies of materials -- resulting in large part from Soviet willingness to expand its exports of such goods -- contributed significantly to the achievement of high rates of industrial growth in recent years, and it is unlikely that this advance can be bettered during the current plans. The allocation and scheduling of supplies undoubtedly can be improved, to be sure, but the elimination of major bottlenecks in supplies of material, which had such a stimulating effect on production during the preceding period, cannot, by its very nature, be repeated.

In Czechoslovakia, Poland, and Rumania, some of the most glaring defects of the wage and norm systems were eliminated by the reforms of recent years. Further adjustments may be undertaken to keep up the pressure on workers for higher output but probably without equivalent effect. The potential economic gain from wage and norm revisions may be somewhat greater in East Germany and Hungary, which have had no thoroughgoing reforms. The East German regime has been especially cautious about instituting such an unpopular program, and it remains to

* P. 64, below.

** P. 47, above.

be seen whether it will continue to restrain itself to avoid stirring up trouble or will decide that the closing of the border in Berlin permits more forceful action.

Improvements in the efficiency of management and growing specialization in production may have a more favorable effect on investment costs than in the recent past. Particularly promising, it would seem, is the opportunity to raise output through greater product specialization in manufacturing plants. The essential step is a reduction in the number of products -- or of types and models of a given product -- that are produced in a given plant, so that the economies of mass production can be more fully realized. Such efforts are promoted by but are not limited to international arrangements for specialization, which are being developed rather slowly.

Although the countries have made different assumptions regarding the trend in the productivity of investment -- the reciprocal measure of investment costs per unit of increase in output -- the plans express a general expectation that the productivity of the total stock of fixed industrial assets will continue to increase. In all four countries for which published data or estimates are available, industrial production is scheduled to grow more rapidly than the stock of assets, as shown in the following tabulation*:

	Planned Increase During the Period Ending in 1965 (Percent)		Increase During the Comparable Preceding Period (Percent)	
	Stock of Fixed Industrial Assets	Industrial Production	Stock of Fixed Industrial Assets	Industrial Production**
Czechoslovakia	46	56	39	55
East Germany	45 to 50	88	20 to 25	74
Poland	35 to 40	52	30 to 35	47
Rumania	100	110	65	67

* Because of differences among the countries in methods of valuing fixed assets and in the coverage of the data, international comparisons of increases in the stock of fixed assets are less meaningful than the intertemporal comparisons.

** Estimated increases in net industrial production.

The quality of the data rule out positive conclusions on this aspect of the plans; nevertheless, the scheduled relationships -- although ambitious, as they are intended to be -- do not seem to be particularly unreasonable in view of past experience in these countries. The ratio of industrial production to industrial assets apparently is planned to increase somewhat less rapidly than during the preceding period in Czechoslovakia; considerably less rapidly in East Germany, but still to a greater extent than in the other three countries; and at about the same rate in Poland. Rumania plans a very large increase in the stock of assets and some improvement in the ratio of production to assets in contrast to the preceding 6-year period, when little or no improvement in this ratio is indicated.

3. Supply of Key Materials

Part of the rise in rates of industrial growth in these countries in the late 1950's unquestionably can be attributed to improvements in the supply of materials, as noted above. The new plans are predicated on further progress in this respect. Some production goals for key materials seem optimistic, however, and possible efficiencies in the utilization of materials appear to have been overestimated in certain instances. Actual supplies of materials thus are likely to be inadequate to support the total volume of industrial production that is planned, although not by a wide margin.

a. Electric Power and Fuels

Production and supply of primary sources of energy generally are planned to grow more rapidly during the new plans than in 1955-59, and it is believed that the available supply of primary energy will grow more rapidly than before in spite of some underfulfillment of individual goals. Recent and planned changes in production and supply of primary sources of energy reveal two important trends. First, brown coal and lignite have been increasing in importance relative to hard coal and will continue to do so because of lower mining costs and progress in using low-quality coal effectively. Even more pronounced is the growing role scheduled for crude oil and natural gas, the supply of which is planned to more than double from 1959 to 1965. Associated with this shift is a planned increase in net imports of crude oil, petroleum products, and natural gas from 1 million tons* of standard fuel in 1959 to about 20 million tons in 1965. At the same time, net exports of coal will be reduced further. A summary of production and supply of primary sources of energy in the six European Satellite countries is shown in the following tabulation:

* Tonnages throughout this report are given in metric tons.

	Million Metric Tons of Standard Fuel*		
	<u>1954</u>	<u>1959</u>	<u>Plan for 1965**</u>
Production	<u>215.0</u>	<u>256.2</u>	<u>327.9</u>
Hard coal	100.0	109.8	129.3
Brown coal and lignite	87.3	108.6	137.9
Petroleum	17.0	20.0	24.9
Natural gas	9.6	15.5	30.8
Hydroelectric power	1.1	2.3	5.0
Net exports (-) or imports (+)	<u>-19.3</u>	<u>-6.5</u>	<u>+16.3</u>
Coal and coke	-14.2	-7.5	-4.4
Petroleum, petroleum products, and natural gas	-5.1	+1.0	+20.5
Electric power	Negl.	Negl.	+0.2
Net supply	<u>195.7</u>	<u>249.7</u>	<u>344.2</u>
Hard coal and imported coke	88.8	102.2	124.8
Brown coal and lignite	84.3	108.7	138.0
Petroleum and imported petro- leum products	11.8	20.7	45.0
Natural gas	9.7	15.8	31.2
Hydroelectric and imported power	1.1	2.3	5.2

The continuing shift to petroleum, natural gas, and (in certain countries) hydroelectric power has held down the need for costly expansion of coal mining. Planned increases in coal output thus are generally of modest size, although the key goals of the two largest producers -- hard coal production in Poland and brown coal production in East Germany -- call for rates of growth a little higher than in 1955-59. Poland probably has a better chance of overfulfilling its goal for hard coal than of reaching its goal for brown coal, for there

* Standard fuel has a calorific value of 7,000 kilocalories per kilogram. Data on p. 54, below, for production of coal and petroleum, refer to actual tonnages rather than to tonnages expressed in terms of standard fuel.

** Plan figures for net imports or exports, and thus for the net supply of energy, are based in part on estimates.

is some doubt that East Germany can provide the equipment that Poland needs to achieve its goal for production of brown coal.

Prospects that East Germany can produce 278 million tons of brown coal, as specified in its plan law, are not too bright, and the goal apparently has been reduced. The amount originally planned will not be needed, because the goal for industrial production in 1965 must be scaled down. Prospects that Czechoslovakia, Hungary, and Rumania will be able to produce the planned amounts of coal are generally good. The goal for production of coking coal in Czechoslovakia may prove to be beyond reach, however, and the hopes of the regime to obtain favorable results from the underground gasification of brown coal seem ill-founded in view of the experiments in the US and the USSR.

The increase scheduled in consumption of petroleum rests only to a small extent on domestic production. The planned increase in output of petroleum in Rumania is rather small, and the much larger one in Hungary would not raise output much above the level of 1955. East Germany's aim of producing 1 million tons of petroleum by 1965 seems unrealistic, as intensive exploration has failed to reveal important resources. The plan of Albania to produce a similar amount seems feasible if drilling equipment and technical assistance can be obtained from other countries.

Each country plans relatively large increases in output of electric power, relying both on sizable additions to plant capacity and ambitious gains in the already intensive utilization of existing plants. Any failure to complete scheduled projects on time thus will almost certainly hold output of electric power below the level planned for 1965. Some reduction of construction periods seems probable, but past experience suggests that additions to capacity by 1965 will be somewhat smaller than planned in East Germany, Poland, Rumania, and possibly Hungary, although not necessarily in Czechoslovakia. Aside from construction problems, most of the countries face difficulties in manufacturing or importing on schedule the large 100-megawatt to 200-megawatt turbines that they want to install in order to reduce both capital costs and fuel costs per unit of output.

Whether or not the supplies of energy expected to be available to these countries in 1965 -- or even the somewhat larger supplies that are planned -- are adequate to support the planned rates of industrial growth is uncertain. Projection to 1965 of the relationship between increases in the supply of energy and estimated increases in net industrial output in 1950-57 suggests that the prospective supply of energy is insufficient to support the planned increase in industrial production. The rate of increase in consumption of energy per unit of

increase in industrial output has declined since 1957, however, and if the relationship of 1958-60 is projected to 1965, little or no deficit in the supply of energy is indicated.

Further improvements in the efficiency of utilizing energy can be expected, although not necessarily to the extent planned. Consumption of metallurgical coke per ton of pig iron, for example, is scheduled to decline about 18 percent in the countries as a group. The most optimistic goal is that of Czechoslovakia, where consumption of coke is supposed to be reduced by 29 percent, or to less than the current level in either the USSR or the US. Installation of large generators and boilers in electric powerplants is relied on to reduce fuel inputs per unit of output, as mentioned above. In one country or another, economies are also expected from increasing substitution of natural gas for coke in blast furnaces, of natural gas for petroleum in various industrial uses, and of petroleum and electric power for coal in rail transport.

b. Steel

Most of the goals for production of steel in 1965 seem to be too high for fulfillment and inadequate to support the planned output of the metalworking industries, even if they are reached. Output of crude steel is scheduled to increase more rapidly under the new plans than in 1955-59 in Czechoslovakia and in Hungary, where the level of production before the uprising in 1956 was not regained until 1958; at about the same rate in East Germany; and somewhat less rapidly in Poland and Rumania. The countries considered most likely to reach their goals for steel in 1965 are Hungary, Poland, and Rumania.

The objective for Czechoslovakia is particularly vulnerable because it depends on the completion of a large integrated iron and steel plant in Slovakia. This plant is scheduled to produce about 1 million tons of steel by 1965, or about one-fourth of the total increase planned, but it is doubtful that the plant will produce nearly that much steel by then, for work on the project has barely begun. Work also is underway in Rumania on an integrated plant with a planned annual capacity of 4 million tons of steel -- a larger plant than any other now found in the Satellites or contemplated through 1975 -- but the regime is not counting on a significant output from it in 1965.

Official expectations in the six countries that an increase of 4 million tons in output of steel can be obtained through a 20-percent increase in the utilization of existing facilities are optimistic, although not clearly unreasonable. Following the lead of the USSR, the regimes will rely mainly on increased mechanization and use of oxygen to speed up steelmaking operations. Growing use of these techniques since 1953 permitted the USSR to achieve a gain in the utilization of steel capacity similar to that planned in the Satellites, and the Satellites as a group are starting from a lower level of utilization.

The additional capacity of 5.3 million tons of steel planned at existing plants, most of which is already under construction, is also expected to be largely but not completely successful. For example, lack of experience with basic oxygen converters may cause some difficulties. Installation of such facilities is planned at existing plants in Czechoslovakia, East Germany, and Poland, as well as at the new plant in Rumania.

Reliance on imports of iron ore, which is already very great in each country, is scheduled to increase further in Czechoslovakia, East Germany, and Hungary. Total requirements of iron ore in 1961-65 are estimated at 88 million tons in terms of iron content, and present plans call for 21 percent of that quantity to be produced domestically, 60 percent to be imported from the USSR, and 8 percent to be imported from India. About 10 million tons thus remain to be imported from other sources such as Sweden, Brazil, Communist China, and certain countries in Africa.

The plans also call for large net imports of rolled products from the USSR together with a growing exchange of such products among the Satellites -- an exchange that has been promoted by the Council for Mutual Economic Assistance (CEMA). There will also be an exchange of metallurgical equipment between the Satellites and the USSR. The USSR will supply some equipment for the new plant in Czechoslovakia, the next section of the Lenin plant in Poland, and most of the rolling mills for the new plant in Rumania and will receive a substantial amount of rolling mill equipment from Czechoslovakia and East Germany.

One of the crucial suppositions in each plan is that the value of production per ton of steel used in the metalworking industries can be increased significantly -- in some countries, very considerably -- as shown in the following tabulation:

	Planned Increase During the Period Ending in 1965 (Percent)	
	Production of the Metalworking Industries	Value of Production per Ton of Steel Used
Czechoslovakia	76	15
East Germany*	123	34
Hungary	64	13**
Poland	76	36
Rumania	120***	30

* The data cover only centrally controlled state enterprises.

** Estimate obtained by prorating the planned increase announced in 1959 for 1959-65.

*** Machinery and equipment only (that is, exclusive of metal products and repair work).

Citing data that imply a planned increase of 36 percent in the value of metalworking production per ton of steel -- which are not entirely consistent with figures in the plan law and may exaggerate the intended increase -- Party Secretary Gomulka assured a group of Polish workers in April 1961 that such progress is indeed possible. Like the other countries, Poland hopes to save substantial amounts of steel by improving manufacturing practices and the design of products. Certain products are much heavier than necessary or are manufactured by processes wasteful of steel, leading Gomulka to characterize some plants as "shavings factories." Weights of some products can be reduced by using stronger steels.

Also evident are intentions to increase the use of plastics and other substitute materials and to concentrate more on production of metalworking products that require less steel per unit of value. Under East Germany's Seven Year Plan, for example, the planned increase in production is 166 percent in the electrotechnical branches of industry compared with 110 percent in the heavy machinery branches. Similarly, Poland plans to double its production in the electrotechnical branches while raising its production of machinery (other than transport equipment) and steel constructions by less than one-half.

Granted that such measures will have some effect in the desired direction, it nevertheless appears that in East Germany, Poland, and Rumania at least, the plans reflect too sanguine a view of what can be accomplished in only 5 to 7 years. Scattered information about recent experience in these and other countries suggests what may be feasible, although the data do not permit definite conclusions.* The increases in metalworking production per ton of steel in Poland from 1955 to 1959 and in Czechoslovakia from 1956 to 1960 appear to have been small, probably less than 10 percent. Calculations for one or two recent 5-year periods in Austria, Belgium-Luxembourg, Italy, and the UK also show rather small increases in metalworking production per ton of steel in most instances. It is possible that West Germany achieved gains during certain 5-year periods in the 1950's that are comparable to those planned in East Germany, Poland, and Rumania, but in general it seems likely that these countries will be unable to reach their goals for metalworking production because of steel shortages.

* Statistics on deliveries of finished steel to the metalworking industries are available for a number of European countries, but the data do not include imports in most instances, and the ultimate users of part of the steel supply often cannot be determined. The relationship of metalworking production to steel consumption may be obscured by changes in inventories. Also, there is the question of the accuracy of calculated indexes of metalworking production -- a very difficult component of industrial production to measure.

c. Nonferrous Materials

Most of the plans for major nonferrous metals and nonmetallic minerals call for rather moderate increases in output in keeping with the limitations of domestic resources, and these goals generally have good prospects of being reached. Targets for some products, however -- typically the few national specialities in this field and certain refined products in countries where new plants are to be built -- are quite ambitious, and their attainment in some instances is problematical. In East Germany, for example, there is doubt that the plants that are expected to yield large increases in aluminum and magnesium output will be completed by 1965. East German goals for potash and zinc are more likely to be realized, although much depends on the amount of investment in these industries during the remaining years of the plan.

Fulfillment of some objectives in Rumania also is dubious. The regime has programmed large percentage increases in the output of copper, lead, and zinc and intends to start refining aluminum in a plant with a projected annual capacity of 20,000 to 30,000 tons. Moreover, this plant is supposed to rely on domestic supplies of bauxite, requiring substantial expenditures for mines and facilities for alumina production.

Hungary's production goals for bauxite, alumina, and aluminum are not particularly high and probably can be achieved without difficulty. Czechoslovak plans, which emphasize a considerable expansion of the output of copper and aluminum, also seem reasonable. Like most of the other countries, Czechoslovakia contemplates increasing substitution of aluminum for copper in electrical equipment and for steel in certain types of machinery and equipment.

Aside from expanding and modernizing its important zinc and lead industries, Poland plans to complete the first section of a new aluminum plant and (with the help of Czechoslovakia) to continue the development of the large deposits of sulfur and copper that were discovered recently. Construction of new copper mines is one of the principal investments of the Five Year Plan, but this project will not boost output until after 1965.

In spite of these plans, the adequacy of supplies of nonferrous materials in these countries will continue to depend to a large extent on imports, chiefly from the USSR. Existing trade agreements commit the USSR to deliver growing amounts of these materials, although not as much as desired by some countries, notably East Germany. Soviet equipment and technical aid also are involved in most of the investment projects planned for this industry.

d. Chemicals

The chemical industries are scheduled to become increasingly important suppliers of materials to industry and agriculture in all of the countries. Planned percentage increases in output are especially high in Rumania, Poland, and Czechoslovakia, although the planned expansion in East Germany is the most important in absolute terms. Also, there is much similarity in the patterns of intended expansion, for the plans show a strong emphasis on production of plastics and synthetic fibers and rubber -- production that will be based increasingly on petroleum rather than coal. In addition, large increases are planned for agricultural chemicals, especially fertilizers, and for the basic inorganic chemicals such as sulfuric acid, ammonia, and chlorine that are needed for the manufacture of fertilizers, synthetics, and a wide range of other products. In Albania, plans to expand the presently negligible output of chemicals are confined largely to fertilizers, and these plans may already be obsolete because of the deterioration of economic relations with Bloc countries. Czechoslovakia and the USSR had agreed to provide Albania with two plants for production of nitrogen and phosphorous fertilizers and related basic chemicals, but these credits now have been canceled.

Huge percentage gains are specified in the five largest countries for production of plastics, which are attractive substitutes for nonferrous metals and other materials in some uses because of their lower cost or special characteristics such as resistance to corrosion. Synthetic fibers are being promoted because of their superior qualities and substitutability for imported natural fibers. Production of synthetic fibers still is small even in the more developed countries, which plan to increase it much more rapidly than production of rayon and other fibers made from cellulose.

Goals for agricultural production are based on the use of much larger amounts of fertilizers and pesticides than in the past. During the period ending in 1965, production of nitrogen and phosphorous fertilizers is planned to rise about 47 percent in East Germany, 81 percent in Poland, 104 percent in Czechoslovakia, 172 percent in Hungary, and about 9 times in Rumania. In addition, East Germany -- the only producer of potash -- plans to increase its output of this fertilizer (in terms of potassium oxide) from 1.5 million tons in 1958 to 2.1 million tons in 1965. Supplies of chemical fertilizers per hectare of agricultural land are scheduled to rise substantially, especially notable increases being planned in the countries that are most backward in this respect (as shown in Table 10*). In terms of kilograms per hectare of arable land, planned supplies of fertilizer in East Germany and Czechoslovakia exceed the

* Table 10 follows on p. 60.

Table 10

Five European Satellite Countries
Planned Growth of the Supply of Chemical Fertilizers
During the Period Ending in 1965 a/

	Supply of Chemical Fertilizers (Kilograms of Nutrient Content per Hectare of Agricultural Land)		Planned Growth of the Supply During the Period Ending in 1965 (Percent)
	Year Preceding the Plan Period <u>b/</u>	Plan for 1965 <u>c/</u>	
Czechoslovakia	68.0 <u>d/</u>	133.5	96
East Germany	146.8	212	44
Hungary	23.5 <u>e/</u>	59 <u>f/</u>	151
Poland	36.5 <u>g/</u>	61	67
Rumania	4.2 <u>h/</u>	34	710

a. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B or are calculated from information in these sources.

b. 1959/60 crop year rather than 1960 for Czechoslovakia and Poland.

c. Assuming no change during the plan period in the agricultural area in Poland and Rumania and in the relationship of the agricultural area to the area of arable land, orchards, and vineyards in Hungary.

d. 33/

e. Calculated from data in source 34/.

f. The nutrient content of the planned gross weight of the supply is assumed to be the same as in 1960 (22.4 percent).

g. 35/

h. Apparent supply, consisting of production plus imports. Imports of apatite concentrates are not included, however, because they are reflected in data for production of phosphorous fertilizer.

levels of 1959 in most Western European countries, although not in the Netherlands, Belgium, or West Germany.

The goals for production of the chemical industries are to be supported by large investment expenditures. A few large plants are to be built in each country -- most of them integrated combines -- and about 175 existing plants are scheduled to be enlarged or modernized,

or both. There is a marked concentration of investment funds on the large new projects, however. Mechanization of operations is to be extended considerably, leading most of the regimes to set very high goals for the growth of labor productivity. Both Hungary and Rumania plan sizable increases in employment in the chemical industry, and all of the countries will need increasing numbers of chemists, engineers, and skilled workers to raise the technical level of the industry.

Although shortages of raw materials, electric power, and labor may interfere with the achievement of goals for production of chemicals, the central problem appears to be timely construction of new plants and prompt deliveries of equipment for both new and old plants. Chemical plants rarely have been completed on schedule in the past, and some projects important to the success of the plans apparently are lagging several months behind schedule. This delay is attributable in part to shortcomings in construction work, but technical support for these projects -- some of which involve new products, complex new processes, or changes in the raw material base -- also has been deficient. Domestic capabilities for such work are inadequate, and foreign assistance seemingly has been less complete and prompt than expected.

In this industry more than in any other, success depends on the acquisition of planned amounts of equipment and substantial technical assistance from foreign countries. Numerous arrangements for economic cooperation have been made among the Satellites and with the USSR, generally calling for the more advanced countries to help the less advanced, and significant amounts of equipment and technology are supposed to be obtained from Western European countries and the US. Nevertheless, the transition from a plan to an efficiently functioning plant holds many difficulties, and it seems likely that many goals for production will not be reached -- some by a considerable margin.

4. Technological Progress

All of the plans are pervaded by the aim of raising the technical level of productive activity, and their results will depend in no small way on how rapidly and efficiently this can be done. Technological progress has by no means been ignored in previous plans. But growing concern with the quality and cost of products, declining reserves of productive capacity, and the prospect in some countries of a less rapid growth of employment have given this task a new urgency. Several aspects of these programs have already been mentioned, notably the plans for (a) greater use of machinery and mass-production techniques in construction work and more economic use of construction materials, (b) substantial gains in production of the metalworking industries per ton of steel consumed, which are representative of plans to

economize on the use of various other materials, (c) a further shift in fuel consumption in transportation from coal to petroleum and electric power, and (d) much larger inputs of machinery, fertilizers, and pesticides in agriculture -- to which increasing use of high-quality seed and breeding stock might be added.

In this section, plans for technological progress in the metalworking industries will be considered briefly as an example of what the regimes hope to accomplish in their industrial sectors. The programs that have been formulated for the metalworking industries are of special interest because of the importance of the industries as suppliers of capital equipment to other parts of the economies and (in the more developed countries) for export and because heavy reliance is placed on technical improvements. Much of the excess capacity that developed in these industries in most of the Satellites as a consequence of overinvestment in the early 1950's has disappeared with the improved utilization of new plants. Nevertheless, many opportunities remain, for the equipment and manufacturing processes in most metalworking plants in these countries are far less productive than those in modern plants in Western countries or even in the USSR. The effective exploitation of these opportunities often requires technical improvements as well as increased supplies of materials and labor.

The plans provide for much greater mechanization of several aspects of operations in order to raise the productivity of these plants. First, there is to be much greater use of automatic or semiautomatic types of machinery -- especially metalcutting and metalforming machine tools -- in preference to general-purpose machines that are less productive even though they require moderately skilled workers. In some instances, automatic features can be added to existing machines, greatly increasing their capacity. In Czechoslovakia, nearly 30 percent of the machine tools of enterprises under the Ministry of General Engineering are supposed to have automatic features in 1965. East Germany plans to install 22,000 automatic machine tools in manufacturing plants, raising the proportion of such machines from 4 percent of the total in 1960 to 16 percent in 1965.

Mechanization also may take the form of more widespread use of continuous production lines: Progress in this area is restricted in the less advanced countries by the small scale of their operations, but East Germany and Czechoslovakia plan a sizable effort, as illustrated by the East German plan to increase the number of continuous production lines in machinery plants from 385 in 1960 to 2,700 in 1965. Plans for several of the countries give the impression that there is to be a significant development of automation, but these plans apparently refer only to the growing use of automatic machinery. Fully automated production lines with automatic inspection and feedback will not be employed to any appreciable extent in these industries until well after 1965, although

automation of some processes in other industries -- notably chemicals and metallurgy -- will be introduced or extended.

Large economies also are expected from greater mechanization of warehousing, intraplant transportation, and similar auxiliary activities -- probably the least progressive aspects of machinery manufacturing in these countries. The simple pallet system of handling materials, for example, which has drastically reduced labor requirements in advanced Western countries, scarcely exists in the Satellites. According to a Czechoslovak periodical, more than one-half of the workers in machinery plants are engaged in warehousing, handling of materials, and other auxiliary activities.

The benefits obtainable from increasing mechanization depend to an important extent on the success of schemes for greater standardization of products and greater specialization of output. Extensive use of automatic machinery, consisting in some instances of single-purpose machine tools, presupposes large-scale production. The domestic market in each country is small, yet a wide range of types and models typically is being manufactured in small, uneconomic batches. The variety of product types found in these countries reflects both the largely independent development of their machinery industries and the diverse sources of present designs, which include prewar Western models that have been modified in various ways, new Western models obtained during the 1950's, Soviet models, and models developed in the countries themselves.

One example of the potential effects of standardization is the East German plan to reduce the 1,148 basic types of textile machinery being produced in 1959 to only 350 basic types in 1965 without lowering the technical level of the textile industry. In addition to reducing the number of final products, the countries plan greater standardization of common parts and subassemblies such as bearings, gears, and small electric motors, which are particularly suited for mass production.

The scope of large-scale production in this field can be broadened also by greater specialization of production, both by country and by plant within a country. International specialization of machinery production has not progressed very far in these countries as yet, and a considerable effort is being made under the auspices of CEMA to extend it. The plans do not suggest that the degree of such specialization is to be increased dramatically by 1965, but some progress clearly is envisioned.

Specialization of production in individual plants has been proceeding somewhat more rapidly, and many opportunities for it remain. More often than not, manufacture of a given type of machinery or component in these countries is dispersed among a sizable number of plants, few of which are specializing in that product. The objectives of the regimes in

this field are difficult to determine, but evidently they count on a considerable advance to permit achievement of goals for production in 1965.

The potential for increasing production in the metalworking industries through the elimination of material shortages is also very large. Interruption of operations in Satellite machinery plants because of shortages of materials has not been unusual, most often happening because of inadequate supplies of rolled steel (especially steel sheets), high-quality alloy steels, and copper products. Avoidance of shortages during the current plans depends primarily on the fulfillment of plans for production and import of such materials, but reductions in the consumption of materials per unit of output and improvements in fixing norms for consumption, distributing available supplies, and controlling inventories also could bring important gains. Potential savings of steel are large, although the plans in East Germany, Poland, and Rumania for increases of 30 percent or more in metalworking output per ton of steel probably exaggerate what can be accomplished during one plan period. It is therefore likely that production will continue to be hampered by inadequate supplies of steel.

Aside from technological improvements, economic efficiency also can be increased by putting more plants on second and third shifts. Most plants in the metalworking industries are being operated on only one shift, and the introduction of a second shift could increase their production considerably if adequate supplies of materials and labor were available. As in most aspects of technical advance in these industries, Czechoslovakia and East Germany lead the other countries in emphasizing this source of increased output. To some extent, these two countries are counting on further mechanization of operations to release the labor needed to expand the use of second shifts. Some advantage might be gained from wider use of second shifts even without increases in employment. Czechoslovak technicians, for example, have pointed out the desirability of transferring workers operating the less efficient machinery during the first shift to the more efficient machinery during the second shift.

5. Agricultural Organization and Other Institutional Changes

In each country other than Poland, the virtual completion of agricultural collectivization has removed an element that disrupted previous plans for agricultural growth. Sustained and costly efforts, however, will be necessary -- and are planned -- to establish the recently formed collective farms as efficient productive units and to improve the functioning of the older collectives, the state farms, and the machine tractor stations (MTS's). Progress will be gradual at best, but some advance in agricultural production should be possible by 1965 if further upsetting institutional changes are avoided.

The regimes face a number of difficulties in attempting to strengthen the collective farms. Many peasants who finally succumbed to state pressure to join collective farms remain fundamentally opposed to socialization of the land. Their apathy or passive resistance will be an inhibiting factor in agricultural growth for many years, although probably a progressively less important one. Collectivization has created needs for experienced agricultural managers and technicians that will take some time to satisfy, and the planned improvements in technology necessitate widespread programs of education and training. Hungary, for example, plans to train more than 5,000 specialists in agricultural colleges during its Five Year Plan and give specific functional training to 100,000 farm workers and 80,000 mechanics of the MTS's. Agricultural employment in Czechoslovakia, East Germany, and Hungary has been reduced recently by the final drives for collectivization, by the attractions of employment in other parts of the economy, and (in East Germany) by the high level of emigration. The performance of collectives in these countries thus is likely to be hampered by labor shortages for a time even though growing mechanization eventually will permit a reduction of employment without adverse effects on output. The recent expansion of the collectivized area also has created a sudden need for farm equipment and buildings that cannot be satisfied fully at once.

Most of the plans are vague about scheduled changes in agricultural organization during the current period, but it seems likely that earlier changes in the "most advanced" Bloc countries will be followed. Some consolidation of collective farms probably will be carried out in order to make the best use of available managerial and technical personnel and other resources. The role of the MTS's in East Germany and Hungary is likely to be reduced -- possibly to the extent of distributing most equipment to the collectives and converting the MTS's into repair centers, as in the USSR and Czechoslovakia. Attempts to transform some of the looser types of collective farms (such as the agricultural associations in Rumania and "Type I" collectives in East Germany) into more advanced types also can be expected.

Czechoslovakia, the leader among the Satellites in the "socialist transformation" of agriculture, appears to be considering other changes that could have a marked effect on the success of its plan. Czechoslovak officials recently have expressed strong opposition to the private plots of collective farm members. The status of private plots has long been a troublesome issue in the USSR, where their size is now severely limited and the peasants are discouraged from spending a disproportionate amount of time on them. Any major action by Czechoslovakia to reduce the size of these plots or limit work on them by the collective farmer or members of his family almost certainly would mean a substantial underfulfillment of the planned output of livestock products, to which the private plots make a large contribution. Czechoslovak officials also have discussed

the desirability of so altering the system of remuneration on collective farms that the bulk of a member's income would come from a minimum wage plus bonuses scaled to the performance of the collective -- both being paid largely in cash. Such a step obviously could weaken work incentives at least temporarily.

In Poland the regime has indicated that the policy of voluntary collectivization will be maintained, leaving the prospect that the contrast between agricultural institutions in Poland and in the other Satellites will become still sharper. In the absence of pressure from the state, it is doubtful that the socialist sector, which now holds 13 percent of the agricultural land, will expand to any appreciable extent. As an alternative, the regime apparently will continue to encourage the formation of the independent cooperative associations called agricultural circles and help them become more efficient. An important element in this program is the agricultural development fund, through which the state offers to finance a large share of the investments undertaken by agricultural circles. The people's councils of the villages apparently will be relied on increasingly for detailed agricultural planning, procurement, and management of investment activity because of the large number of productive units that must be dealt with.

So far the Polish program has not received the support from the peasants that the regime had hoped for. The number of agricultural circles did not increase very rapidly in 1960 and 1961. Only three-fifths of the villages now have them, and only about one-fifth of the farms are members. Moreover, the circles have taken comparatively little advantage of the financial assistance offered through the agricultural development fund. Of the 4.9 billion zlotys received by the fund during its first 17 months (that is, through 1960), only 20 percent was used. More than two-thirds of the circles failed to make any use of the fund.

The failure of Polish peasants to respond more enthusiastically to these programs does not necessarily mean that they will be discredited by a serious underfulfillment of production goals and that the regime will feel impelled to resume collectivization efforts. The aim of reaching targets for output may be served best by retaining the present moderate attitude toward institutional changes. Polish agricultural policy appears to have received a measure of Soviet approval at least temporarily and has been strengthened by the good performance of agriculture in Poland compared with that in the other Satellites. Even if agricultural performance is mediocre and pressure from other Bloc countries to collectivize

agriculture in Poland mounts, the Gomulka regime seems less likely to push collectivization than to experiment with different forms of cooperative organization or manipulate prices and taxes to strengthen incentives.

In nonagricultural sectors, there is likely to be a further socialization of private enterprise where it is still of some importance -- as in East German and Hungarian industry -- and further revision of work norms and basic wage scales in some or all branches of industry and possibly in construction. Less tangible but no less important are the efforts that the regimes will make to achieve more effective planning, organization, and management of the process of economic development. It seems likely, however, that these endeavors will be confined to relatively small changes in existing organizations and methods. Most of the plans stress the importance of harnessing individual initiative, and the directives of 1959 for the Hungarian plan mention an "extension of the sphere of activities of lower organs." In general, however, the plans do not convey the impression that significant decentralization of decision-making is contemplated.

There is considerable scope, nevertheless, for further efforts to "perfect" economic planning and management. In at least some of the countries the current plans appear to be worked more carefully than earlier ones, and further improvements (affecting the annual plans within the period) should be possible. With growing experience in integrated planning, the regimes should be able to avoid some of the most wasteful mistakes of the past. Investment planning in particular may show noticeable improvement as the regimes try to establish more rational criteria for decisions in this field. Some benefits should accrue also from wider use of improved planning techniques and, in some countries, from greater use of electronic computers. The efficiency of management at the enterprise level should be influenced favorably by increasing emphasis on the profitability of production, thus giving managers added incentive to economize on labor and materials.

6. Foreign Trade and Economic Cooperation

The economic development of these countries will continue to be promoted by a moderately rapid expansion of foreign trade and the growing scope of economic cooperation among them (except possibly Albania) and the USSR. In Czechoslovakia and East Germany, where trade turnover per capita has now caught up with that of France but remains much lower than in West Germany and the UK, plans indicate a decline in the rate of growth of foreign trade from more than 11 percent in 1955-59 to 8 percent during the period ending in 1965. Some decline from the high rates of recent years does seem likely, but its extent probably is exaggerated by the announced figures, which are unavoidably tentative and incomplete for these two countries as for the others.

A considerably reduced rate of growth for trade turnover is implied by the plan for Albania, and even the announced objective is uncertain because of its strained economic relations with the USSR and other Satellites. In Poland -- where turnover per capita is unusually low -- and in Hungary, rates of growth are not planned to differ much from the recent rate of 8 percent, as shown in Figure 4* and Table 15.** In an announcement notably lacking in explanation and detail, the Rumanian regime has indicated an intention of doubling the volume of foreign trade during the Six Year Plan, requiring an average annual increase of 12 percent compared with a sluggish 4 percent in 1956-59. Considerable progress toward the fulfillment of this goal was made in 1960 and 1961. Although the earlier tendency (except in Rumania) of rates of growth for foreign trade to exceed those for national income generally is planned to continue, there is no difference in the planned rates for Poland, and the margin between them is scheduled to be much smaller in Czechoslovakia and East Germany than in 1955-59.

Exports are scheduled to increase much faster than imports in Czechoslovakia, East Germany, Hungary, and Poland, whereas the rates were the same in Czechoslovakia and Hungary in 1955-59, and imports ran ahead of exports in the other two countries, especially in Poland. Czechoslovakia apparently intends to raise its export surplus from \$114 million in 1960 to roughly \$500 million in 1965. A substantial surplus will be needed to cover the deficit on its services account and to implement credits that have already been extended to other Satellites and underdeveloped countries in the West. The planned surplus seems to be considerably larger than necessary for these purposes, however, suggesting that the regime has made provision in its plan for important additional extensions of credit.

The East German plan also has an ambitious goal for the export surplus, which apparently was scheduled to rise from \$210 million in 1958 to something like \$800 million in 1965. This amount would be sufficient to cover some additional extensions of credit as well as scheduled payments on debts with the USSR; shipments under credits previously granted to Poland, Bulgaria, Albania, and underdeveloped countries in the West; and the prospective deficit for transportation and other services. It is improbable that the Ulbricht regime still expects to develop an export surplus of that magnitude, however, because of the lagging rate of industrial growth (which can be expected to hamper the expansion of exports) and the additional credits that the regime obtained from the USSR in 1961 and early 1962.*** Under

* Following p. 68.

** Appendix A, p. 88, below.

*** The exact nature and amount of the credit reported in 1961 and its relation to the credit announced this year are still in question.

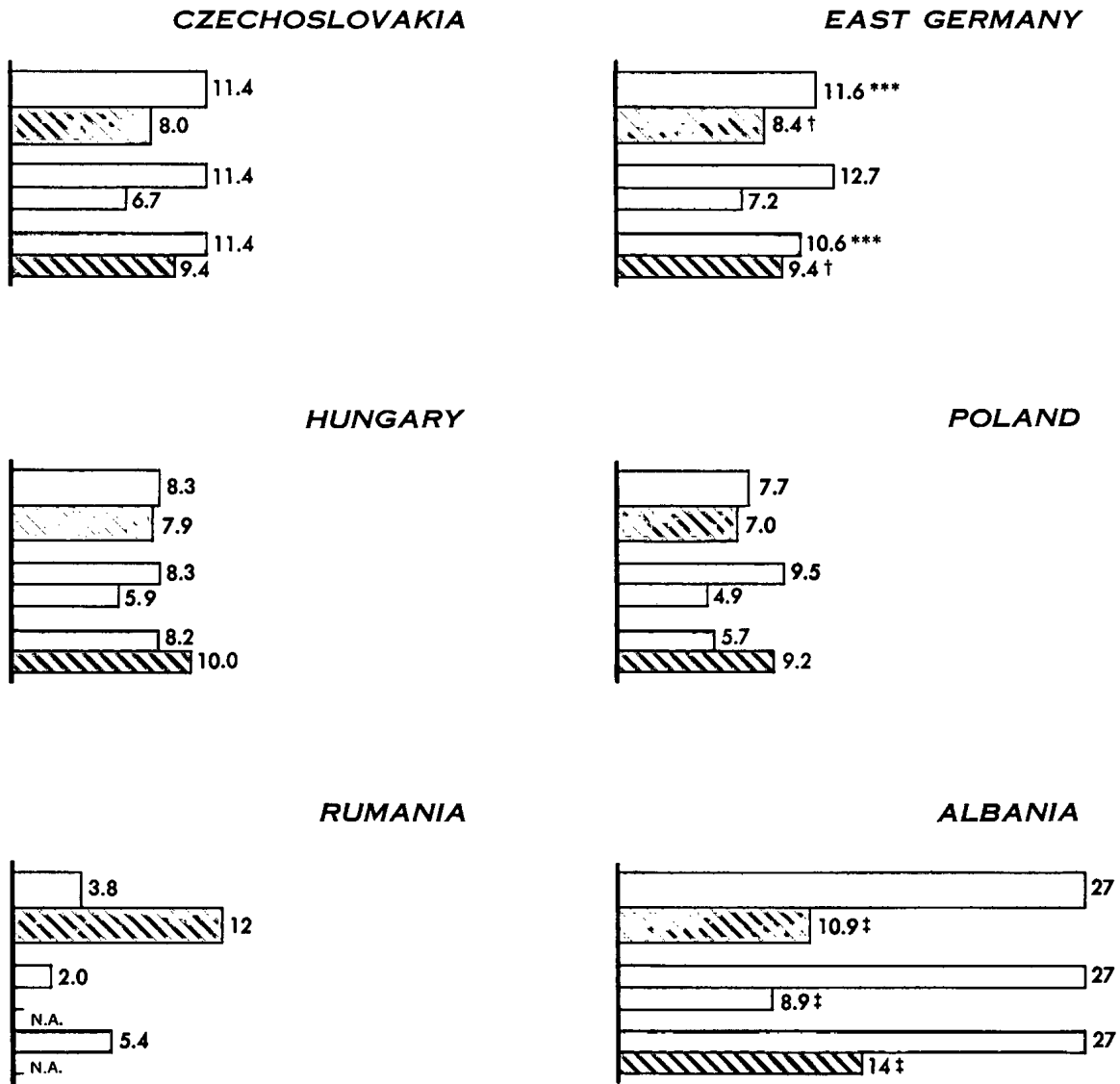
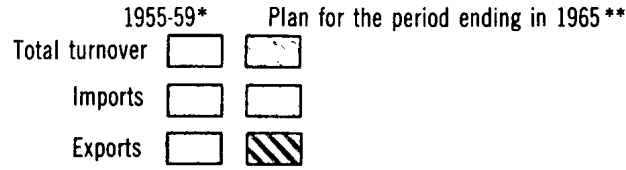
Figure 4

SIX EUROPEAN SATELLITE COUNTRIES

Growth of Foreign Trade

1955-59* and Plan for the Period Ending in 1965**

AVERAGE ANNUAL PERCENTAGE INCREASES



*1956-59 for Rumania.

**The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.

***This figure exaggerates the actual increase because of the changing or incomplete coverage of the data.

†Estimated.

‡Increase from 1956-60 to 1961-65 (midpoint). The planned increase during 1961-65 is estimated at 8.5 percent.

the latest version of the Polish plan, which raised the goal for exports, the import surplus of \$169 million in 1960 would gradually be converted into an export surplus of about \$150 million by 1965, or roughly the amount that it is believed will be due on foreign debts. Receipt of additional credits from the US or Bloc countries may, of course, lead to a trade balance in 1965 much different than that envisioned when the plan was drawn up.

The Hungarian regime has indicated that one of the primary aims of the new Five Year Plan will be the establishment of an export surplus, as the country will soon have to start repaying the loans received after the revolt in 1956. If imports and exports develop as planned, Hungary will have an export surplus of about \$100 million in 1965 -- a sum that appears adequate to cover scheduled payments on long-term debts and a sizable deficit on the services account. Rumania has not revealed its plan for imports, exports, and the trade balance in 1965, but it may be noted that scheduled payments on earlier credits from the USSR, East Germany, and Czechoslovakia will outweigh imports financed by credits unless additional loans are obtained. Albania no doubt will continue to have comparatively large import surpluses as it draws on the important credits extended by China.

The Satellites (other than Albania) and the USSR will form an even more closely knit economic community in 1965 than at present -- not only from the point of view of the importance of their exchanges in the total volume of their foreign trade but also as regards the interdependence of the economies. The share of Sino-Soviet Bloc countries in total trade, which amounted to 63 to 80 percent in the five largest countries and about 95 percent in Albania at the start of the current plans, is scheduled to rise further in Czechoslovakia, East Germany, and Poland and decline only slightly in Hungary, as shown in Table 11.* The share of Sino-Soviet Bloc countries in Albanian trade has declined somewhat since 1960 and may decline further, but much more significant is the shift in trade from the USSR to Communist China. Trade with the USSR apparently has ceased, and the share of total trade carried on with China is scheduled to rise from 28 percent in 1961 to 59 percent in 1962.

In Rumania a substantial reduction in the Bloc's share of the total trade seems to be contemplated, as shown in Table 11. This shift, which would require that trade with non-Bloc countries increase about 20 percent annually, reflects plans to go outside the Bloc for needed machinery and equipment, especially for metallurgical and chemical equipment. A large step toward the planned shift in trade was taken in 1960, when turnover with Western European countries rose about 90 percent compared with an increase of 23 percent with Soviet Bloc countries. Further

* Table 11 follows on p. 70.

Table 11

Five European Satellite Countries
Planned Changes in the Geographic Distribution of Foreign Trade
During the Period Ending in 1965 a/

	<u>Planned Average Annual Increase in Trade (Percent) <u>b/</u></u>			
	<u>Total</u>	<u>With Sino-Soviet Bloc Countries <u>c/</u></u>	<u>With the USSR</u>	<u>With Non-Bloc Countries <u>c/</u></u>
Czechoslovakia	8.0	9.4	10.3	4.2
East Germany	8.4 <u>d/</u>	9	N.A.	7
Hungary	7.9 <u>d/</u>	8	N.A.	8
Poland	7.0	7.6	N.A.	6.0
Rumania	12	8.5 to 10	N.A.	20 to 23

	<u>Share of the USSR in Total Trade (Percent)</u>		<u>Share of Sino-Soviet Bloc Countries <u>c/</u> in Total Trade (Percent)</u>	
	<u>Year Preceding the Plan Period</u>	<u>Plan for 1965</u>	<u>Year Preceding the Plan Period</u>	<u>Plan for 1965</u>
Czechoslovakia	35 <u>e/</u>	38	71 <u>e/</u>	76
East Germany	43	N.A.	74	76
Hungary	30 <u>f/</u>	N.A.	71 <u>f/</u>	70
Poland	30 <u>g/</u>	N.A.	63 <u>g/</u>	64 <u>h/</u>
Rumania	47	N.A.	80	65 to 70

a. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B.

b. Except for Czechoslovakia, the planned increases shown for trade with Sino-Soviet Bloc countries and non-Bloc countries are estimates based on the planned share of Sino-Soviet Bloc countries in total trade in 1965.

c. Yugoslavia is included in data for Sino-Soviet Bloc countries.

d. Figure obtained as described in Table 15.

e. 36/

f. 37/

g. 38/

h. 39/

rapid growth of trade with non-Bloc countries in 1961 raised their share of Rumanian trade to the minimum of 30 percent planned for 1965.

The pattern of Satellite trade with the USSR will continue to be characterized, in broad terms, by an exchange of Soviet fuels and raw materials for Satellite machinery and equipment. The Satellites generally will remain heavily dependent on the USSR for supplies of petroleum, iron ore, manganese ore, nonferrous metals, apatite concentrates, and cotton. Imports of Soviet foodstuffs also will continue to be important to certain Satellite countries. Although trade with the USSR is scheduled to become a larger share of Czechoslovak turnover, no increase appears to be planned in the Soviet share of Hungarian turnover, and some decline is likely in the Soviet share of East German and Rumanian turnover.

The USSR obviously has an important role in the economic programs of the Satellites -- as the leading trade partner of each country, providing materials and equipment not readily obtainable elsewhere; as a supplier of advanced technology in some fields; and as a source of economic assistance for certain countries -- but this role will not necessarily place a significant burden on its own economic program for 1959-65. Deliveries to the Satellites under existing Soviet credits will be offset to some extent -- perhaps substantially -- by repayments of earlier credits. The burden on the USSR also may be held down by a further enlargement of the role of Czechoslovakia in providing economic assistance for other Satellites and certain areas outside the Bloc.

With the exception indicated for Rumania, the Satellites appear unwilling to seek large increases in trade with the industrialized countries of the West because of weak markets or unfavorable terms of trade for their exports (as in the case of Polish coal) and their desire to minimize their dependence on such sources. This tendency is reinforced by the difficulties that they experience in selling their goods (especially the machinery and equipment) in these countries because of the low quality or other circumstances. Thus, both economic considerations and the political aim of extending Communist influence make growing trade with the underdeveloped countries attractive, and such trade generally is planned to become much more important.

Information on planned changes in the commodity composition of trade is available only for four of the countries and is incomplete for these, but it appears that in general the major trends of recent years will continue. Trade in products of the metalworking industries will be considerably expanded in conjunction with investment requirements in the various countries, the developing specialization of production in this field, and the expectation that underdeveloped countries will provide a growing market for such goods -- especially if they are offered

on credit. As the following tabulation shows, the percentage share of the products of the metalworking industries in total exports is planned to increase in all four countries for which data are available, although the change in East Germany is very small and would not restore the ratio of 1955.

	<u>1955</u>	<u>1960</u>	<u>Plan for 1965</u>
Czechoslovakia	44	45	54
East Germany*	60	57	58
Hungary	30	38	44**
Poland	13	28	38

The share of these products in total imports also is scheduled to rise in at least three -- and possibly all four -- of these countries, continuing the recent trend in each country except Poland.

Fuels and other industrial materials are scheduled to become relatively less important in the exports of Poland (mainly because coal exports are not planned to increase at all) and of East Germany, whereas the share of such goods in imports at the beginning of the plan period is to be maintained. How these relationships are expected to change in the other countries is uncertain, but it is clear that the already large import surplus of the Satellites in fuels and industrial materials is planned to be even larger by 1965. Most of the countries probably hope that advances in agricultural production will permit them either to raise the share of food and foodstuffs in exports or reduce the share of such products in imports in addition to providing moderate increases in the domestic supply of food per capita. Each of the four countries has been able to bring about one or the other of these shifts in the composition of their trade since 1955, but there is some question whether or not further shifts will be possible during the period ending in 1965.

The activities of CEMA and its subordinate bodies have not yet given any extraordinary impetus to foreign trade and economic specialization and should not be expected to do so over short periods. Nevertheless, much work is being done to develop intra-Bloc trade and exploit favorable opportunities for specialization, and its effect on the rate of economic development -- although not measurable -- undoubtedly will be significant. One of the most promising forms of economic cooperation among the Satellites is the joint investment project, in which one or more countries grant a credit to another Satellite to assist it in

* Based on data for total exports that exclude deliveries of uranium. The figure for 1960 is an estimate.

** Plan for 1961-65.

developing a particular industry. The agreement often provides that the credit will be repaid from the resulting increase in output. A number of joint investment projects will be in progress during the period ending in 1965. East Germany, for example, is assisting Poland in expanding its output of brown coal and in building the Polish section of the Soviet-Satellite pipeline. Czechoslovakia is helping East Germany to develop its potash mines and Poland to develop its hard coal mines and copper and sulfur industries. Czechoslovakia also is assisting Rumania in the construction of an electric powerplant fueled with natural gas and of plants for the manufacture of plywood and panels made from wood chips. Finally, Czechoslovakia, East Germany, and Poland are cooperating with Rumania in the construction of a cellulose combine.

7. Transportation Service

To insure that economic development will not be restricted by shortages of transportation service, the regimes intend to restrain the growth of demand as well as to increase the capacity and efficiency of the transportation system. Transportation requirements per unit of output are supposed to be reduced by increased consumption of coal in powerplants and other facilities located near the mines, growing substitution for coal of fuels that are less costly to transport, processing of bulky raw materials closer to their source, increased utilization of local resources, and reduction of crosshauling and circuitous routing. The scheduled shift in the structure of production toward products of high value in relation to weight would also have this effect. On the other hand, transportation needs per unit of output presumably will tend to increase as a consequence of growing specialization in production, although hardly to the extent of offsetting the reductions expected from other measures.

Allocations of investment for the transportation and communications sector provide for substantial expansion and improvement of transportation facilities. Sections of the rail systems having especially heavy traffic are scheduled to be electrified by 1965, and roadways are supposed to be improved by substitution of heavier rail, welded rail, and reinforced concrete ties. Traffic control is to be improved by means of more adequate communications equipment, and modern equipment is to be used more extensively to make loading and unloading and yard operations more efficient. The trend toward more efficient motive power will also continue, for steam locomotives are scheduled to be replaced to a significant extent by electric and diesel locomotives. Inventories of freight cars will be expanded, with an increasing share of 4-axle units. Such measures are expected to permit heavier loads per car and per train, greater route densities, and shorter turnaround times. Expansion of inventories of electric locomotives to planned levels may prove difficult, however, because present indications are that some of the countries may not be able to fulfill their production plans.

The regimes also expect to obtain some economies through greater use of motor and pipeline transportation. Plans call for improvement of highways and substantially enlarged inventories of trucks, which are to be used more widely for freight hauls of up to 50 kilometers. Pipeline transportation -- now negligible -- will account for an estimated 2.6 percent of the total ton-kilometers of freight traffic planned in 1965 as a result of the completion of the pipeline that is being constructed from the USSR to Poland, East Germany, Czechoslovakia, and Hungary. The section of the pipeline serving Czechoslovakia is already in operation, and work on the other sections generally is proceeding on schedule. According to a Polish source, this pipeline will reduce transport costs for petroleum by 75 percent. Little expansion is envisioned in transportation on inland waterways, but the ocean transport fleet is supposed to double (in terms of deadweight tons) during 1961-65, permitting these countries to transport about one-third of their seaborne foreign trade in domestic vessels.

IV. Prospects and Implications

The overriding impression obtained in reviewing the current economic plans of these countries is that they are too ambitious to be fulfilled in most major respects. This conclusion is suggested by certain statistical comparisons and also -- perhaps more persuasively -- by the profusion and boldness of programs for particular facets of the economic development of the countries. Among other things, the plans call for better planning, organization, and management; more effective mobilization, training, and distribution of labor; strengthened work incentives; major economies in the use of materials; expansion and modernization of the stock of productive capital; greater product specialization and standardization; development of new products and processes; and technological advances along a wide front, with special emphasis on the more widespread use of mass production and automation techniques.

The planners seemingly have considered everything, but it does not follow that their estimates of what is possible are invariably sound. Furthermore, the plan goals in some of the countries reflect not so much the expert judgment of planners and managers as an almost mystical appraisal by leading Party officials of what should be possible under a "socialist" system. In East Germany, for example, Party Secretary Ulbricht frequently has raised the production goals proposed by specialists in the various industries and sectors. Most problems of choice underlying the present plans seem to have been resolved by adopting the more optimistic assumption and the more challenging goal. Realization of economic objectives depends not only on impressive achievements in many specific fields but also on a degree of perfection in meshing these elements that has not been attained in practice.

Economic goals that are beyond the capacity of a country are not necessarily poor goals, however, and the significance of failure to reach them can easily be exaggerated. The plans themselves are an important factor in the development of these economies, stimulating the search for more efficient ways of doing things as well as specifying the desired rate and composition of their growth. Ambitious goals may yield more rapid rates of growth than goals that are clearly feasible, although they also can have the opposite effect if they are extremely high or inconsistent. What is to be avoided more than moderately high goals for production is lack of balance in the allocation of resources, whereby excessive attention to certain parts of the economy and neglect of others prevents efficient use of the productive capacity as a whole. The allocation of resources planned in these countries probably will not produce the scheduled rates of growth, but it is not obvious that some other allocation would be likely to yield better results.

None of the six countries whose plans have been examined is believed to have a good chance of reaching the planned level of national income in 1965. Hungary probably will be able to achieve the rates of growth scheduled for industry and agriculture during 1959-65 in the plan directives of 1959,* but the higher rates stipulated in the new Five Year Plan appear to be beyond reach -- at least in the case of agricultural production and national income. The new goal for agriculture implies a minimum annual rate of growth of 5.5 percent, or about twice the rate previously planned, and this rate is supposed to be achieved with less investment than was formerly planned. Some progress in solving the problems of organization and management of the collective farms should be possible by 1965, and large increases are projected in yield-raising inputs, but it is doubtful that agricultural production can be raised more than 3 or 3.5 percent annually with average weather in 1965. The upward revision of the planned rate of growth for industry from 7.4 to 8.2 percent is more reasonable, especially as planned industrial investment has been boosted, and the prospects for reaching this goal seem favorable. This accomplishment would require a rate of growth somewhat higher than that estimated for 1955-59 but substantially lower than the average rate estimated for 1958-60.

Czechoslovakia and Poland probably will be unable to achieve the planned rates of growth of roughly 9 percent for industry, 4 percent for agriculture, and 7 percent for national income, but rates about 1 to 1-1/2 percentage points lower than those planned would not be surprising. For industry, this achievement would represent a continuation of the rate estimated for Poland during 1956-60 but some decline from the rate of 9.5 percent estimated for Czechoslovakia during that period.

Czechoslovakia and Poland are unlikely to achieve an average annual increase in gross agricultural production of more than 3 percent -- a rate about the same as that in Czechoslovakia in 1955-59 but somewhat lower than that in Poland during 1956-60. Labor difficulties in Czechoslovak agriculture easily could hold the rate of growth below 3 percent, for the increase planned in the stock of agricultural machinery may not compensate adequately for the decline of 19 percent in employment that the regime desires and may well achieve. The rising average age of agricultural workers and the widespread apathy among them also will continue to be problems.

Agricultural growth in Poland in 1956-60 was stimulated by several measures that strengthened the incentives of the peasants, notably the

* The feasibility of the rate of growth originally planned for national income is more uncertain, however, as it seems high compared with the rates planned for industry and agriculture and has not been raised much in the new plan for 1961-65 in spite of the upward revision of the rates for these two sectors.

relaxation of the collectivization effort, higher prices for farm products, and a reduction of compulsory deliveries. Comparable concessions are hardly feasible during the new plan period, and their absence is a major consideration underlying the judgment that agricultural growth will be less rapid. There is also a strong possibility that private agricultural investments will not increase to the extent planned.

East Germany's objective of increasing industrial production by 9.4 percent annually has already proved to be excessively high. The goal for the growth of labor productivity was very ambitious to begin with, and neither employment nor investment has developed as favorably as planned. It now seems likely that industrial growth in 1959-65 will average less than 7 percent annually. For 1961-65 alone, the rate is expected to be about 6 percent compared with an estimated rate of 7 percent in 1956-60.

Like Hungary, East Germany faces difficulties in making its many new collective farms function effectively. Little progress is likely during the next several years, but with steadily growing inputs and adoption of improved farming methods, some advance in production should be possible by 1965. It seems doubtful, however, that the rate of agricultural growth will average more than 1 or 2 percent in contrast to the planned rate of 4.5 percent. Shortcomings in reaching goals for construction and most of the remaining sectors also are expected, and the national income probably will increase only by 4 to 5 percent annually rather than the 7.5 percent specified in the plan.

Lack of realism in the agricultural plans presages a considerable underfulfillment of scheduled rates of economic growth in both Rumania and Albania. They may achieve the largest gains in agricultural production of the countries under consideration, inasmuch as crop yields and livestock productivity are rather low and agricultural production in Albania in 1960 was below earlier levels, but they almost certainly will fall short of their objectives for 1965 by a wider margin than the other four countries. Average annual increases of 4 or 5 percent, or roughly one-half the increases planned, probably should be regarded as the upper limit of their capability in agriculture.

Prospects for industrial growth in Albania became rather uncertain in 1961 with the worsening, and finally the rupture, of relations with the USSR -- its principal source of assistance for the industrialization programs of the last decade. Prompt Chinese Communist support has done much, however, to make Albania's industrial plan meaningful again. The planned industrial rate of growth of 9 percent is not unusually high for a country at its stage of development and probably can be realized during the latter part of the Five Year Plan. Nevertheless, there is some doubt that the average rate of industrial growth during 1961-65 will reach the

planned level. Assistance promised to Albania will be burdensome to the Chinese economy, but the Chinese evidently consider it worth the cost, for Albania's independent line weakens the position of the USSR in the Soviet-Chinese ideological dispute.

Rumania probably will not be able to improve on recent rates of growth of both employment and labor productivity in industry, as planned. The rate of industrial growth may be the highest of the six countries under consideration, but a range of 10 to 11 percent seems more reasonable than the planned rate of 13 percent.

In terms of GNP, rates of growth of about 5.5 percent annually are anticipated in Rumania and Poland compared with estimated rates of about 6 percent in 1955-59. Hungary may well be able to match the estimated rate of growth of 5 percent in 1955-59 -- which was depressed somewhat by the revolt in 1956 -- but previous rates of 6 and 5 percent in Czechoslovakia and East Germany, respectively, are expected to decline by about 1 percentage point. Although the expected rates of economic growth would represent a creditable accomplishment, they are not unusually high compared with recent rates in Western Europe.

It seems to be characteristic of these countries that investment programs are not carried out nearly as expeditiously as the regimes hoped and that the effect of such shortcomings on the growth of production is less serious than they might have feared. Comparatively rapid rates of industrial growth were attained in the 1950's in spite of widespread failure to complete new facilities on schedule, suggesting that industrial managers showed some resourcefulness in expanding production with existing facilities. Managers will encounter further challenges of this sort under the current plans, for investment plans are considered unlikely to be fulfilled completely even though investment no doubt will expand faster than national income except possibly in Hungary and Albania.

Allocations of machinery and equipment for investment purposes are not expected to reach planned levels -- mainly because of a tight supply of materials and an inability to raise labor productivity to the desired extent with relatively modest investment programs in the metalworking industries. Moreover, construction costs and construction periods probably cannot be reduced to the extent planned, further widening the gap between planned and actual additions to plant capacity by 1965. Nevertheless, the prospect is for substantial additions to the stock of industrial assets in each country and a more efficient utilization of facilities in existence at the beginning of the plans.

If production goals for the metalworking industries and most other branches of industry are underfulfilled, as anticipated, the regimes will have little opportunity to use above-plan exports of industrial products

to finance supplementary food imports and thus offset lagging domestic production in agriculture. Adjustment of foreign trade plans in the course of the period, however, should permit some of the most serious bottlenecks in plant capacity or supplies of industrial materials to be broken.

The significant question from the point of view of consumers in these countries is how the regimes will react if rates of economic growth fall below their expectations, as is believed likely. Where the plans of the early 1950's were aimed at maximum rates of growth (subject, to be sure, to important political and ideological constraints), subsequent programs generally have combined the objectives of high rates of growth and moderate improvements in living conditions. This change in policy apparently seemed wise politically, and the economies could better afford it. It seems doubtful that the countries would attempt to restore rates of growth to planned levels by expanding investment programs. In East Germany, the regime has already responded to lower rates of growth than were planned by reducing rather than raising investment goals.

In general, however, the regimes probably will be reluctant to scale down the present investment programs, and shortcomings experienced in reaching planned levels of production consequently will be reflected primarily in the growth of consumption. The prospective failure of the countries to reach goals for agricultural production can be expected to have a fairly direct effect on the planned expansion of food supplies. Problems of structural readjustment are minimized by maintaining the continuity of investment activity, leaving consumption to absorb most of the year-to-year fluctuations in rates of growth. Moreover, the regimes can always argue that in safeguarding the investment programs that will provide the basis of future growth, they insure maximum gains in living conditions during the period covered by two or three long-term plans.

Objectives for consumption of goods almost certainly will not be reached, but significant increases in consumption nevertheless should be possible during the period ending in 1965. The diet is expected to improve gradually in each country in spite of underfulfillment of goals for production of livestock products. The quality of the diet should also be improved by larger supplies of vegetables and fruits and such imported "luxuries" as coffee and cocoa. To provide moderate gains in food consumption, Czechoslovakia and East Germany might well have to import more food than planned, but such imports would not necessarily have to rise faster than domestic production of food. Increases in per capita supplies of foods of all kinds will continue to be held down in Poland, Rumania, and especially Albania by rapid rates of population growth. Even if production plans are not completely fulfilled, supplies of consumer durables and clothing are likely to increase significantly, accounting for a growing yet still comparatively small share of consumer expenditures.

Although the rates of economic growth anticipated in these countries are moderately high and should not raise serious problems for the regimes, underfulfillment of goals for national income will force the regimes to reconsider the priorities expressed in the plan and may have substantial effects on certain aspects of their plans. It is difficult to single out any one part of these economies as having a particularly important influence on economic growth, but the degree of success achieved in construction activity clearly is one of the most decisive factors. Problems in carrying out construction plans are almost certain to arise. The regimes thus will have strong reason to review their investment allocations for housing, which are one of the main elements of flexibility in the plans. If these sizable sums are only a first step toward the provision of satisfactory housing, it is equally true that the programs can be cut substantially with little shortrun effect on housing conditions. Cutbacks in state programs would augment directly the construction capacity and supply of materials available for productive facilities, which are often a weak spot in the plans of these countries. The temptation to reduce the planned allocation of funds for housing thus will be very great if diversion of resources to industry or other productive sectors seems urgent.

Underfulfillment of production plans also may have significant repercussions on certain aspects of the foreign economic relations of these countries. Czechoslovakia's aim of greatly increasing its export surplus in support of an expanded program of credit extensions obviously may be thwarted if industry cannot provide the planned volume of goods for export or if serious deficiencies in agricultural performance must be partly compensated by extra imports of foodstuffs. If the Satellites have difficulty producing planned amounts of key types of investment goods, such as metallurgical and chemical equipment, they may attempt to expand their purchases of such goods in the West above planned levels. Production difficulties in industries that are important sources of goods for export almost inevitably will have repercussions in the countries that were relying on deliveries of these goods.

Shortcomings in the realization of economic goals are not an unusual occurrence in these countries, however, and the expected underfulfillment of the new plans should not be allowed to obscure the progress being made. By 1965, these economies generally will be not only appreciably larger than at present but more industrialized, more diversified, more efficient, and more interdependent -- capable of supporting a somewhat higher standard of living and extending Communist economic influence outside the Bloc while laying the foundations for further economic growth. In spite of the credits reportedly extended by the USSR to East Germany in 1961 and early 1962 to bolster its lagging but not really low rate of industrial growth, there is no apparent Satellite need during 1961-65 for Soviet credits comparable to those extended in 1956-60, and new credits will be partly offset

by payments on earlier ones. The prospect, rather, is that the countries as a group will become less of a burden on the USSR and more an element of economic strength in the Soviet Bloc.

APPENDIX A

STATISTICAL TABLES

Table 12

Six European Satellite Countries
Growth of National Income and Industrial and Agricultural Production a/
1955-59 and Plan for the Period Ending in 1965 b/

	Reported Average Annual Increase 1955-59 <u>c/</u>	Plan for the Period Ending in 1965	
		Average Annual Increase	Total Increase
Percent			
National income (Communist concept)			
Czechoslovakia	7.4	7.3	42
East Germany	6 <u>d/</u>	7.5 <u>d/</u>	66 <u>d/e/</u>
Hungary	6.4	6.3	35
Poland	6.7 <u>f/</u>	7.0	40
Rumania	9.1	9.2 to 10.3	70 to 80
Albania	8.2	9.3	56
Gross industrial production			
Czechoslovakia	10.5 (9.5 <u>g/</u>)	9.3	56
East Germany	9.0 (6.5 <u>g/</u>)	9.4	88
Hungary	7.0 (6.5 <u>g/</u>)	8.2 to 8.4	48 to 50
Poland	9.8 <u>f/</u> (8 <u>g/</u>)	8.7	52
Rumania	10.5 (11 <u>g/</u>)	13	110
Albania	16.7 <u>h/</u> (12 <u>g/</u>)	8.7	52
Gross agricultural production			
Czechoslovakia	2.8	4.1 to 4.2	22 to 23 <u>i/</u>
East Germany	2 <u>d/</u>	4.5	36 <u>j/</u>
Hungary	4.5	5.4 to 5.7 <u>k/</u>	30 to 32 <u>k/</u>
Poland	3.8 <u>f/</u>	4.1	22
Rumania	4.2	9.2 to 10.3	70 to 80
Albania	1.3	11.5	72

a. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B.

b. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.

c. 1956-60 for Poland and Albania.

d. Estimated plan.

e. The increase of 59 percent indicated in the plan is believed to refer to national income available for domestic use.

f. 40/

g. Estimated increase (rounded to the nearest one-half percent) in net industrial production, which is considered more suitable for comparison with the planned rate of growth than the official figure for gross production. Although industrial goals in the Satellites refer to gross industrial production, they are believed to be calculated in a manner that largely avoids the upward bias apparent in most official indexes of gross industrial production in past years.

h. The increase from 1959 to 1960 is from source 41/.

i. Increase above the level planned for 1960. The increase above the level actually reached in 1960 is 28 percent, 42/ but the previously planned percentage increase seems to have been retained.

j. 43/

k. Estimate based on the announced intention of raising the average production in 1961-65 from 22 to 23 percent above the average for 1956-60, assuming that the regime would expect a steady rate of growth during the plan period in the absence of variations in weather.

Table 13

Six European Satellite Countries
Growth of Investment and Consumption a/
1955-59 and Plan for the Period Ending in 1965 b/

	Plan for the Period Ending in 1965		Plan for 1965 <u>b/</u>	
	Value (Billion Units of National Currencies) <u>c/</u>	Increase Above the Comparable Preceding Period (Percent)	Value (Billion Units of National Currencies) <u>c/</u>	Increase During the Plan Period (Percent)
Czechoslovakia	322.4	60	75.6	51
East Germany <u>d/</u>	142	N.A.	25 <u>e/</u>	103 <u>e/</u>
Hungary <u>f/</u>	192	49	46	28
Poland	624.1	53	142.7	46 <u>g/</u>
Rumania	170 to 180	98 to 110 <u>h/</u>	31.9 to 36.2	83 to 107
Albania	69.5	51	15.7	36

a. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries. Unless otherwise indicated, data are from the official statistical year-books and plan documents listed in Appendix B.

b. Data for Czechoslovakia and Albania are projections based on the assumption of a constant rate of growth during the plan period. Data for Rumania are projections based on actual investment in 1960-61 (estimated in terms of 1955 prices) and the assumption of a constant rate of growth in subsequent years.

c. The values refer to total investment in Czechoslovakia (at 1959 prices), East Germany (at 1958 prices), and Poland (at 1961 prices) and investment in the socialist sector in Hungary (at 1959 prices), Rumania (probably at 1955 prices), and Albania (at 1961 prices), except for the apparent exclusion of investment by collective farms from their own funds in the last two countries. Capital repairs are included only for Czechoslovakia and East Germany.

d. These figures presumably have been revised downward, for the plans for 1959 and 1960 were not fulfilled, and the original goal for 1961 has been reduced substantially.

e. Approximate figure, including construction, from source 7/.

f. 8/. According to this source, the planned value of investment of 180 billion forints during 1961-65 that is mentioned in the plan law should be raised to about 192 billion forints for comparison with official data for 1956-60. The planned value of investment shown for 1965 appears to be consistent with a planned value of 192 billion forints for 1961-65.

g. 9/

h. Increase based on data for 1954-59 at 1955 prices in source 10/.

Table 14

Six European Satellite Countries
Planned Growth of the Park of Agricultural Tractors
During the Period Ending in 1965
and Planned Amount of Arable Land per Tractor in 1965 a/

	<u>Tractor Park</u>			Planned Amount of Arable Land per Tractor <u>b/</u> in 1965 (Hectares) <u>c/</u>
	Year Preceding the Plan	Thousand Units <u>b/</u> Plan for 1965	Planned Increase (Percent)	
Czechoslovakia	94.3 <u>d/</u>	154 <u>e/</u>	63	33
East Germany	57.2	110 <u>f/</u>	92	45
Hungary	47.9 <u>g/</u>	82 to 83	71 to 73	64 to 65
Poland	76.2 <u>h/</u>	166 <u>i/</u>	118	96
Rumania	49.4	150	204	68
Albania	4.1	9.0	118	57

a. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B. Tractors held by the small private sector of agriculture in each country other than Poland are excluded, as are the small numbers of tractors held by collective farms in East Germany and Rumania.

b. In 15-horsepower equivalents.

c. Assuming no change in the amount of arable land during the plan period in East Germany, Hungary, and Poland.

d. 54/

e. 55/

f. 56/

g. 57/

h. 58/

i. Assuming that the average horsepower of the planned park of 135,000 physical units is about the same as in 1960.

Table 15

Six European Satellite Countries
Growth of Foreign Trade a/
1955-59 and Plan for the Period Ending in 1965 b/

	Value in 1959		Average Annual Increase (Percent)	
	Total (Million US \$)	Per Capita (US \$)	1955-59 <u>c/</u>	Plan for the Period Ending in 1965
Total turnover				
Czechoslovakia	3,329	246	11.4	8.0
East Germany	4,114	238	11.6 <u>d/</u>	8.4 <u>e/</u>
Hungary	1,562	157	8.3	7.9 <u>e/</u>
Poland	2,565	88	7.7	7.0
Rumania	1,024	56	3.8	12
Albania	119	76	27	10.9 <u>f/</u>
Imports				
Czechoslovakia	1,602	118	11.4	6.7
East Germany	1,992	115	12.7	7.2 <u>g/</u>
Hungary	793	80	8.3	5.9
Poland	1,420	49	9.5	4.9
Rumania	502	28	2.0	N.A.
Albania	85	55	27	8.9 <u>f/</u>
Exports				
Czechoslovakia	1,727	127	11.4	9.4
East Germany	2,121	123	10.6 <u>d/</u>	9.4 <u>h/</u>
Hungary	770	77	8.2	10.0
Poland	1,145	39	5.7	9.2
Rumania	522	29	5.4	N.A.
Albania	34	22	27	14.0 <u>f/</u>

a. Unless otherwise indicated, data are from the official statistical yearbooks and plan documents listed in Appendix B. A subsequent announcement in Poland indicates that the planned percentage increases in imports and exports during the period ending in 1965 have been raised moderately. Because of rounding, components may not add to the totals shown.

b. The plan period is 1959-65 for East Germany, 1960-65 for Rumania, and 1961-65 for the other countries.

c. 1956-59 for Rumania.

d. This figure is calculated from data in the official statistical yearbook. It exaggerates the actual increase because (1) uranium exports are excluded from the data for 1954 but included in the data for 1959 and (2) uncompensated exports, which were substantial in 1954 but negligible in 1959, are excluded from the data for both years.

e. Estimate derived from the planned increases in imports and exports.

f. Midpoint of the range announced for the increase from 1956-60 to 1961-65. The planned increase during 1961-65 is estimated at 8.5 percent.

g. 59/

h. Estimate (including uranium exports) derived from source 60/.

APPENDIX B

SOURCES

A. General Reference Works

1. Statistical Yearbooks

Albania, Statistical Board. Anuari statistikor i R.P.Sh., 1960 (Statistical Yearbook of the Albanian Peoples Republic, 1960), Tirana, 1960.

Albania, Statistical Board. Anuari statistikor i R.P.Sh., 1958 (Statistical Yearbook of the Albanian Peoples Republic, 1958), Tirana, 1958.

Czechoslovakia, State Statistical Office. Statisticka rocenka ceskoslovenske socialisticke republiky, 1960 (Statistical Yearbook of the Czechoslovak Socialist Republic, 1960), Prague, 1960.

East Germany, State Central Administration for Statistics. Statistisches Jahrbuch der Deutschen Demokratischen Republik, 1959 (Statistical Yearbook of the German Democratic Republic, 1959), East Berlin, 1960.

Hungary, Central Statistical Office. Statisztikai evkonyv, 1959 (Statistical Yearbook, 1959), Budapest, 1960.

Poland, Central Statistical Office. Rocznik statystyczny, 1960 (Statistical Yearbook, 1960), Warsaw, 1960.

Rumania, Central Statistical Office. Anuarul statistic al R.P.R., 1961 (Statistical Yearbook of the Rumanian Peoples Republic, 1961), Bucharest, 1961.

2. Plan Documents

Albania

Draft directives of the Albanian Workers Party for the Third Five Year Plan (1961-65): Albanian broadcast, Tirana, 11 Oct 60.

Report by Premier Shehu on the draft directives for the Third Five Year Plan (1961-65): US Joint Publications Research Service, JPRS 13239, 29 Mar 62, p. 1-91. Certain goals cited in this report are higher than those in the draft directives of October 1960.

Czechoslovakia

Resolution of the Czechoslovak Communist Party on the Third Five Year Plan (1961-65): Rude pravo, 9 Jul 60.

Investment data: Czechoslovakia, State Planning Office, Planovane gospodarstvi, no 12, 1960, p. 956.

Foreign trade data: US Joint Publications Research Service, JPRS 9091, 21 Apr 61, p. 1-17.

East Germany

Law on the Seven Year Plan (1959-65): Neues Deutschland, 2 Oct 59, Sonderbeilage.

Hungary

Law on the Second Five Year Plan (1961-65): US Joint Publications Research Service, JPRS 12235, 31 Jan 62, p. 72-104.

Discussion of the Second Five Year Plan (1961-65): US Joint Publications Research Service, JPRS 12777, 2 Mar 62, p. 7-31.

Poland

Law on the Five Year Plan (1961-65): US Joint Publications Research Service, JPRS 8700, 7 Aug 61, p. 13-126.

Rumania

Draft directives of the Rumanian Workers Party for the Six Year Plan (1960-65): Scinteia, 19 May 60.

Report by Party Secretary Gheorghiu-Dej on the draft directives for the Six Year Plan (1960-65): Rumanian broadcast, Bucharest, 20 Jun 60.

B. Source References

1. OEEC. General Statistics, pt II, Jul 61, p. 4, 13, 30.
2. Ibid., Sep 61, p. 13, 14, 17, 22, 23, 30, 31, 32, 33.
3. OEEC. Industrial Statistics, 1900-1959, Paris, 1960, p. 160, 167, 168, 169.
4. Czechoslovakia, Chamber of Commerce. Czechoslovak Foreign Trade, no 3, 1960.

5. Czechoslovakia, State Statistical Office. Statisticka rocenka ceskoslovenske socialisticke republiky, 1961 (Statistical Yearbook of the Czechoslovak Socialist Republic, 1961), Prague, 1961, p. 393.
6. Federation of Hungarian Architects. Magyar epitomuveszet, no 2, 1960, p. 12-13.
7. Ulbricht, Walter. Der Siebenjahrplan des Friedens, des Wohlstands und des Gluecks des Volkes (The Seven Year Plan for the Peace, Well Being, and Happiness of the People), East Berlin, 1959, p. 23.
8. US Joint Publications Research Service. JPRS 13868, 25 May 62, p. 29-30.
9. Zycie gospodarcze, 19 Feb 61, p. 2.
10. Rumania, Central Statistical Office. Rumanian Statistical Pocketbook, 1960, [Bucharest, 1960], p. 163.
11. Ulbricht, op. cit. (7, above), p. 23.
12. East Germany, State Central Administration for Statistics. Statistische Praxis, Aug 60, unnumbered page (Statistische Monatszahlen der DDR).
13. Grosse, Hermann. "Zu einigen Fragen des Nutzeffekts der Investitionen" (Several Questions on the Effectiveness of Investment), Einheit, no 11, 1959, p. 1487.
14. Riebe, Siegfried, and Hicke, Hans-Joachim. "Zur Perspektivplanung der Investitionen unter Beruecksichtigung der Loesung der oekonomischen Hauptaufgabe" (On the Long-Term Planning of Investment with Respect to the Solution of the Main Economic Task), Wirtschaftswissenschaft, no 3, 1959, p. 378.
15. Ibid., p. 380.
16. East Germany, State Central Administration for Statistics. Statistisches Jahrbuch der Deutschen Demokratischen Republik, 1960/61 (Statistical Yearbook of the German Democratic Republic, 1960/61), East Berlin, 1961, p. 385, 581.
17. Grosse, op. cit. (13, above).
18. Hungary, Central Statistical Office. Statisztikai havi kozle-
menyek, no 3, 1961, p. 15.
19. Nepszabadsag, 29 Sep 59.
20. Hungary, Central Statistical Office. Statisztikai havi kozle-
menyek, no 3, 1961, p. 15.
21. US Joint Publications Research Service. JPRS 13868, 25 May 62, p. 40. U.
22. Trybuna ludu, 24 Jun 60.
23. Poland, Central Statistical Office. Concise Statistical Yearbook of Poland, 1962, Warsaw, 1962, p. 38.
24. US Joint Publications Research Service. JPRS 7750, 22 Feb 61, p. 73.
25. Knauer, Arnold. Leitungstaetigkeit und Arbeitskraefte ... (Management and the Labor Force ...), East Berlin, 1961, p. 49.

26. US Joint Publications Research Service. JPRS 10554, 5 Oct 61
p. 20.
27. East Germany, State Central Administration for Statistics.
Statistisches Jahrbuch der Deutschen Demokratischen Republik,
1960/61 (Statistical Yearbook of the German Democratic Republic,
1960/61), East Berlin, 1961, p. 251.
28. Hungary, Central Statistical Office. Statisztikai havi
kozlemenyek, no 3, 1961, p. 15.
29. Poland, Central Statistical Office. Concise Statistical Yearbook
of Poland, 1962, Warsaw, 1962, p. 38.
30. Rumania, Central Statistical Office. Anuarul statistic al R.P.R.,
1959 (Statistical Yearbook of the Rumanian Peoples Republic,
1959), Bucharest, 1959, p. 208.
31. Rumania, Central Statistical Office. Rumanian Statistical Pocket-
book, 1960, [Bucharest, 1960], p. 164.
32. US Joint Publications Research Service. JPRS 7750, 22 Feb 61,
p. 73.
33. Czechoslovakia, State Statistical Office. Statisticka rocenka
ceskoslovenske socialisticke republiky, 1961 (Statistical Year-
book of the Czechoslovak Socialist Republic, 1961), Prague, 1961,
p. 281.
34. Hungary, Central Statistical Office. Statisztikai havi kozle-
menyek, no 10, 1961, p. 42, 44.
35. Poland, Central Statistical Office. Rocznik statystyczny, 1961
(Statistical Yearbook, 1961), Warsaw, 1961, p. 219.
36. Czechoslovakia, State Statistical Office. Statisticka rocenka
ceskoslovenske socialisticke republiky, 1961 (Statistical Year-
book of the Czechoslovak Socialist Republic, 1961), Prague,
1961, p. 374, 377.
37. Hungary, Central Statistical Office. Statisztikai evkonyv, 1960
(Statistical Yearbook, 1960), Budapest, 1961, p. 230, 231.
38. Poland, Central Statistical Office. Concise Statistical Year-
book of Poland, 1962, Warsaw, 1962, p. 135, 137.
39. Szybki i harmonijny rozwoj polski ludowej: Plan 5-letni na lata
1961-1965 (Rapid and Harmonious Development of Peoples Poland:
The Five Year Plan for the Period 1961-1965), Warsaw, 1961,
p. 15.
40. Poland, Central Statistical Office. Rocznik statystyczny, 1961
(Statistical Yearbook, 1961), Warsaw, 1961, p. 56, 81, 172.
41. Albanian broadcast, Tirana, 5 Feb 61.
42. Czechoslovak broadcast, Prague, 25 Mar 61.
43. Neues Deutschland, 1 Apr 60, p. 6.
44. Die Wirtschaft, 10 Jan 58, p. 1.
45. Ibid., 4 Feb 59, p. 7.
46. Ibid., 18 Feb 60, p. 3.
47. Neues Deutschland, 3 Feb 61, p. 3.
48. Ulbricht, op. cit. (7, above).

49. US Joint Publications Research Service. JPRS 13868, 25 May 62, p. 30.
50. Poland, Central Statistical Office. Rocznik statystyczny, 1961 (Statistical Yearbook, 1961), Warsaw, 1961, p. 56, 69.
51. Zycie gospodarcze, 19 Feb 61, p. 2.
52. Czechoslovak broadcast, Prague, 3 Jan 61.
53. East Germany, State Central Administration for Statistics. Statistisches Jahrbuch der Deutschen Demokratischen Republik, 1960/61 (Statistical Yearbook of the German Democratic Republic, 1960/61), East Berlin, 1961, p. 184.
54. Czechoslovakia, State Statistical Office. Statisticka rocenka ceskoslovenske socialisticke republiky, 1961 (Statistical Yearbook of the Czechoslovak Socialist Republic, 1961), Prague, 1961, p. 277.
55. Czechoslovak broadcast, Prague, 8 May 60.
56. US Joint Publications Research Service. JPRS 2530, 16 Apr 60, p. 49.
57. Hungary, Central Statistical Office. Statisztikai evkonyv, 1960 (Statistical Yearbook, 1960), Budapest, 1961, p. 169.
58. Poland, Central Statistical Office. Rocznik statystyczny, 1961 (Statistical Yearbook, 1961), Warsaw, 1961, p. 217.
59. SED Central Committee, Party College "Karl Marx." Die Ausnutzung der Ware-Geld-Beziehungen durch die Wirtschaftspolitik der DDR (The Utilization of Commodity-Money Relationships in the Economic Policy of the German Democratic Republic), East Berlin, 1961, p. 214.
60. Informationsbuero West. IWE Informations- und Archivdienst, 14 Oct 59, p. 10.