ECONOMIC DEVELOPMENT IN THE BACKYARD REGIONS OP YUGOSLAVIA, 1953-64

Mary B, MacDonald

Thesis submitted for the Degree of
Doctor of Philosophy
at the

University of Oxford.

Trinity Term, 1968.

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ABSTRACT

The disparities in the level of development between the richer
and poorer regions of Yugoslavia are among the worst in Europe.
The level of output per head of the population in 1964 in the poorest of the eight regions was less than one-fifth of its level in the richest, while in the group of the four least developed regions, comprising 40 percent of the country's land area and one-third of its population, it was only one-half of its level in the more developed group.
The period 1953-&4 spans twelve years during which the promotion
of the development of the backward regions has been a constitutional obligation of the Yugoslav government, and its active regional policy implemented through the uniquely Yugoslav system of decentralised planning, Following the repudiation, in the years 1950-52, of centralised directive planning on the Soviet model, the Yugoslav authorities instituted a system of economic management based on the decentralisation to the enterprise of responsibility for the organisation of current production, combined with the retention by the state organs of control over the "basic proportions of development", specifically, the level and
sectoral distribution of investment and foreign trade. The control of investment was made effective through the strong centralisation in the accumulation of investment funds, from taxes on the enterprise, and their allocation in accordance with plan priorities. The authorities were thus able directly to channel a substantial volume of investment funds to the underdeveloped regions. Extensive government intervention in price formation, in addition to tax concessions and the payment of subsidies to enterprises in financial difficulties severely limited the

application of profit and loss criteria to the operations of the enterprise o The system of decentralised planning thus provided a very favourable institutional framework for promoting investment and the expansion of output in the underdeveloped regions.
Development policy for the backward regions, as for the country
as a whole, passed through two main phases during these years. Industrial-isation was consistently regarded as the centrepiece of development strategy, with the improvement of agriculture and the expansion of tertiary activities playing, for the most part, only a subsidiary role. Between 1953 and 1956 efforts were concentrated on the build-up of
the "basic industries", notably the power industries and heavy metallurgy, a continuation of the policy begun under the First Five-Year Plan in the Stalinist years. From 1957, however, a new strategy was adopted,
of "development on a broader front", giving much greater prominence to the expansion of manufacturing and consumer goods 1 industries. This reorientation gave rise to considerable dispersion in the development efforts in the backward regions, both among industrial sectors and into newly designated centres, in contrast to the narrow range of industries developed in the earlier phase and their concentration in the vicinity of the necessary raw materials.
Within this broad pattern, however, the individual under-
developed regions varied their own development strategies in accordance with their natural resources and other characteristics. In Bosnia-Hercegovenia, which contained a substantial part of Yugoslavia f s reserves of coal, iron-ore and water-power, development proceeded rapidly in the earlier years with the expansion of the national priority sectors of coal, steel and electricity, but latterly the transition to

a more diversified pattern of industrial development was effected only slowly. The concentration of these resource-based industries into the central parts of the region has left Bosnia-Hercegovenia itself, in spite of substantial local population migration, faced with the internal problem of disparities between its more and less developed areas. Mentenegro, the smallest and most remote of the regions, separated from the rest of Yugoslavia by mountain barriers, had initially to devote major efforts and a large volume of investment to the provision of transport facilities before the expansion of production could be
begun, and even in 1964 the facilities remained seriously deficient, Because of the region's small size (less than half a million inhabitants) its development strategy comprised only a few individual projects, although the level of investment there was much the highest in Yugoslavia. Macedonia, the most agricultural of the underdeveloped regions, adopted a policy of integrated agricultural and industrial development, the improvement of agriculture being complemented by the establishment of textile, leather and food-processing industries to process agricultural products for the national market. This pattern of development encouraged a high degree of urbanisation in the region, with the concentration of its industries into a number of relatively large centres, each serving its particular agricultural hinterland. For political reasons development efforts for Kosmet, much the poorest of the Yugoslav regions did not begin, on any scale, until after 1957, with the result that development there was scarcely begun* A two-pronged approach, comprising both heavy and light industry, was however being either adopted or planned. Goal, electricity and, eventually, chemical industries were being based on
the region's extensive lignite deposits, while non-ferrous metallurgy

and related chemicals were being expanded, to exploit local deposits
of lead and zinc; complementary to these, the labour-intensive industries of textiles, footwear and food products were being promoted in order
to create new industrial emplojrment and thus begin to relieve the acute pressure of agricultural overpopulation.
But, in spite of very high levels of investment in the under-
developed regions, the disparities between the regional groups in the level of output per head tended to increase over the twelve years, as total output in the underdeveloped regions grew rather less rapidly,
and population more rapidly, than in the more developed group. This occurred in spite of considerable emigration, most notably from Macedonia, Only in Montenegro, much the smallest of the regions, was a movement towards convergence with the more developed group achieved. The
policy of industrialisation was itself successful, in that each of the underdeveloped regions recorded a rate of industrial expansion higher, sometimes substantially higher, than in the more developed group; but their tendency towards lower growth rates in the other economic sectors, combined with the handicap of an output structure in which industry occupied a lesser place more than offset (except in Tvlontenegro) the successful growth of industrial production. The focussing of develop-ment efforts on industrial expansion, while in itself successful, was thus concentrated on too narrow a front to achieve a convergent movement in the growth of total output.
The cost of the policy of development in the backward regions
is difficult to appraise, with the artificial prices for certain items of capital equipment and the payment of subsidies in order to maintain production in unprofitable enterprises. But, accepting the Yugoslav

valuations of investment and regional product, comparison on a sector-by-sector basis reveals that the growth of output achieved in the under-developed regions commonly required a volume of investment at least half as large again, and sometimes several times larger, than in the more developed regions.
On strictly economic grounds, the defence can be offered that a
period of twelve years, even of an active development policy, is much too short to achieve the elimination of disparities which have built up over generations, and that investment for "catching-up" in the provision of overhead capital and the time required for the external economies
of development to be gained bring a temporary overstatement of the
f

investment cost of development policy. There remains, however, a substantial element in the development efforts which can only be accurately described as "social" or "relief", rather than "development" investment^

Acknowle dgements

During the preparation of this thesis several visits were made
to Yugoslavia. The usefulness and enjoyment of these visits derived
in large measure from the hospitality extended by the Yugoslav
Institute for Economic Research, and in particular by Branko Horvat
and Miodrag Ostracanin. It is a pleasure to acknowledge the help afforded through the library and other facilities freely made available, numerous introductions arranged in Belgrade and other parts of Yugoslavia, and many stimulating and informative conversations with members of
the Institute,
Among other economists whose knowledge, opinions and comments
have contributed to the development of certain ideas expressed here,
* j

special mention must be made of Branko Colanovic, Director of the Privredna Banka of Serbia, Mihailo Mladenovi£, Head of the Regional Division of the Federal Planning Office, Kosta Mihailovie', Director
of the Ekonomski Institut of Serbia, and Filip Vasic and Vera Podgornik of the Institut za Ekonomiku Investicija. The members of the Regional Planning Offices in Sarajevo, Titograd, Skopje and Pristina provided many useful discussions on the individual prospects and problems of their own regions. In Belgrade the librarians of the Federal Statistical Office and the National Bank spared themselves no efforts in making available any publications sought.
Much of the data processing for this thesis was carried out on
the University's KDF9 computer, using the admirable regression programme, with data transformation facilities, contributed by Smiel Van Broekhoven,
Michael Kaser has supervised this thesis since almost its earliest days, and its final form owes much to his close and careful scrutiny.

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1.

INTRODUCTION

Regional disparities in the level of economic development and
average standard of living are a problem familir*r, in varying degrees, to many countries. In Yugoslavia, still, in spite of the substantial progress achieved in the post-'-ar ^eriod, a developing country, the regional problem arises from the geographical concentration of development into particular areas, while others retain the many economic and social characteristics of imcerdevelopment; regional policy is concerned with the extension of development to these backward regions, and their integration into the process of national economic growth.
As a developing country, Yugoslavia's principal economic objective
is to maintain a high rate of growth of national output, in order to complete the transition from a traditional to a modern economy. The size of the underdeveloped regions alone, comprising forty per cent of the national territory and one-third of the population, (apart from the poorer localities in other regions), demands that they be included in this, although the national and regional growth objectives are potentially in conflict.
The regional organisation of national development, an issue already faced by Yugoslavia as one of the more advanced of the developing countries, will confront many others rs they seek to combine the drive to development with internal integration of the economy. Its extent, the existing degree of underd.evelopment and tVie u*. rency of national growth combine to make it a problem of a different orrier from 'area redevelopment', through urban renewal aid the adaptation of an obsolescent industrial structure, in industrialised countries.

2.

The regional problem in Yugoslavia is of exceptional interest. It
is almost certainly the most acute in Europe, with the per capita income derived by the one-third of the copulation who live in the under-developed regions amounting to o ;ly half of the level in the rest of the country, and in the poorest of the eight re"ions to less than one-fifth of that in the most developed region. The highly individual Yugoslav model of planner1 economy has enabled the authorities to pursue a much more active regional -oolicy than is feasible in m-iny countries. An investment system, designed to implement the planners' programme of development, has afforded a much more r>ov/erful and direct instrument for securing the desired regional allocation of investment than the rebate of taxes, preferential loan terms and other cost-reducing incentives employed in less closely planned economies. Fiscal and monetary measures have been used in Yugoslavia, but only in a minor role? regional policy has been essentially and directly an investment policy, strongly influenced by the nature of the Yugoslav economic system. In Soviet-type economies, on the other hand, where the authorities' control of economic development is even greater, political centralism has commonly suppressed regional questions. Yugoslavia is not only one of the more advanced of the developing countries, but also one of the most successful, having maintained, over the twelve-year period 1^53-64 an average annual growth r^te of 8.3 :oer cent, among 1 v e hi?h/st in the world; the underdeveloped regions have, to a considerable extent, but not entirely, shared in this growth. The Yugoslav situation thus offers a prominent regional problem, the institutional opportunity for a vigorous policy, a-id a high-growth environment.
Regional economics i=; itself a relatively nevr and wide-ranging

3.

field of economics, still in the process of devising its own aT-'ropriate tools of analysis, often bv adapting tools developed in other fields. Many of these tools are, as yet, imperfectly matched with each other, and with the type of data commonly available. The approach adored here will combine 'development' economics with 'location' and 'trade' aspects from spatial economics. For the pnmoses o\ policy-making, t'ese two types of decision are largely interdependent. In the case of resource-based industries, or industries with a strong market-orientation, decisions on the location of Development are closely dependent on sectoral decisions. Even for f f6otloose' ind-is tries, t-e rate of expansion is constrained by the size of t'~e feasible market, either t'e share of the national (or even international) marvet which c?n be won, or the opportunities for expansion, with or without
'import 1 substitution, in the loca" market. Locational decisions are th, s partially determined by sectoral decisions, while the sectoral decisions themselves are constrained by the opportunities for trade. The development of the underdeveloped regions will he treated, for
the most part, from the side of production, thror^h an analysis of investment, employment and the growth of output. Yugoslav appraisals along- these lines tend to be conducted onl;'- in the ''ighly aggregate terms of the level of investment and the growth of total :>utr>i-.t, with, possibly, a small number of major sectors; while these are often supplemented by reference to individual features aid projects, systematic analysis by sector is not applied. In the present work disaggregation by sector will be extensively used In the discussion of bot 1 - the 'growth' and the 'locational' aspects of de
policies.

4.

The central role in t Vi e analysis gi~; en lo investment, as a,
but by no means sufficient, condition for growth, follows the treatment applied by the Yugoslavs t: erri selves, who regard Investment as the principal instrument for oromotin^ economic development. Tn the discussion of regional development strategies, as embodied in invest^nt decisions, statistical a ;d interview rn-terial will be us^d in entirely complementary roles. figures o \ realised investment, both its l^vel and its distribution by sector, give a necessary Quantitative ^rsme^Drk for the more detailed local information, on motivations arr" objectives as well as projects undertaken, derived from visits a .ad discussions in Yugo Slavic .
The employment problem in the underdeveloped regions is not the
ove? t unemployment of industrial depressed areas, but lo"' Droductivity. This nay be the consequence of 'underemployment 1 , the s'or-eadin- of available work among all those with no other source of employment, or of a scarcity of co-operating factors, notably capital. V.'hile conceptually distinct, these two sources of lo'1" productivity are difficult to distinguish and quantify in concrete situations, although underempl -yment is generally agreed to be particularly prevalent in agriculture. Productivity can be improved either through the rreation of new employment in higher-nroductivity sectors, bringing a structural shift of employment away fro;r, sectors of underemployment and low productivity, or by improvements, through the provision of belter equipment, within individual sectors. Analysis by sector will be used to follow the impact of development policies along thes<=> 'structural' and 'productivity' lines.
The calculation of regional srrowt 1 -. rates V.- sector not only

provides much informrtive detail on individual q-ro^t 1 patterns, but makes it possible to separate regional growth rates into t v eir 'gro and 'structural' aspects. This reveals t Vi at the underdeveloped regions have achieved high growth rates for many individual sectors, but have been handicapped by a structure in which slow-growing sectors hold a prominent place. The Yugoslavs' own aggregate approach, overlooking this structural aspect, accords less than due recognition to the growth of output achieved in the underdeveloped regions.
Corollaries of the location of development are not only the
movement of goods but the migration of population. At the national level, the political inhibitions arising from the differences in nationality between the populations of the v-rious Yugoslav regions prevent the acceptance of inter-regional mi r r^tion as t'-.e solution to regional problems and require a decision on the rate of Development of the underdeveloped regions relative to t^e rest of t v e country. V/ithin each region, locational decisions partly determine the decree of concentration or dispersion of population; against the 'economies of agglomeration' in the build-up of industrial centres must be set the investment costs of urbanisation, for tie provision of social capital. The related issues of locational policy, inter-regioral migration and urbanisation will he treated as an integral pprt of regional development policy.
The scarcity of, and competing demands for, invest'npnt resources
impose on regional policy the criterion of efficient use -v0 investment. In spite of the considerable volume of resources which h?ve been cevoted to its implemen f ation, the Yugoslavs themselves v ^ve ma^e little explicit analysis of its cost-effecti~eness. To do this -no"e

6.

systematically than by criticising losses incurred on individual projects presents many problems: many of the methods of valuation user3 in the Yugoslav system do not reflect real social costs and returns; the verier1 of active regional policy lifts been short relative to the history of the problem, and the external economies of development yield their full results only in the longer-term: since t" e topic is a politically sensitive one, where imputrtions have to '^e mar'e, thie value-judgements of the individual are liahle to obtrude. While t^ese considerations indicate some of the difficulties and limitations, the present work will offer a critical a-nraisal of the Yugoslav economic system, its operation and its criteria, from the point o:r vier: of their impact on regional development, and some indications of t v e cost of regional policy.
Analysis by sector at the regional level is made possible by the availability of data series from t u e Yugoslav statistical services. 'Social ownership' of the means of production requires p-xtensive statistical reporting, hot-: to give account for the use of social property and to orovide t v e informational hrsis for planning. The federal structure promotes the regional compilation of r"ata, unimpeded by the 'disclosure' provisions which suppress much regional information in free enterprise economies.
Regional development will be treated here in detail only from 1953 until the e^d of 1 Q 64. This twelve-jreer period is a unit both r r^m the points of view of institutional developments and the availability of data. V/hile the selection of any particular *err as marking t-e beginning of a new planning era must be somewhat arbitrnr^ , by
the principal features of decentralised pla nin^, wit"-' its ru

7.

differences from its predecessor, were, if not already established, clearly emerging. 1965-66 saw the introduction of a further set of economic reforms, making major changes in the planning system, indeed, in the eyes of some observers, threatening its continued existence. The full implications of these changes are still emerging, and the fluidity of the situation prevents detailed consideration of t v eir impact on regional policy.
For the earlier years, of planning on the Soviet morel, only a
few statistical series are available, mostly of limited usefulness.
The use of physical units for planning purposes, with only a minor role for a system of administered prices, makes valuations in the prices of the time, even where available, Isrgel^r meaningless. A few reconstructed series allow only the main outlines of the economic changes during these years to be observed. The most recent yesr for which full data are available is now 1965, but, in view of the impact of the price and taxation reforms and ot 1 er changes introducer] in t 1; e middle of that year, it is preferable to terminate the series at the end of 1964. Yugoslav concepts and methods of valuation will be followed
throughout. Social product arid, ns.tio.nal income will bear their Marxist 'productive 1 connotation, and be valued, as in tie Yugoslav accounts, at market prices, inclusive of turnover and other taxes, retails of the concepts and methods of compilation of the national income accounts are given in Appendix 1. Because the dat? have been collated from a range of sources, and numerous adjustments made, data assembly is described in detail in Appendix 2, ^ith only bri*-p notes appended to individual tables in Appendix 4. All translations from oe^ho-Cro-t are by the author.

8.

1. THZ PROBLK' -, . v.. ^.-J. A .,..> REGIOKJ Ih YUGOSLAVIA

(i) The I 'equalities ' e^etr. t^e Regions
It is now almost fifty years sin.ce Yugoslavia, was create^"1 as a nation-state, and over twenty since it declarer1 itself Social'st, but a prominevrb characteristic is still toe wide disrrc rit. i . t^e level of economic development of its constituent regions. In sn^'te of formal political unification and the implementation of socialist principles, the creation of 'one nation 1 of t^e Southern Slavs, with 'equality of the nationalities' has not yet, in this respect, been achieved.
The extent of the inequalities is illustrated by the Lorerz curve
in -Vlgure 1, where regional shares in national outimt are compared with shares in the total population of Yugoslavia., in 19o4»
ITor, over the period 1?53-64, which covers more than half of the
life of t n e Socialist state, and ma^y of its years of active regional policy, v:as there any over-all narrowing of the differences. Social product * per head of the oo'oulation, which, in lc>53, was 3.4 times greater in the richest region than in the poorest, by 1964 was 5.4 times greater; of the regions individually, all the rich -rew richer,

1. Social product, whic1 - is inclusive of depreciation, will, in -eneral, be used as the measure of output, in preference to national incone,
in order to avoid the difficulties involve^ in the estimation of depreciation. The familiar difficulties of anticipating asset life, both physical and economic, apply with particular force in a
country which is still, to a considerable extent, underdeveloped,
and \vhere development has been taring ^tace at a rapid pace. /Moreover, the provision of amortisation was closely regulated by the Yugoslav authorities, as described in AnpB-dix 1, in a manner which yielded only a very approximate estimate of the s.ppro^ ^a^e allowance for caoira.l stock maintai' ance.

10.

while almost all of the poor grew relatively poorer. ' (Table 1-1). These disparities were probably the widest to occur in any country
in Europe, In Italy, which suffers from the most acute regional problem in V/estern Europe, Tagliacarne (1965, Table 20) has estimated that, among the fourteen regions, net national product per hear1 in 1964 ranged from 142 in Lombardy (Italy = 100) to 51 in Basilicata and Calabria. In the U.S.S.PL. the differentials in net material product per head are still narrower in the European part, ranging, on average over the years 1958-61, from 133 in Latvia (U.S.S.R. = 100) to 74 in Eelorussia, and even in the Asian Republics only from 79 in Azerbeidzhan to 56 in Tadzhikistan. (Vorobev (1965, p. 521)).
Social product per head affords the most comprehensive single
measure, but these disparities between the regions are further confirmee1 by a number of other indices of the level of development, shown in
Table 1-2. The poorer regions had a strikingly lower rate of

2 t employment * of their total population, the consequence of limited

employment opportunities, combined with an unfavorable a^e-structure
of the population deriving from a low life-expectancy. Tie larger proportion of the working population who were en^sTed in agriculture,
1. The term 'region' will be used to refer to each of the eight principal territorial divisions of Yugoslavia, alt Vi oi.i gh five are Republics (Slovenia, Croatia, Bosnia-iiereegovina, Macedonia and Montenegro),
one a province (Vojvodina) and only one (Kosovo-Metohija (Kosmet)) strictly a region. Serbia Proper is not a political and adminis-trative unit in the same '.'/ay as the others; within the Republic of Serbia, Vojvodina and Kosmet have certain rights to conduct fieir
own affairs which do not apply to Serbia Proper; the regional
position within Serbia thus constitutes a secondary, but only prrti-1, level of federation, rather than sub-division into three co-equal
units.

2. Employment will be used in its .Vestern rather t'-ari its Yugoslav connotation, in order to include the self-employed, an obviously important category, particularly in agriculture.

11.

Table 1-1 Social Proruct per Hear", by Region., IQ^*3 anr 1964

,- -

Yugoslavia
Slovenia
Croatia
Vojvocina
Serbia Proper
Bosnia-Herce ?ovina
Macedonia
Montenegro
Kosmet

i-ousan

1953

64.0
116.3
71.1
61.4
58.1
50.8
43.9
3^.4

33.8

r1 Dinars

1^64

316.4
602.4
376.2
353.5
311.3
213.9
217."
214.3
112.2

Index

1953

100
132
111
96

79
69
58
53

1964

100
190
119
113
93
68
69
68
35

Table 1-2 Indices of 'he Level of Development, by Region. 1964

Yugoslavia

Slovenia

Croatia

Vojvodina

Serbia
Proper

Bosnia-

Heitegovina

Macedonia

Montenegro

Kosmet

Index of
Social
Product
per Head

100

190

119

113

98

63

69

68

35

Employed as ;'.'
of Total
Population

37.6

41.3

38.9

36.9

44.1

31.7

32.4

27.1

29.2

/j Shares in
Employment
Agric-
ulture .

62.3

38.2

55.5

61.5

70.3

65.5

63.8*

60.4

31,8

Indus-
:try

20.2

36.1

23.2

19.5

15.4

20.5

14.1*

20.3

9.3

Ser-
vices

8.0

12.2

10.5

8.3

6.6

6.3

6.5*

9.0

3.^

Output
( Thou.
Agric-
ulture

345

519

373

701

262

245

341

260

196

per Y/orker
s. Dinars)
In^'us- 1 Ser-
try vices

1778 2000

2098 2395

1358 1943

1464 1701

1816 2217

1613 1735

1355 1639

1750 2170

1573 1097

* The shares in employment in Macedonia refer to 19^2, to avoir1 the large increases, particularly in the construction industry, associated with the rebuilding of Skopje, 1P6.7-64.

13.

and its low average productivity there, strongly surest underemployment. The poorer regions tender1, further, to have a lower proportion of their employed population in industry, although this varied considerably in individual cases, as did employment in the productive services. The tendency for output per worker in industry to be lower emerges more clearly if the comparison is made on a sector-by-sector basis, as in Table A-2; in most sectors, average productivity was markedl.y lower in the poorer regions, the effect, for industry as a whole, being partially concealed by the greater importance of sectors such as tobacco, electricity and steel, r here output p?r worker was high. Output per worker in industry and services was strikingly higher, for the economy as a whole, than in agriculture; in 1964, as shown, it "/as between five and six times higher.
Both the 'structural 1 and the 'productivity 1 aspects of the
employment situation in the poorer regions are evident: the larger proportion of the population who were either not in employment, or engaged in the low-productivity sector, agriculture, and, conversely, the lower levels of employment in the ^igh-prod^ctivity sectors of industry and services; and, on a sector-by-sector basis, lower average productivity than was achieved in thn richer regions.
Statistical confirmation of the close relationship between social product per head and a wider range of indices of the level of development is given by Ivanovic (1961). He compiles an index of the level of development, incorporating seven economic indicators; national income per head of the population, fixed capital per worker in the
s 'Cial sector of the economy, cadastral income per hectare in
1. Part of this dif'erence was due to t;- e Yu-osl^v -r.ic - s-ste:a, which is descrioed in Chapter 3 (iii), oelov;.

14.

agriculture, active as a proportion of total population, the le'^tb
of roar's per 100 square kilometres of territory, the length of rair-ays similarly, and trie percentage of non-agricultural population; when applied to the relevant data for 1955 this index yields the ~ame ranking of the six Republics as does income per head, and a range, between Slovenia and Montenegro, o:c almost eight to one.
This variation among the regions shown from t'-e side of production
is confirmed, from t^e aspect of consumption, by the representative measures of the standard of life, show-' in Table 1-3. Fai-ticv larly striking is the range in the rate of illiteracy, negligible in Slovenia, which has a tradition of universal education extending over a century, but 41.1 per cent of f e population over ten -ears of a-;e in Kosmet,

Economic Dualism *««W«W.I.-B.*-*<MOT-*MM«
A situation of this sort, where widely differing levels of
development co-exist within a country, and individual regions are relatively ; >ell or relatively badly off according to most of the indices of the level of development, is by no means unique to Yugoslavia.
Lutz (1962) describes a similar situation in Itr.ly as one of 'economic dualism'; there, with reservations, the regional division between the North and the vlezzogiorno approximates to the division between the developer1 sectors in both agriculture aid industry, a-r t^eir undeveloped, or pre-industrial, sectors.
This division between 'the .North 1 -"-and 'the South' applies equally
in Yugoslavia - the term 'dualisn 1 is adopter"1, from, the Italian case, by Obradovic (1962) - but in more complex form. The terminol gy 'North 1 and 'South' is not in common use, each region retaining its Individual status within the federal structure. Moreover, as already indicated,

15,

Table 1-3 Measures of f-e Aver? 3tp r^^Tf" of Life.

Yugoslavia
Slovenia

Croatia

Consumption
of ".Teat

Kg. p^r Plead

26.2

30.6

33.6

Vojvor'ina , 47.3

Serbia Proper , 27.6

Bosnia- Jercegovina 20.3
Macedonia

Montenegro
Kosraet

14.4

25.3

11.5

"" xnencitur^ on
Clothing & Foot war
Thous. Dinars
T J 7° per i-Tead

12.5

23.0

14.6

14.6

12.3

10.1

9.2
°.7

6.5

Rate of
Illiteracy

!

of Porjuls. hi on

19.7

1.8

12.1 !

10.6

23.0

3?.5

24.5

21.7

41.1

The figures for consult ion of meat a.i d expenditure o^ clot]"dng and footwear relate to 1963, t'ie ra; e of illiteracy to l°6l.

16.

the Yugoslav regional situation is characterised by a wider range of levels of development than among the Italian provinces; all t>>e regions are underdeveloped relative to Slovenia; all, excent Slovenia and Croftia, bad a level of social product per hear below the national average in 1964; if the four richest, and t>e four poorest, regions are grouped together, each group still shows a range in social product per head, between its richest arid, poorest members, of almost two to one.
In Yugoslav circumstances, therefore, the delimitation of any particular group of regions as underdeveloped must be partly arbitrary.
The regions themselves, moreover, are by no means internally homogeneous in their level of development. Even the richest of all, Slovenia, has, on occasion, adopted special measures to assist its own poorer areas, and incomes in the Lika have always >een 'veil below the average for Croatia as a whole. Some of the underdeveloped regions, on the other hand, contain important industrial and commercial centres; Sarajevo (in Bosnian Hc rcegovina) is old as an industrial town, Zenica (also in Bosnia) has been a major national industrial centre thron^rhout the post-v/ar period, while, in Macedonia, Skopje, with its strategic position on natural lines of communication, is one of the oldest commercial and trading centres of the Balkans. The 'dualism' in agriculture shows itself between the social and nrivate sectors far more directly than between regions, the strte farms and co-operatives operating with larger units and more mechanlrec5 methods, ^y contrast with the small-scale, primitive methods and low productivity o"° the peasant holdings. Any regional grouping can, therefore, s v o"< only an approximate correspondence to the incidence of economic characteristics, regions classified as 'more developed' or 'underdeveloped' be in" only predominantly so.

17.

The Underdeveloped Regions
For the nur-oses of this stud , fo^r regions, Bosnia-JIercegovina, "laced onia, Montenegro and Ilosmet, will be treate^ as underdeveloped. This is the grouping w1 icli gives the closest ov^r-all correspondence to the official classification o^ 'underdeveloped regions' applied between 1953 and 1?64, although the various revisions introduced into the classification make it impossible to follow the official scheduling throughout. " Each of these four regions, at various times, received federal assistance on the grounds of economic backwardness, while the onl'f other areas to receive any consistent decree of special attention were selected parts of Serbia Proper.
The .rouplng of these four regions defines the problem of under-development where it has been most acute. Together they contain 6.6 million people, 34 per cent of the national pop lation; but in 1964
this 34 per cent produced only 21 per cent of social product, representing a per capita output only half of the level achieved in the foi;r more developed, regions. A clear margin stands out be^-een the* level of
social product ?er head in Bosnia- T Ie:rcegovina, Macedonia an r" Montenegro, at 63 or 69 per ce-~t of the national average ( vith Kosmet much lover still), and Serbia Proper, t r e ^oorest of the richer regions, at ?9 per cent. (Table 1-1). Individually the four underdeveloped regions
tended to rank in the lower positions by t>ie other indices of the level of development shown in Tables 1-2 and 1-3.
The division hetween the more and less developed regions co-incites ap^roxi natel^'' with the countr/'s "la.ior geographical '"'ivis:' ons; the
1. As P resul-'; o:" a further reclassificatvon introduced in I"o5, 'hese four regions together h^ve ->o\v v eco^e, for t v e fir.^t time, !hp

13.

richer regions, Slovenia, Croatia, Vojvodina ai ,r1 ports of northern Serbia, occupy or are orientated to arc's t' e 3~va-Dr,nu^e plain and the Dalmatian coast, while the poorer regions occupy a contiguous area of the largely mountainous territory in the south. ' ' 'heir more mountainous nature often restricts their agricultural potential, especially for arable farming, and presents considerable difficulties for the provision of transport facilities. These handicaps, however, do not affect each of the underdeveloped regions to an equal extent, a/K each has other endowments favourable to development.
Bosnia-Hercegovina, v/ith °..5 million, inhabitants, is the third.
largest region in Yugoslavia, in both population and Ifev area, (after Serbia Proper and Croatia), and much the largest of the underdeveloped regions, larger than the three others combined. In spite of its proximity to the Adriatic in the west, the coastal strip, Dalmrt-ia, forms part of Croatia, leaving Bosnia-Hercegovina only a few .idles of coastline. To the north, relatively small parts of the Republic lie in the Sava valley, the river itself serving as the northern frontier vith Croatia, but hills give way increasingly to mountains, in the south and west. The valleys of several major rivers, however, the. Bosna, Vrbas and Una draining to the Sava, and the Neretva to the Adriatic, offer natural lines of communication between t v e Sava valley and the coast, although communications in the transverse direction are difficult.
The region is exceptionally rich in natural resources. Abundant ^ydr-electric potential is available on its rivers, the Prina
(separating Bosnia-Hercegovina from Serbia Proper in the east), the
Vrhas and t^e Neretva. * The manor pert of Yugoslavia's kno-n delosits
1. Yugoslav resources of V.T ter-power for ^.'--hro-electricity, of w1 ich the rivers of Bosnia-Hercegovina are an important nart, IP ej^een estimated as second only to those of ITorvay, among iCurmean co ntr~.es.

of iron-ore, along with important reserves of coal and lignite, and smaller deposits of non-ferrous metal ores (notably oa.m:ite) form a rich base of mineral resources. The heavy forestation covering much
of the region provides extensive reserves of timber. Agricultural potential is, however, limited; only in the major valleys, predominantly the Sava, is extensive arable farming possible, altho .^h some of the les'j mountainous eurpas are suitable for stock-raising.
Montenegro, Bosnia-Hercegovina's immediate southerl" neighbour,
is by far the smallest of the Yugoslav regions in population, although. not in land-area, containing less than half a million inhabitants. Geography dominates the region; outside a small central plain and coastal strip, lontenegro is entirely mountainous. This mountain barrier, which for centuries provided protection against invaders, now constitutes a major obstacle to the integration of Montenegro into the economic development of the country as a whole; only two partially-surfaced
roads, and (for several years yet) no railv;ay, provide communications with the interior of the country. The isolation imposed by the mountains is to onl a small eytent alleviated by some 100 kilometres of sea-coast with several harbours.
The natural-resource endowments of lYfontengro closery resemble
those of Bosnia-Hercegovina: 'v?t empower, timber and non-ferrous metal ores, notably bauxite; but, with the exception of the >F><;xite, they are inferior in amount and quality to those of Bosnia-Hercegovina. The small amount of arable land available is concentrated in t^e central plain, with opportunities for stock-raising on higher ^ro^nd. The natual resource with which Montenegro is excellently endowed is the tboroughly modern one of potential for tourism, alon^ its Adriatic coast.

20.

Macedonia occupies the southernmost part of Yu^oslc.via, sharing frontiers y*ith Albania, Greece a.nd Bulgaria. T1 e population, predominantly of llaceclonian nationality, retain their ovn language.
In size, with a population of 1.5 mil'. '-n, i.Iaced-mia, i"-: the largest of the underdeveloped regions, pfter Bosn^a-Hercegovi^a, an f " only slightly smaller than Slovenia.

Th/ river Vardar, rising in the norti:-'.vest an'1 sweeping round to
cross the region from north to sort-, gaining tributaries on the way, forms a plain of go or1 a T-icuJ tural Irnd, covering the central and eastern parts of the Republic and with s^urs extending into t] -e north-west and south west. The agricultural potential of t 1 is plain is greatly favourer! by r.Iacec'onia' s southerly position ^nd "T.rm climate, allowing the growing of cotton, tobacco anr rice, and the expensive cultivation of grapes anrl vier'iterranean fruits. Soil erosion has daraa^ed extensive areas to the west, anr" t-e mountains further - r est make these parts of the region suitable on .1.7 for rough grazing. Feldspar, small deposits of non-'errous ores (notabl c v ro~oe) an^ recently-discovered iron-ore :;ive Llace^onia a muc v more li niter1 bsse of mineral resources than is founc7 in the other underdeveloped regions.
The Varc'ar plain also opens up easy natural conmunic* tion northwards Serbia, and southwards with Greece. Lateral co-F.-.unications, v;itr the southern end of the Adriatic, are, however, extremely difficult; Albania presents a political obstacle, and, further north, t 1 e ^ount^ins of Llontenepro impose a physical ^arrier. T.I^ny of "'T acedonia' s erports are t]'us involved in very long transport hauls, e ' ther across the Interior

1. The frontiers of I.Iacedonir, h.-.ve, since the Second ,,orld V/ar, heon in endemic dispute among Yugoslavia, Greece and ^ul^ar :.-,., each of v/^ich includes a iv.acedoni.-n population.

21.

of Yugoslavia to be shipped through f.i.ieka, at the northern end of the Adriatic, or southv/ards to Salonika, in Greece.
Kosmet, with its popula.tion of 1.1 million people, main! of
Albanian descent, constitutes Yugoslavia's lar.gesi and most complex development problem, a problem which is political and social as -/ell as economic. Not only is Kosmet much the poorest region in terms of social product per head, and wit 1 a life-expectancy only half of that for the rest of the country and a rate of illiteracy more than twice as high, but it is the least -veil integrated into the process of national development.
At the political level, the state of Yugoslavia's relations vdth neighbouring Albania has often been reflected in the treatment of its own Albanian minority. Throughout much of th- earlier 1950' s, -/hen Yugoslav-Albanian relations v/ere very bad, no real effor-ts were raa^e by the Yugoslav authorities to improve the ^osition o:r Kosmet; development efforts in the region essentially came only after the beginnings of a rapprochement het^/e^n the t T vo nations.
Kosmet has also certainly suffered, particularly in the earlier years, from the additional level of federation within the Republic of Serbia. The other uaderdeveloDed regio s, being lie "publics, take nart, along with Serbia as a -/hole, in the planning process at the national level, while Kosnet, unless special provision -as een made, must make its claims through, and v/ithin, the Republic of Serbia.; Serbia itself has had to face numerous other intern?! problems, such as t'-e special position of Belgrade, the resettlement of Vojvodina and the h^ckv/ardness of parts of Serbia Proper. In its position '.vithin Serbia, k'osmet t^us, on occasion, sufferer1 a further political di sa^ vant.?.t~e.
The Albanian minority, the Shiptars, win social acceptance much

22.

less readily tba an/ other of Yugoslavia's many national minorities.
It is impossible to say how ar this difficulty of socia? integration derives fro:.i the very real differences in nationality a>.d culture between the Ghiptars and t-'e rest of the population, a^ bow far s.:.mply from
the contrast between their obvious poverty and the consciousness of economic progress pie- alent in the rest of the country. Whichever its cause, as a consequence of this social isolation Kosmet tends to experience difficulty in atActing qualified people "rom other regions to fill posts there, aad in establishing business contacts outside, while emigrants from Kosmet are not easily absorbed into other communities.
In terms of more strict]/" economic resources, Kosmet is no worse
placed than the other underdeveloped regio ;s. Its r^ricultural
potential, while inferior to that of the Vo;jvodina and laclring the specialised advantages of ilacedonia, is superior to that of Bos'iia-Hercegovina or Montene~ro, but over-pormlation and the lack of alternative employment opportunities, including through emigration, have resulted in the fragmentation of holdings. It shares t u:e richness of other ^arts
of Serbia in dernsits of non-ferrous ores, notably lead, copper and
zinc; the lead deposits, in spite of being er~>loited for man-- years, regain the most important in Yugoslavia. Extensive deposits of lignite are present in both Kosovo (the eastern part of the region) and
Meto v ija, The region's position in natural communications is similar to that o" Macedonia, its immediate southerly neighbour, in f-ood iccess northwards to t^e Sava-Danube nla^'n but poor access westwards to the Adriatic ports. Transport links, however, have not -et been fully
1. Every nationality in Yugoslavia Is a -ninor: ty; thn Serbs, the largest nationality TOUTO, were recorded in the Pon ^1-rtio- Census O-T ^
as 42 r>er ce-.t o: t^e total

23.

developed to take comparable advantage of the natural nosition of Kosmet by connecting the region with the national transport arteries across Serbia and Macedonia. It is t u e r>or>ulption question, rather than natural disadvantages or the lack of resources, which lies at the centre of the problem of Kosmet.
The problem of the underdeveloped regions is, therefore, partly
one of geography. The regions comprise many of the remoter r>arts of Yugoslavia, separ^te^ by distance and, ofte^, by difficulties of terrain, from the areas in the Sava-Danube -»lain and central Serbia. r- the more mountainous areas, agricultural -noter.tial is poor. But nature has favoured these regions in other respects; accordin- to the appraisal given by Colanovic (1966, pp. 39-40), one o'? the Yugoslav economists most deeply interested in the regional problem:
'The natural raw-material resources in the underdeveloped
areas are certainly considerable. Some regions, it is true,
are poor in this respect, but others are of a ~eneral national significance and imperatively call for intensive development.
The underdeveloped areas contain abo^t 76 ner cent of all
Yugoslav deposits of coal, 96 ->er cent of iron ore, 86 per cent of lead and zinc, 34 per cent of bauxite, all the deposits of manganese ore, and most of t-e antimony and asbestos. The underdeveloped areas also nossess 40 ^er cent of the entire timber and a substantial part of the water power of the whole
country. Yugoslavia's industrial expansion, indispensable in
the future as it has been in the past, will rely to a ^reat
degree on these and on other natural resources in the under-
developed areas 1.
But the resource of the under developer1 regions of even greater importance is their underutilised manpower, as shown by their low rates of employment and low labour -productivity. TTad they been able to match the level of output per worker achieved in the -sore developed regions, total output in the underdeveloped regions, in 1064, woul^ v sve been 50 per cent higher than its actual level: alternative!^, n?tc u in^ the employment rates of the more developed regions wo-ild K^ve mrde

24.

available almost 65 "\ 000 extra workers, equivalent to 44 ner cent of the entire industrial labour-force in Yugoslavia.

An Inherited Problem

While geography ' akes its contribution to the region-.1, nroblem in Yugoslavia, th° influence of history has nroiabl^ been of even greater importance. The Disparities between the regions are older than the country itself. At the time of its formation in 1918, not only was
the new state of Yugoslavia ooor and underdeveloped by comparison wit^ the rest of Europe, but the Diverse historical experiences of its member regions had brought them to very different levels of development. The regions in the north, Slovenia, most of Croatia, and Vojvodina, were formerly Darts of the Austro-T-Tungarian empire, [lost of Serbia, Bosnia-'Tercegovina and " r acedonia had been, for long periods, under Turkish rule, although Serbia had established its independence progressively through t>->e nineteenth century and oosnia-Hercegovina had come under the administration of the Austrian empire some forty years before the First World War. '"'onten^gro ha^ always been, more or less, an independent state, but devoting most of its energies to fighting off the Turks. The division between the no-re and less developed regions thus coincides, annroximately, with the :r ro-i.tier between the old Austrian and Ottoman ermires.
The northern regions had already, in 1913, attained a level of development significantly more advanced than the rest o:~ the country. V/ithin the transn^rt and communications system of the Austrian emnire, they had developed links vrith central and vv-stern Europe. While their society "/as still overwhelmingly rural and agricultural, r/ith the peasant farmer predomi -atirrr, certain irmrove~ie ts in techniques and

25.

organisation had been introduced in the production and marketing of pgricultural products; Vojvodina, in particular, often described as
1 the granary of the Austro-Hun -ariai Empire', "vas noted for its developed agriculture. Some mining enterprises, and a few branches of manufacturing industry had been established, and industrial production and commerce could be described as in the early stages of canital^st development, while administration and the system of education, notably in Slovenia, were well doveloped for the time.
But, in the south, this sort of develonment had scarcely begun.
Tur' ish rule, repressive and inefficient as it -as, had established only a quasi-military framework of -:o' ern^ent a d administration, with no general system of education; communications were exiguous, and industry virtually confined to handicrafts; economic life "r as characterised by tl<e ubiquity of very primitive, subsistence agriculture and the lack of any of the features of an i?ici^ient industrial society. The only region in the south where any industrial development took place prior to 1114 was Bosnia; Tomasevich (1955, pp.171-172) shows the remar-'pble increase in t u e (still snail) number of factories established there, following ± J> -s seizure from the Turks by Austria in 13^8. As is confirmed by this illustration, the adverse effects of Turkish rule, in retarding the development of the entire southern n^rt of Yugoslavir,
had bee profound.

The Inter-'7ar Years
The int°r-war ' r ears were most unhappy oies -""or t^e roimtry, with
the failrre of the rttemnt at political integration makinr rn i^nossible environment for economic integration; even th^ formulrtion o a national policy to real with the ^is-nnrities '-''as i^-oosni

26.

p.36) dismisses t^e matter brusouely with the assertion that 'in the neriod between the two "rars, no effort at all was r"evoted to the development of t %i e underdeveloped regions'.
Systematic information on the economic recor^ of the neriod is extremely limited, bnt -° few writers attempt ^t i_ma tes of the "<pi in indicators. Static (1957, r>.3) estimates the annual Tr^'th o^ national income, over the neri^d 1926-3C>, at 2.14 per cen f: the Gens se.-=; of "opulation (1^21 and 1931) a - d other remo^ranhic information s 1 ow that the rate of nonulation growth was aroirir- 1.5 ner cent, leaving o^ly a very smell margin for increase^' incon-ie -oer bear. Some ---rowth of industry to<~>k olace, ^escriber1 in KuVolec'a (1^5^, chaps, ITr -^I) but it "/as insufficient to Tnake much impact on the ^e^eral situation of agricultural overpopulation.
Several rea.sons suggest that the regional Disparities may have increased rather than diminished. T1 e onl*- firm fiTures are for the rate of t)o-nul?tion -<ro-vth, which, as is show by 3 i.me n^ovir (1°64, Tables 21-22), was markedly higher in the noorer regions. Slovenia, Croatia ard Vo.ivodina had already had some ex-nerience of economic growth, nrobably sufficient to allo'v t^e^ to maintain some progress, while iii the poorer regions de-elo^ment v'^d riot =- e i begun. The IP - ding sectors in manufacturing industry v/ere the food-processing, textile, footwear a--d timber industries, (Kukole^a (1^56, np.°2-96), Cobeljic (1^59, ^.79)), which wou'd tend to concentrate in the rrricul.tnral areas of Voivodina and Slavonia, ar-d in. t'T? manuf ar turin^ centres of Sl^euia and Croatia. A few developments were also nade in mining, ^ot.ablT in Serbia, and Slovenia. A substantial ^art of such -e*v invert-' ^e^t as to°>k place wns ^ina iced by foreign capital, whic 1 tended to concentrate in the north and w-st "/it 1 ^ t^eir n-evi ous links wit!" central a d western

27.

ilurone; Cobeljic (1959, pn.84, 87) estimates that about 50 ner cent o^ capital in industry and mining was foreign-owned, and that
'the amount of capital invested in industry, per head of the population, in the period 1^18-3^ shows that Slovenia was
develoning more than two and a half times nore rabidly than
Serbia, six times more rapidly than Bosnia-Hercego^ina, and
almost tventy-five tines more rapidly than Montenegro'.
However, Vinski (1961, p.209), one of the closest students of economic growth in Yugoslavia, and particular!/- of capital formation (as also in Vinski (1962), (1965)), concludes that
'Although there are strong arguments in favour of a narrowing
of differences, it is not possible to answer this question
(whether the regional disparities recorded in 1953 had widened
or narrowed since the First World War) in quantitative terms
due to lack of data 1.
y/hat is clear is that acute regional disparities existed, and were probably getting worse, while no efforts were being made to improve the position.
The new Communist government, therefore, w^ich came to power at
the end of the Second World War, inherited a nroblem which had had at least part of its origins in the history of the regions even before the formation of the country, and which the first three decades of statehood had failed to alleviate. The War had added great destruction throughout the entire country, but leaving the regional situation essentially unchanged. The new government immediately formulated its intention to launch a frontal attack on the underdevelopment of the country as a
whole, and in particular, in the words of its first Pive-Year Plan (Yugoslavia (1947-51, arts.5, 21)) 'to ensure a more ranid rate of develo^- ment in the hack-arc1 People's Republics ad remove all the consequences of unequal development' and 'to remove the inequalities in the development of the individual People's Republics and builf"1 Yugoslavia as an
economic whole'. Since this first declaration, innr^ving the

28.

position of the backward regions has bee- consistently and er^icitl" included among the objectives of national economic ->olicy ad, as then, has al^a^s been formulated in terms of the nromotion of development in the underdeveloped regions as a special nroblem w; thin the development of the country as a whole.

29.

(ii) The Objective of Development

The otivatxons
The determination to reduce, and eventually eliminate, the regional disparities is promoted by both an idealistic and a m-p-n-'tic motivation, each relateD to the 'nationality question'. The Yugoslav nonulation comprises many nationality groups, and although a I"1 are Southern Slavs, relations between them h<?ve not always been characterised by 'brotherhood and unity'; after political unification, dissension a.mori.g the nationalists increased in bitterness, "inally culminating in civil *var during the Second World '.Var. V><ile the passions aroused in the inter-war and vVar years soon died down, t'-e nationality Differences have not been forgotten. The establishment of the federation and the designation of the Republics and regions on the basis of the nationality of the majority of the inhabitants, designed to meet the political aspirations of the major Trou^s, entrenched the importance of the regional question at the national level, in contrast to the other East European co^ -tries where, as described by Kasor (1°67, n^,30-31), political centralism has largely suppressed regional issues. As long as the economic disparities continue to coincide with the nationality ~rou~is in Yugoslavia a potentially Dangerous source of friction exists, '"'dch makes t r >e reduction of the differences in economic standards a vital nsrt of the cementing of national unity.
But t^e n-romotion of national unity is not regarded simply in this precautionary v/ey. A more fu.n.DR~>ental motivation is t^e conviction that the economic equalities existing i^ Yugoslavia are in contrc-Diction to the nrincinles of a socialist society. As Kardel;i Cl°6/-, n^.i.^7, 171), a le^.Ding member of the government, reminded the 7 ighth Congress of

30,
League of Communists:
'Yugoslavia is a multinational conrvnity, marker5 by considerable differences in the economic structure of the individual
republics. The -nroblem of the economic enuality of ^eonles
therefore has two aspects: it is a question of economic independence, or self-government of neoples, am" a"1.so a
Droblem of the gradual elimination of essential differences
in regard, to the level of development of the material basis
of national life 1.

'Obviously, one of the most important factors of economic equality of peoples is the transcendence of the historically conditioned qualitative differences in the levels o^ economic development of various parts o r the county'.
Kubovic (1Q 59, p.60) rccepts it in the same spirit:
'(In underdeveloped areas) the acceleration of economic
development would lead to the implementation of one of the principles of the social order in Yugoslavia, t v-at of economic equality 1.
w>>ile "'[ihailovic (1%5, ^.568) begins his discussion of the regional question 'from the premiss that without economic equality there is no national equality'.

Regional_and "ational Development
Although the objective of development of the backward regions is often expressed, in the first instance, as a political value- jud~ement and referred to its wider social aspects, much of the detailed discussion sets it in an economic context, related specifically to the development of the country as a whole. Todorovic (1962, r>.ioi) points out t'-at the development of the country as a whole denends on the development of its various parts:
'A region is not isolated relative to the ^ational ecomny,
but is interder>endently linked wit v' all ot: er regions. The
general 1 -vel or" pcono^ic develo^ ie t is therefore t u e result
of the Size of the growth rate in each regio: 1 iiidividnallv, or
of all together. To the extent, therefore, thnt e.l\ regions
develop more rabidly, t^e o^'-r-all --ro^ti'1 r^+e will ^e
The underdeveloped regio s contain productive resources which are

31,

not being adequately mobilised to contribute to the development of the

country as a whole. According to Stojanovic (I960, p.300):

'An underdeveloped area is a "bottleneck" for the economy as
a whole in precisely the same ^vay as an underdeve.1 oned sector.
Both types of "bottleneck" bring the same economic result:
a loss of the growth of production through the u-derutilisation
of productive factors.... Underdeveloped regions are like
paralysed limbs in an economy, deforming its normal -rowth
and functioning'.

And similarly Kubovic (1961, p.7):

'The fuller utilisation of the material, human and natural
resources of all parts of the country promotes the more vigorous
and rapid development of the Yugoslav economy as a whole'.

Mihailovic (1962, p.17) criticises the approach to regional

problems adopted in capitalist countries, for failing to make regional

development an integral part of national development:

'Unequal territorial development was, and has remained, a
motive and basis for state intervention in Western countries.
This intervention has on occasion bee i very extensive, but, irrespective of it? extent, it has been confined to the most important corrections, and has only taken place aftor the
problems have reached such a state that they can no longer be tolerated, from an economic or social poi.^t of view. This
ex post intervention shows th^t regional development has not
bee:n, or become, an integral part of a single co ^re'-e sive
and active r>olicy of development for the economy as a whole'.

After criticising Western location theorists for their ' inar> :.ropriate

application of the micro-economic criterion' of profit-maximisation to

a problem which requires criteria relating to 'the entire social

economy and its development', he urges that the 'regional r>roblem'

should be considered as the 'regional aspect of economic cevelonment':

'Its role consists in mobilising available productive T?ote-tial,
by establishing economically appropriate To-oo^tions in the territorial structure of the economy, for t-e more conmlete and successful achievement o:r social and economic o v iectives. The regional aspect takes account of the globpl economic effert of
all factors in individual types of area, and their combination in general economic development'.
(\1ihai 1 ovic (1962, r>.27)).

32.

"liodrag Jelic (1965, pp. 14-26) * also warns against the danger of interpreting 'economic rationality 1 in terms of the profitability of individual projects, when the appropriate criterion must be, explicitly, that of 'minimum social cost'. He acknowled-es that a strictly economic justification for the develo^^e^t of the underdeveloped regions may be difificult to find, on the basis solely of the profitability of individual projects, and within a short time-horizon; but, nevertheless, he criticises the tendency for too restrictive an interpretation of profitability to favonr the location of projects in the more developed regions, when the appropriate social criterion vould favour the under-developed regions. lie elaborates on tv.r o reasons why the socia"> ra.ther than 'individual' return must be explicitly considered. In the under-developed regions, each project tends to incur certain costs for the provision of the necessary infrastructure, while in a more developed region fuller facilities are normally available and their capital cost ignored, although, in the longer-run, heavy expenditure will be required
X

for reconstruction and conversion, Moreover, since individual 'rentability' (profitability) depends on the 'social rentability of t^e milieu', it cannot be a criterion until the underdeveloped regions have achieved the appropriate degree of 'social rentability', a clear reference to the importance of the external economies of development.

Income Redistribution
The Yugoslavs' o^/n approach to the regional problem thus concentrates
on 'development', the better utilisation of the resources of t v =e under-developed regions, but in the content of national development. While this has been the centre-piece of region?! Policy, alternative lines of
1. Refe-e>"c--s bel m to Jelic plone ^111 b° to Borivole J^lic.

33.

solution are available, and ' ave been use^, in a. lesser role.
The regional problem arises from Differences between the geographical distribution of economic activity a^d of ponu'rtion, certain regions generating a larger volume of output, relative to their population, than others. A straight-forward solution is to accept the existing location of both population and economic activity, but to reduce the disparities by a redistribution of income from richer to poorer regions. On this approach, regional equality is assessed in terms of 'income receiver', rat" er tl an in terms of 'income \

produced', the concent which underlies the 'development' abroach. Redistributional measures are applied in Yugoslavia, in the form
of budgetary assistance to the poorer regions and social security payments to their inhabitants, "but are rejecter1 as a lon^-term solution, Kardelj (1964, p^.169-171) repudiates 'mechanical redistribution' as in contradiction to the principle o^ 'each according to his ability and to each according to his work', on which economic equality must
be based. .Tihailovic (1965, p. 568) similarly rejects equality through income redistribution:
'By equality is meant such changes in the structure of the
economy and society as will realise equal conditions for all socio-economic groups... It is concerned ?n.th realising equal opportunities, and not with the mechanical equalisation of
personal incomes and the repudiation of distribution according
to work'.
The development apo»ach itself may be used, as is the experience
of many countries, as a cover for a measure of redistribution. When a 'development' nroiect w1 ich is not justifiable on the basis of its social rentability, even in the wir'e interpretation °riven by ^i'a'l^vi and Miodrag Jelic above, is nevertheless implemented, ti^ discr«*v3"'cy between its actual and social opportunity returns re^rese->ts a

34.

redistributional or 'relief component. Stojanovic (1962, p.62) rejects development policy implemented a.s assistance:
'However, the more rat)id development of the underdeveloped,
or insufficiently developed, regions, is sometimes -.vro^gly
treated as granting economic assistance to these regions; in
other words, that society as a w^ole makes sacrifices for the
more rapid development of those areas which, in its legacy, capitalism left underdeveloped. If, to repeat, regional development is regarded as the optimal territorial organisation
of the factors of production within the framework of the entire economy, then, in the longer run, economic assistance can never exist, because the very meaning of 'assistance 1 is such that it conceals within in itself something that is a loss for some-one, which he undergoes for the benefit of another'.

Migration
Intra-regional migration, the movement of workers into higher-productivity employment in a Different locality, raises the level of regional output: inter-regional migration, similarly, increases national output. Output in the losing region, however, is not increased, unless the marginal productivity of labour there is negative - a very extreme case of 'underemployment' - but remains unchanged, provided the migrants were previously unemployed or under-employed (at zero marginal productivity), or are replaced in their previous employment (possibly after a sequence of .-job-shifts), with no reduction in output, by others not formerly employed. The reduction, as a result of migration, in the number o^ recipients (including dependents) of the given level of regional -mtput improves income per head. Even if the total labo T-force, and, consequently region?1 output, are reduced by emigration, the differential in out-put per worker, between the emigrant and the recipient region, will, on the static assumptions of a given capital stock and ri-iini^Mn- marginal productivity of labour, be reduced. Thus irter-regional TV-ration

35.
brings certain improvements, in the short-run, and without increasing the level of regional outnut, in the position of the poorer regions. The longer-term, or dynamic, effect is, however, less clear. .iyrdal (1957, pp.27-28) sees inter-regional migration as a disequilibrating force, since its selectivity 'at least with respec 4 to the migrant's age 1 will, through its adverse effect on the age-structure of the population in the losing region, reduce the participation rate. To this can be added a further long-term loss of output as a result of the qualitative selectivity of emigration, the departure of the more ambitious and energetic members of the labour-force reducing the rate of innovation.
Yugoslav economists, however, are not concerned at these possible long-term consequences. Without explicitly distinguishing intra- from inter-regional migration, they recognise that, for the foreseeable future, copulation movement has an important contribution to make to the 'development' solution of the regional oroblem. T.Tibailovic (1965, pn.570, 573), for example, asserts that
'Nothing would be so economically naive as the assertion that
all areas have the same conditions for develo-vne~t, alloying the
same concentration of economic activity and nonrle.tion, and, from their own potential, offer the same contribution to the develop-
ment of the economy as a whole*.
'The territorial redistribution of population slays an
important role, whether the concern is with equality (of
development) or priority areas, or, indeed, with the solution
of the apparent contradictions between these two claims'.
Stojanovic (1063a, pp.632-683) makes a similar distinction between 'active' regions, suitable for development and the further concentration of population and 'passive' regions, which must lose population:
'(The uneven distribution of population) requires t'-at economic
regions must be clearly delimited, in respect of those wl\ich
are to be immigration, and whic" emigration, regions... it is

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quite clear "hat epch region in Yugoslavia is not, and will not be, (even after 1970) in a position to absorb the entire labour-force on its territory. This .neans that, ; n ^l^nnin^, -e must forsee the vrav -'n '"hich the labour force will increase p^non-*
the individual regions.
... In pursuit of the objective of the greatest possible economic effect from investment, even in the longer-run investment will not be justified in some exceptionally nassive regions, t n 'ot is, where there is little concentration of population, natural
resources (as kno-m at t'-e moment) are r>rrticularly nea~re, and
the other basic pre-conditions for development, (in particular, infra-structure) scarcely exist. The concentration of investment into economically active areas will bring far greater economic results'.

A Composite Approach
Alt' ough co -.'centu^lly distinct, those three lines of solution, development, income redistribution and population nitration, each play some role in Yugoslav policy, and prove neither mutually exclusive, nor even independent, in practice. Budgetary transfers, aimed at narrowing the differences in the standard of social service, particularly in education and health, provided in the various regions, assists migration, by making the population better equipped to move. Migration reduces the size of the population for w1- om development has to be organised. Development itself, nerhaos slightly surprisingly, tends to promote, rather than retard, mi-ration; t" e creation of new employment opportunities in underdeveloped areas, in factories and on construction sites, awake.is an appreciation of ev^n better opportunities available in other regions, or, sometimes, abroad. By improving the efficiency of the national labour market a/ d encouraging the relocation of population, 'development' makes a Rouble contribution to the solution of the regional problem.
"".oth the redistribution of income and migration can, however, be effective to only a limited extent. Redistribution can be only a

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palliative, not a cure, for low incomes; -itb one-third of the population involved, at a level of r>er capita out out only half of that for the rest of the country, the equalisation of incomes would require a larger transfer than could be acceptable to the other regions: instead 01 r>romoting national unity, regional nolicy along t 1 ese lines would create political friction. The simple fact, again, that one-third of the population is involv ed, and 40 oer cent of the national territory, precludes migration as the princi~>a"! solution. The nationality differences are an obstacle to migration; all emigrerts from Macedonia and Kosmet, for example, and all immigrants into Slovenia, face a language problem, in addition to the ubiquitous differences of culture and dialect. Population movement can be facilitate^ by government action, through the provision of training centres and soonsorshir> schemes, but, barring compulsory resettlement, individual initiative must do the rest. Migration, even if socially acceptable on the necessary scale, cannot be a costless solution; apart from the social costs involved in the run-down of communities in the regions losing r>onulation, and the direct costs of movement, borne by the individual migrant, heavy investment expenditure is required for the provision of social overhead capital in the recipient areas. These alternative approaches have therefore had only a subsidiary role, while the centre-oiece of policy has b°en development, but within the context of the development of the economy as a whole.

38.

(iii) The First Attempt; The I'ive-Year Plan, 1947-32
The first attempt to promote the development of the backward
regions was launched, as part of an ambitious progr^ime for the development of the con-try as a whole, by the ne-r Communist r:overnment which came to power at the end. of the Second World V.'ar. To implement this pro?;rannie it swept away pre-war capitalism a:.,d introduced a system of economic planning and management cl sely modeller? on that of the U.S.S.R.
All the means of production were progressively nationalise^, with
the exceptions of private peasant hold in~s in agriculture, and of equipment in handic&fts, and -'n small sections of the construction industry, retail trade and personal services. The exemption of agricultural land constituted the major deviation from the Soviet
model; the exemption was made ostensibly on the principle 'hat 'the
land belongs to those who work it f (Yugoslavia (1946, art. 19)) but outright nationalisation -' T as politically i^nossible because of the important part played by the peasants in the Partisan struggle. However, a maximum land holding, generally of 25 hecteres of arable land, --as imposed, and the larger private estates expropriated. The other exempted sectors were left in private han^s for the practical reason that their small scale of operation would have made them difficult and costly to administer. To ensure t 1 at the survival of private ownership of the means of production, even in this limited form, could not ^ive rise to any resurgence of capitalism, the employment of ware-labour was restricted to five persons. The new regime t 1 us established direct state control over virtually all economic activity, wit v the exception of agriculture, which continued to be over 9^ per cent in nrivate

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han^s, and handicrafts.

Centralised Directive Planning
State control of economic activity v;as imn lamented thro gh the
system familiar in the U.S.S.R. and, later, in ^uch of Eastern '^ characterised, retrospectively, in Yugoslavia, as ' r entra.i -i.^e<* Directive planning' . * A hierarchical structure of Ministries and other holies was established, to control and administer the various sectors of the economy. The state attempted to control virtually all decision-making by planning in great detail, in predominant!^ physical terms, and by posing plans and their fulfilment as directives to the enterprises,

2 which formed the lowest tier in the administrative Hierarchy.

Zekovic (1957a, p. 24) sums up the system in these terms:
1 Above all, the economic system was characterised by the
unlimited intervention of the state in t^e economic life of
the country... The st?te apparatus Tr/°s the organiser and
direct manager of all economic activit.y'.
Kardelj (1953, pp. 1-2) has given two reasons for the adoption of this system, the backwardness of the country, and the hegemony of Soviet ideology:
'When the first fedral Constitution was adopted, (in 1°46) ,
our country was at the beginning of its socialist development,
both in its material aspects and in socialist experience.
Our deliberate socialist aspirations were then limited and impeded, in particular, by two objective factors: the backward condition of the country, '-;ith all the material, social and political consequences of this, and the he ^emor^ of Soviet ideology, which was a strong influence on us at t" pt time.
These two factors... fo^nd expression in the relatively strong emphasis on the role of the state apparatus'.
Jelic (1962, pp. 47-48) similar!,- justifies it for the more narrowly

1. This tern, or a similar one, is in common use: tMs is t?:e - term used by Borivoje Jelic (1^62).
2. The princinles and operation of this s stem are we.l J described in Jelic (1962, part II) and Zekovic (1957a).

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economic purpose of implementing 'the priority task of raising the country's rate of accumulation and rate of growth, and of concentrating available resources on these priority objectives', which, he believed, could be achieved 'only through the single organised force in existence at that time - the new state'.
Centralised directive planning was particularly favourable for
the underdeveloped regions, as the state both determined and implemented the pattern of development. The centralisation of all investment funds and investment decisions eliminated any institutional difficulties to securing the necessary resources for the backward regions; their development was absorbed into the general process of organising national development. Grlickov (1^53, pp. 273-274) summarises the impact of this system:
'The system of centralised, distribution of accumulation was
a fundamental characteristic of this period. V/it'iin it, the
direct determination of the rate of economic development and
the volume of accumulation was the basic method of financing
the more rapid development of the underdeveloped regions.
There is certainly greater opportunity for more precise nl arming
of the rate of development in underdeveloped areas within the
framework of this system, and a better situation in respect of
the other necessary conditions for planning complex development, according to given conditions of the factors of production'.

__ . plan
The First Five-Year Plan, (Yugoslavia (1^47-51)), introduced in April 1947, was an ambitious programme for the development of the national economy, of which the elimination of the differences between the regions formed a part. Although it contained a grand list of objectives, affecting every area of economic life, the keynote of the Plan was 'industrialisation', particularly the build-up of heavy industry. In
his speech to the National Assembly during the debate on the Plan, Jito

41,
(1947, p.7) described it as 'the Plan for the industrialisation and electrification of our country 1, echoing Lenin in a phrase v/hich was often repeated.
The Plan objectives for the underdeveloped regions were 'to ensure
a speedier rate of development in the backward People's .Republics and remove all the consequences of uneven development' and 'to remove the inequalities in the development of the People's Republics and build Yugoslavia as an economic whole'. (Yugoslavia (1947-51, arts.5, 21)). Special efforts were scheduled for the Republics of Bosnia-Hercegovina, Macedonia and Montenegro, and also 'backward areas in other Republics', although these were not specified by name. This objective was to be secured through 'the most rapid increase possible in production and investment 1, and, in particular, the targets set for the level of investment and the growth of industrial production in the three
Republics were substantially above those for the rest of the country.
At this time, the problem of regional backwardness was already seen
as a microcosm of the national problem, the more acute local incidence of the underdevelopment prevailing in the economy as a whole. As 'industrialisation 1 was to be the spearhead of national economic nrogress, so an even higher rate of industrial development in the backward regions was to close the gap between them and the others; the process of development was to be the same, but at an accelerated rate, through an even more intensive drive to industrialisation. The time-horizon for eliminating the disparities was not specified, but was intended to be,
if not precisely the five years of the Plan period, at least relatively short.
Drawn up as it was in an atmosphere of revolutionary -rervour, when

42.

great achievements v:ere expected from the socialist system and the

revolutionary ardour of the people, * the targets in the Plan were set,

as was later recognised, at an inmossiblv high level, as statements of

ambition, rather than precise targets. The Polish economist "°obrov/ski

(1956, pp.30-81), a syripat' etic observer, ^ives as his opinion that

'The Yugoslav Five-Year Plan, as it '--/as adopted by the People's Assembly of Yugoslavia in April 1947, is a curious document. T t certainly does not always do credit to its authors - errors o:r
detail are numerous, and the whole is an er" or. The line of
argument very co^nmon today, v;hich retains of this Plan only its excessive size, is, ho-.vever, an over-sinn.lification. On a closer look it annears rather as a mixture of good and mistaken ideas.
Host often mistaken, moreover, precisely because of lack of moderation'.

The objectives for the underdeveloped regions were certainly

formulated with insufficient regard to the time necessary to eliminate

a legacy of several centuries, overlooking even the inefficiencies in

production which would inevitably result, in the initial years, from

lack o~ experience. The development of the backward regions \"?s,

moreover, a secondary objective in the .'la ^; as Uvalic (1 Q ^2, ^.29^)

points outj

'Because the Tirst Five-Ye=r Plan, had as its nriorit,-- task the construction of the basic industries and the electricity supply industry, it is understandable t u at the underdeveloped Republics could participate in this o^ily to the extent t-at the~ r nos^e^sed
the necessary conditions for the development of these sectors.
The tasks set out in the i'lan figures for the underdeveloped
^epublics represented, therefore, an expression of aspiration
rather than ru^ranteed conditions for its pc^ievement'.

However, the objectives set oin t in the Plan soon lost their

relevance to practical decisions. The Plan. ",r as in o:nln/ its second year

of implementation, -^h.en Yugoslavia '.vas excelled fro1^ tl^e Co^in - ror^ and

!. 'The enthusiasm for work '.vit' which or ^eople are building a free homeland is the very same concrete ex^r^ssion o'r our new, sincere patriotism rs was militant self-sacrifice in the V/pr of Liberation'. (Kir'ric (1943,p.206)).

43.
subjected to economic blockade and the threat of invasion by t^e East European nations. T Talf of the country's external trade was disrupted, and supplies of es-ential industrial materials and equipment cut of~r; in 1947 56 per cent of Yugoslavia's imports and 53 r>er cent of exports had been traded with the Corainforn countries, and in 194^ only 14 ~>er cent of each. * Simultaneously, the country had to re-arm ranidly, as a protection against possible invasion.
The strain placed on the planning mechanism, by these events,
became severe. V/ith resources already over-committee by the Plan, many supplies disrupted and priorities frequently rescheduled with changing circumstances, 'planning 1 gave way increasingly to ad hoc decisions, frequently ill-considered and hastily adopted under the pressure of events. The Plan itself was first reduced in scor><=> by the postponement of a number of less urgent nrojects, including a number in the under-developed Republics, then extended for one year, to run until the end of 1952, and finally superseded by the Key Investment Programme. This Programme reduced the Plan tasks to manageable proportions, by the selection of only a small number of national importance and, mainly, in the basic industries and transport. These were, in effect, scheduled as individual tasks rat er than as a full development rvla-. Thus, only four years after the socialist revolution in the economy, comprehensive and long-term planning was, for the time being, abandonned.

Development during the First Pive-Year Plan
The results of this first attack on the economic backwardness of
the country, in the course of the First Five-Year Plan, were, in
1. Details of the effects of t^e blockade are ^iven i^
Commission for Europe (1954, ^n. 111-112) p.nr1 ZnVovic
pp.209-212).

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general, meagre, although a few notable developments were achieved. Over the six years 1947-52, the national. income of Yu^oTlavis increased at an average annual rate of only 2.2 ner cent (0.9 r>er cent ner hear* of population). The major sectors, however, yielded widely differing rates, industry and transport growing fairly rapidly, ^t 6.2 a^d 6.4 per cent respectively, while agriculture, by contrast, showed an annual decline of 3.2 per cent. Industry, transport and construction each followed a similar year-to-year pattern of ranid expansion between 1947 and 1^49, checked in 1950 and reversed into a decline in 1951 and 1952; agricultural output, on the other hand, fluctuated widely from year to year, with notably poor results in 1950 and 1952; t v ese agricultural fluctuations outweighed the growth trends of t^e other sectors in their influence on the year-to-year movement of national income. (Table 1-4)*
Among the individual regions, the highest growth rates were achieved
by Bosnia-Hercegovi ^a, Croatia and Slovenia, while in Vo.jvodina, the most agricultural of the regions, the l?vel o:° tatal income fell.
(Table 1-5). " Their higher rates of population increase resulted in

1. Output figures are available, by region, only for net output and
for 1947 and 1952, the two end-years of the period* Regional growth rates have therefore to be calculated by compound interest. For Yugoslavia as a whole, the availability of annual figures mahes it possible to calculate trend growth rates (by f ; tting a regression line, in semi-log form, by least squares). The results compare as follows:
Trend Rate ($) Compound ('")
National Income 1.9 2.2
Agriculture -2.3 -3.2
Industry 5.2 6.2
Transport 6.2 6.4
Construction -0.6 1.0
Y/hile the trend rate is the preferable measure, in that it incorporates the growth in each year, the connound interest rptes gi^e a suf 'icier-tly good approximation for the general conclusions to renahn unaltered.

45,
Table 1-4 Grcr.vt' -if National Income .and. T "a,ior sectors. 1947-32

"atio-ital Income
(billion dii-srs)
'% Annual Charge
Agriculture
(billion dinars)
% Annual Charge
Industry
(billion dinars)

t

1947 1Q4^ 1049 1950 1^51 1952

1146 l'^78 14^4 1355 14°4 12°2

+20.2 +8.4 -n.3 +^.5 -13.6 1
425 494 50? 374 543 362
+16.2 +2.6 -26.2 +45.2 -3^.3

330 40T 452 455 449 445

% Annual Charge - +23.9 +10.5 +0.7 -1.3 -0.9
Transport
(billion dinars) ^ ' u 4 ;± ^ ^
°5 Annual Charge ' - +30 +20 +9 -7 -14
Construction

(billion dinp^s) 106 131 159 144 115 112

% Annual Charge - +24 +21 -9 -20 -3

One 'billion 1 here, ar>d in other Tables, represents o^e t million.
All dinar valuations in this ']>ble are at ">rices o~~ I960.

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Table 1-
1^4'7 -52

Yugoslavia

"atio al
Income

2.2

i

Slovenia : 3.1*
i

Croatia 3.4*

Vojvor'iria -2.5

Serbia
Proper i 1.6

"osnia-
H^rceTOvina

Macedonia

4.0*

2.4*
?

"lontene^ro

Kosmet

1.1

1.6

Popu- !
IP tio>-J r

1.4

0.9

0.8

0.6

1.5*

2.0*

2.4*

2.3*

2.1*

Income

ipr Tr ea(^

0.9

2.1*

2.5*

- 3.0

Ao;ri-
cul 'ure

- 3.2

0.0*

- 3.0*

- *,3

i

0.1

2.0*

0.0

- 1.3

- 0.4

- 2.8*

- 1.8*

- 4.4

- 3.7

- 4.5

Indus-
try

6.2

6.9*

5.9

0.9

5.5

3.9*

^.2

7.8*

9.2*

Transport

su

7.2*

3.4

5.5

6.4

20.7*

3.6

3.6*

7.3*

Construc-
tion

1.0

- 3.0

- 0.1 1

i

- 1.7

- 0.3

5.1*

7.9*

- 2.4

- 2.3

* denotes a --.rowth rate above the national avera e.

NOTE: Growth rates have been calculator by comDounr" interest

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?.n even less favourable positior! -TOT the underd evelo^ed r«"-ions in the growth of regional income ^er hear1. Bosnia-^ercegovina, first in t 7°e ranv in? by t^e 'rrowth of total income, dropped to thir^ nl^ee, behind Croatia a. d Slovenia; the gro""tl) of income in Macedonia '/as exactly offset, while in TT ontenegro and Kos^et the growth of regional income was less than the increase v- rn^ulation, bringing a fall in r>er capita income. Thus only Bos:iia-T-Tercegovi --a, among t v>e underdeveloped regions, and only Slovenia and Croatia, amon? t^e others, achiever1 any increase in income per head during the years of the ^irst Five-Yea.r T1 lan.
The r *ro'vth of industrial ^ntpi.it, w ich t v e Pla-i had made ^he snea.r-
1] ead of development, for the underdeveloped regions as for the country as a whole, * was not only ratr'.d in each of the underdeveloped Re^iblics, (av- d also in Kosmet), but more rapir1 t^-an in t^e rest of the country; so, also, for the most r^rf, was t^e gro"tl' of transport. To this extent, the ~r: lan objectives for the underdeveloped regions vere implemented, 3ltho' i gh less strongly than had bee- intended in t^e Plan. T]-ut, on t 1 e other hand, with the exception of ^osni^-^erce.^ovina, the underdeveloped regions suffered a more severe decline in agricultural outDi.it than did the others (anart from Vojvodina). The Icy-er .V-'vel of development there made agriculture of relatively ~reater, and iT^ustry of lesser, imnorta'.ce, in the o^t-nut structure of the underdeveloped regions. The net outcome of t'-ese various on^osinr " tendencies was favourable ool r ir, the case of Bosnia~T ^erce'~:ovina, w' ile in the ot^er three regions the resulting growth of regional income was so low that
it was fully absorbed by t v e increase in no^i 1 ati^n.
An 'ual figures for regional v~.cone are not available to sl^'" whet 1 er
1. In the Yugoslav industrial classification, electricity (^e
and distribution) is included within 'industr '.

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t^e check to national growth from 1^50 had a differential regional i'~>~act. On the evidence of the inde>r of industrial production ( "avezni Zavod^.a Statistiku: Statisticki 111 ten °1, Table 2-2) the three under-develo^ed Remiblics suf ered less of a set-had' t-an the others^ the index for Bosnia-ITerce^ovina was virtually unch--n^ed in IT50, 1951 and 1952, while for i.JDcedonia and Montenegro i.t fell between 1950 and 1951, but increased again in 1952, in Macedonia to almost its level of 1°50, in Montenegro to '-/ell above it. But the ^ethodolo^ic?! problems of compilinq; such an index, on a pre-""-r base (19°9) and for regions '"here industrialisation was only ^e-~-inni-<ig, limit t'°e acruracy of the detailed figures.
The nrincinel feature of the development of the underdeveloped
regions drrLng these years \^as t v e growth of industr^ in Bosnia-
T Tercegovina. This, however, derived from the priority of the 'basic sectors' in the Plan, rather than from the priority o?n & - u^derdeveloned region. The region's resources of iroo-ore, coal, "r ater-^o-'er and timber constituted the country's most important resource base for the 'basic industries', and this brought an i vi tensive build-nn of heavy industry in their vicinity. In 1946 a small steel-mill (c^nacit ' 80,000 tons) already existed at Zenica, and between 194^ and 1Q52 v^.lf of the total investment in the iron and steel indnstr^ in Yugoslavia was directed into Bosnia, sunniemented by hi^h levels o^ investment in priority sectors such as electricity and coal- In addition to t v e high ouality of its natural resources, Bosnia ^ad the further arVenta-;e of being wel 1 placed from t; -e strategic Doint of view, i^ t lo e he-rt of t'ie countrv, v/ell removed from exposed frontiers; this consideration v/as of particular importance from l'H9. By lQ r-2-5 7 the build-un of the coal anr1 s^ee 1 cornier in central Bos i.a, in centres snc^ as Zenic^,

49.

Travnik, Kakanj anr1 Tu^.la, was v/ell advance*-', supported by developments in transport and electricity supply. Given the original Plan Driorities and the subsequent Importance of defence and re -armament, the resources of Bosnia would have been intensively exploited, irrespective of t u eir regional location. It '-as fortuitous, but also gratifying, that the intensive development of the h^sic sectors took ->lace so predominantly in t^e largest of the underdeveloped regions. UvaJ.ic (1%2, p,297) has summed up the development of Bosnia-IIercegovina. at this time:
Tecause it was necessary to ^evelop heavy industry as rapidly
as possible, account was tahen of which location wo^ld, by the
closest possible "oroximity to sources of rav: materials, require
the smallest and least e>~nensive investment. Associate^ with
these were, moreover, very important strategic considerations,
which sought the location o:p imnortant industrial projects at
a Distance fron the frontiers which could, at that time, be regarded as in danger. All this makes clear why, throughout
the whole post-"/ar build-up of industry, the Republic of Bosnia-
r "ercegovina was particularly favoured, amo"'" the underdeveloped regions; it corresponded best to t'^e requirenents just mentioned, both in resnect of the raw materials aTr aiT?ble, anr1 of its
distance from the frontiers'.
Lacking t]| e resource endowments of T3osnia-?ercpgo^r ina, t^p other underdeveloped regions could ^ot compete, as locations for industrial development, wit1 " Slovenia and Croatia, with their 'r reat advantages
in exne^ience an^ previously installed capacity. The scheduled Republics, Macedonia and >ro,Ltenegro, were not, ^ovpver, entirely left aside from development efforts, both receiving relatively high levels of investment, as is sho-ni i:-, Table 1-^. . The sh?re of " T onteregro in total investment wa.s higher than its scares in bot 1 -' national income and population, that is, it exceeded the national average in bot>> its investment ratio and the level of investment per head, « position shared by "'osnia- ercerovina among all the regions. T'la.cedonia r "as
slightly less f^voure^ , being above the average in investment ratio,
but below in investment per h e ad. Both Reon.bllcs received restively

. 'able 1-6 Regional Shares in national Inco -e, Ponnla-'-ion an^ Investment. 1947-52

Yugoslavia

Slovenia

Croatia

Vojvocina

Serbia Proper

^'ational
Income

100

1-^.3

26.4

10.3

24.6

Bosnia-TT erce~ovina j 14.0

Macedonia

Montenegro

Kosmet

Unallocated by
-pi •. £ • 1 0

4.6

1.6

2.3

-

Population

100

9.0

23.7

10.3

26.2

16.4

7.4

2.4

4.6

-

Total
Investment

100

14.5*

24.0*

5.2

2?. 6

20. 1+*

5.6+

3.1+*

2.2

2.7

Investment
in
Industry

———————————

no

18. 2+*

23.0

4.1

22. 9

20.°. + *

5.2 +

2.3+

2.2

1.3

Each region is shown as a -oercenta^e of the figure for Yugoslavia. The shares in national income are the average of the t"r o yea^s, 1°47 ar.c1 1952, which are the only years available; tie of er figures are averages of the scares -'.n each ->f t^e six years.

+ denotes an investment ratio above the national average.

* denotes a level of investment per hear' e t^e national average.

high scares o~r t-p investment in Industry, without matching the very high levels of "Bosnir"-"ercegovina ?-^d Slovenia. In sr>:Me of the difficulties of the time, therefore, the Plan ob.lect-ive for investment in t^e poorer Republics was partially nut into effect.
In 1946 Llontene^ro Md b?d no industry at all, most inadequate com-iunicatio^s, and low levels of agricultural and handicraft nroc^ction. Initially, investment efforts ^vere confined to t^e eo.nstrjction of transport facilities; the region's first railways were nuilt (from Titorrrad to the coast, and from Nik^ic to Tito^rad) and several roads were improved. Industrial investment increased after 1949, v<ut was largely limited to two sectors, electricity and steel, an^ in effect,
to two projects, t^e Gornja Zeta hydro-electric scheme and t Vi e (later notorious) rliksic steel-works. None of these projects cor Id nay off immediately - several, indeed, were not completed by 1952 - but must,
- evert^eless, be accredited to the development efforts ma^e for the Republic during the Plan.
In .lacedonia, also, some foundation was laid for future "ro^th.
^lood control on the Vardar, linked wit^ irrigation and soil-conservation, extended a-id imnroved the central a -ricultural area. In industry, electricity generation (at T ^;rovo), the quarryin" of felcsnsr and
the production of textiles a^d tobacco -r ere all expanded, but t^e level of industrial development remained very low.
Virtually nothing was achieved fir the development of Kosmet -t
this time. It was t^e onl r one of t s e underdeveloped r^^ions (and, admittedly, it -vas not nationally scheduled as such) where the level of investment irr -n s lo' v er, relative to both regional income and population, t an in the country PS a v^hole. Of its meagre Ip^ei of industrial investment, half was directed iito load-^ninins '.vhic 1 ^, In

52.

1952, remained its only industrial activity of any note. By 1952-53 the level of income per head ir Kosmet was lower, and the development prospects cert.?.inly no better, than in 1947.
The growth of output, and even the level of realised investment,
in the underdeveloped regions, thus fell far short of the ambitions expressed i the ~-Ian. In part this was inevitable, from the 'lack of moderation' which ?ohrowski (1°56, p. 31) noted in the T'lan. But the dominant economic influence of the neriod was not the Plan, but the 'Cominform troubles', (as they came to be called) bringing the blockade and the emnhasis on defence. This serious set-back to the development of the country as a whole "Droved somewhat of a mixed blessing to the underdeveloped regions. The intensified build-un of the basic industries accelerated the industrial development of Bosnia-TTercegovina, which would, in any event, have moved ahead strongly, but it caused the •postponement of various projects in Montenegro, while burdening the region with an unwanted and badly located steel-mill, ~" and retarded the development of li^ht industry, for which Macedonia was particularly well suited. Kosmet suffered severely from the change in political attitudes. The abrupt reorientation of Yugoslav trade away from the
C ^inform countries renewed the locational advantages wMch the more northerly regions had en.jo^ed in the days of t]ie Austria"1 empire, and emphasised the remoteness and noor access opportunities of much of the underdeveloped part of the conntry.

The Need_for Change
T5y 1951-52 it was obvious tb.pt the economic position o^ the country
was most unsatisfactory. Investment had been maintained at t 1 -^ very
1. This is discussed more -rulTv below, in the suhsenuent development of I/'ontenegro (Chanter 4 (iii)).

53.

high level of 32-33 per cent of social nrod^ct nn eac] "' year until 1952, when the cut-'-.ack to the Plan reduced it to 30 per cent, but the
ri:ro'"th of o^trmt was not ir'^i essive. A substantial -^pt of the investment during the neriod, such as t'~e 24 ^^ cent w^ic 1 ha^ been devoted to transport, and the further portions for other infrastructure, would yield its full results only in the lon^er-ter-i. ~3ut industry
hpd been the major development priority, and after 194^ b.nr"1 failed to achieve aoy increase in output. Af.ricu] ture, sti 1! by ^^r t^e largest sector, had been reduced to a very serious oli^ht by the victimisation of the private sector, an^ the policy of forcec7 collectivisation implemented between 194q and 1952; p^ricultur?! output in 1952 v/rs
one of the lowest levels recorded, and one-third ^elo-.v its level of 1951. The disruption to production caused by the blockade was still being felt, but those responsible for economic rnpnp r'ement ^ad increasingly to recognise that a larger ^°rt of the di^^icu 1 ties lay in the inadequacies of the system of centralised directive planning, and that, if development WPS to proceed successful!" , major chanres wo 1 "Id have to be

54,

2. T> EGENTRALISEr PLATTI f ING

(i) The "'rj.rci'-yie of Decentralisation

The system of decentralised planning, with its bole and original

innovations, was Revised by the Yugoslav authorities as a repudiation

of centralised directive planning. The immediate practiral motivation

for change derived from the growing inefficiency o:r administrative

planning, but, in addition, ti"e ideological foundations of the Soviet

system no longer received the same unquestioning acc^-V-r-nce as prior

to t^e br-ak with the Cominform.

Tito Mmself (1952, pp.7^-79) voiced strong criticise to the

Com unist Party Congress of the inefficiencies in the implementation

of the Plan:

'It is necessary to underline that, after the announcement
of investment decisions and in ovr struggle not to erceed t:^e planned periods, we bar to undertake almost all investment construction, without having t^e projects elaborated in full;
this, :/•' a number of cases, forced us to carry through an
uneconomic project and, later, to efTect corrections which
cost us precious millions...
A further fault of the Five-Year Plan (was) that a lar~e
number of projects we^e constructed without sufficient attention to their profitabi 1 itj'-, both from the Doint of viev/ of the
balance of payments and of their domestic eco-TO^'c imr>??ct.«.
An even more serious de"ect v/a.s t 1-i e me^aloma'iia v/hich
dominated the execution of numerous projects a.id which had
to be remedied when it bad already caused serious losses'.

The intrinsic deficiencies o:r the system are pointed out by

Jelic" (1962, nn. 125-127) :

'With centralised management a^d t; e administrative intervention
of t^e state apparatus, the problem of initiative in state
eco :o; iic enterprises inevitably became acute... ^axi-vum energy could be used only in the direction of the best ^os^ible
fulfilment of Plavi tasks, witho it much opportunity for the correction of event ^1. inconsistencies or, PS is even no e important, for the effective utilisation of t v ose opportunities and adv^nta^es which e central!" pre^arer1 Plan no '1^ not for^ee. In an underdeveloped economy, where the vv^ole of revelo
is directed to a fev: b^sic tasks, this ^roblem r^oes

55.

initially, take acute form. However, as the economy ^eveloDS,
p.nr1 development presents itself increasingly as a complex
process, stro.""'!:" centralised planning and administrative
management are increasingly less suitable for the effective exploitatio of the many possibilities offered by the complex
life of a modern economy'.

The criticisms of centralise^ directive -nl^ii ing were formalised,

particularly by Kardel.j , around the theme t 1 at f e sys em had outlived

its usefulness. As there had been, 0,1 his analysis, a twofold reason

for its adoption in 1946, in the backwardness of the country anr7 the

hegemony of Soviet ideology, " both were felt, from 1150, to aiply in

the o-o->osite direction, for the ending of strict centralisation:

1 If we reject that system (centralised Directive plan in-;) today,
we do so not because -e v e"i'eve we mar'e a mistake formerly, but
because "/e think ths.t we have, for the most -n?rt, attained the
objective which v/e established P.- id car, therefore, noir ' move further' (Kardell (1^54b, "^. 259-261)) .

"'ut he further acknowledger! tbpt the introduction of changes v/a c5

'undoubtedly accelerated and c^rystallised by our struggle p^^inst the

a^rressive repression of Soviet hegemony' and the fear of 'bureaucratic

degeneration 1 and the ;-ro'" r th of 'state capitalism' which t^e Yugoslav's

2 observed in the IT.3.3.R. and, inciniently , in their o-v : system. *

Prom the mos narrowly economic ^oint of view, a similar rationale

for changes is "-iven by Jelic (1^62, ^.127):

'Conditions "/ere rire for changes in the economic position of
the country. A ma.ior extension o^ economic activity WPS
imminent as a res^l-1'" of the extensive process of investment.
A ma.ior eyoansion of production WPS expected,.. Tv e entire
nrocess of the further construction of a socialist society
coul^ not continue urder the old methor's, the "r^mework of
which had become restrictive and r^aa

Th^ 'Revolution within. « Revolution 1

The process of transforination to the new, enr uniquely Yugoslav,

1. Above, p.35-
2. The most famo'S ^"/position of 'bureaucratism' is t'-rt gl^en by t v Disillusioned \]ilas (1957).

56.

system of decentralised planning spanner1 several /ears: it can, indeed be said that, some fifteen years late; t 1; e system is still transitional, searching for definitive form. Bu 4 its essential characteristic, the balancing of centralise-"" anr1 decentralized decision-^.a^in->:, ^s it was established around 1953, was 10 1 fundamentally altered by the frequent, sometimes extensive, modifications made between tben anr" the enD of 1964, The c'-an^es of 1950-53, by contrast , bv introducing Decentralisation,
v/e» designed to, anri did, effect a decisive break it 1; the nreceering system. Coming as it did only a fe- years after the soclalis+ revolution "<•'•" ich harn swept away capitalism, the introduction of t^e n°v; system has been described by Auty (1954, p.l) as a 'revolution vrtlrin a revolution'. Both the objectives and the methods nf centralised directive
planning -ere rejected. Kardelj (19~4a, p. 156) repudiated the desirability and usefulness of generalised state mana-:e^.ent :
iallst nla. 'ned econon- does not mean, and must not mean, that
it is necessary to subject -11 activity in society to the state apparatus a-p^ to -"o a^ay -'ith al 1 free ^ro-th in this s^'ere..
there can be no ^ro^res- of social isn ^itVout this freedom (of "tersonal initiative in t v e economy)', ^-*
and elsewhere, (Ta^del.i (1°55, p. 22))
central leadership '"hatev^r, no matter how wise it "la" 1" be,
co ild alone direct economic a.n.d social develo^-^t in total and
in detail' ;
instead, t^e state organs should be restricted to 'that planning and canalising role which is necessary for the maximum utilisation of the creative energies o^ society' .
The crucial element in the 'revolution 1, ^ivvir effect to the
reduction in the functions o ° the state a d t v e enhanced ro^e of economic

1. The emphasis here echoes, in ironic contrast, the fa-no-13 c^m
nade by Kidric (I n 4°) to the Communist Party in 1°4^ that 'our
still incline to spontaneity that is a vest'-;e of tbp t»ast In their conceptions'.

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an*3 other organisations, was the replacement of ^onn£--d hv Incest:! ve as the orJnciDa' instrument of economic T.a^p ^e ra r'nt. As KardeJ.i O-^" n.23) observes:
'the maximum effort and initiative of t^e in"-"") visual defends
not so rrr-ich on rirectiv^s, ron^-rol a ^ checking... as it does
upon personal economic and social, culUiral a^d material,
1-tere^ts' ,
an" similarly llesaric (19^2, r>.
'the basic rao 4 '.ve-force for the actions of i
economic or?;a:aisr tion. cannot... ^e a central econo-m'c nlan,
that is, a obligation, a directive or a norm, externally established, but tnp interest and -initiative of t^e working peoDle themselves and t^eir organisations'.

Social On^iershi^ of the Veans of Production
A neT " Gonstitutio--1 (Yugoslavia (1953, art, 4)) gave
expression to t V;.e fundamental ide^s of ne 1 "/ system:
'Social ovnershi'o of t^e means of ^ronuotio^, self-government
o^ the producers in the econom"'", an^ se.lf-^over ^me^t of the workinT-neonle i1 ^ comnine, tovm and district, shall be t^p ^a
o^ the social an^ political organisation of t^e country*.
The precedence of social ownership of the ^.eans of production served
to indicate that t>e no" system in no -ay marked a return to nrivetp capitalism. Any justification ^iven for social o^ershin tended, hov/ever, to be on entirely T>J ^ctical ^roun^s; Kr^del.1 (1954a, p. 155) notes that

'The importance of social owners^i^ of the ^eans o f'
is, in part, th^t it ^akes -nossi^le socialist ^lannin.^, the elimination of anarchy in production, anr1 the social direction
of general ecoioo: n ic d
and Jelic (1^62, p. 13) similarly that 'social o
of production mak^s "lossible social, -ipn? ^e ivi ^nt o nrof'n.ction, a^d distribution in acordance with social nreds'. The nra.'-matic tone, narticii 1 r T'ly of Kardel.l's remarks, is stri^i.n^ly dif-'rroni "rom. t'-i of the annou/scenents of nrtio alir?tio-T only P fe-v years

58.

previously; * the intervening years of 'state capitalism' ha r" s n ^own

that public ownership of itself achieves little. "orvet ( 19 6 ID } p. .106)

points the truth of the experience with an apt quotation from Le rr is

(1949, p.

tf'In thc early days of socialist thought," - writes the ./est
Indian Socialist ' F rom Ja^'ica, IV. A. Levis - "it ":?s almost an
a~iom that once property passed from nrlva-'e hands to public
ownership all the nalor social problems were automatically solved;
it would be nut to nurnoses conforming ^ore to t^e n"blic
interest, income woul^ he ^ore equitably distributed , economic rioter would b^ democratised, efficiency ^/ould increase, and the
class stru<-ple >etveen owners and workers woul^1 end, Vhis view
has not survived the experience". Prof. Le"r is •.".•as re "erring, in
the first instance, to British experience, but the conclusion may
easily be eneralised*.

The replacement of 'state' by 'social' ownership of the me a. 'S of

production was not, however, a merely verbal change, but nart of a

wider set of innovations affecting the entire nosition of the enterprise,

which ~ave substance to ' self-government of the producers in the economy'.

Workers' Vana^ement of Enterprises

The first '.Tie a sure of reorganisation in. t v e ec^-o.-riic sy^^en had. been

the enactment, as early as June 1950, of the haw on the llana^ement of

Economic Enterprises by their Working Collectives, which provided that

(art.l) :

'"Tactories, iriines, transport, communications, ^-riculture,
forestry, com ;uial and other state economic enterprises representing social property shr,ll be mana-ed, on behalf of the social
community, by their working collectives, "•"it 1 " in the state
economic plan.
Tv e working collectives shall exercise this ^ans-enrnt through
t'^e workers' councils and managing hoards of the enterprise',

Enterprise assets thun regained 'social nron^rt;' ' , hut the workin r-

collectives (all the employees of the ente?'-nrise, acting as a. body)

1. In 1^46 Kidrin (l'H8, _ n.5°) KadTr . n" . n~r "•, -Tlv , "told the ^>ti Assembly- 'Today we are introducin^ t v 'e la/.v for "'h-'c 1 - our vor^^'nr •oeo^e have long been v/aitln^, for which eac 1 " true rip trio t in this

co-n^try has Ion.- been -vnntln-. Today -e are introdno...n^ t-e 1-- of :rlvate econoni^ entpr^-3.ses .

V 'J

the nationalisation of :rlvate e

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replaced the state organs as t n -e ^'-encies resno'islble for their

utilisation. * T^ot only* did management b^ r the -Yorkers offer the
2 t
ideological advantage * of introducing a higher for-? o:p social relation-ship than management h-r the state bureaucratic ^"maratus, but also

immediate practical advantages; the transfer of decision-''aking nowers to the enterprise reducer1 t' e volume o^ Decisions to be made by, and thus the pressure on, the state administration, w> lie simultaneously allowing greater flexibility for the enterprise to a^a.nt to individual opportunities.

It '/ r as the end of t v e follo'.vi.n<~ year, hov/e^er, before the recasting
of the entire machinery of ^conomic nlan^.i^r a^d management v r on ghtt.be transfer of substantive ^o-^-rs to the enterprise and its -Yorkers' management. The Law on the Ilanned Far? ^ernr-nt o'r the national Economy, enacted in December 1351, brought to an end the executive management
of production b- the state organs, transferring these functions to the enterprise guided h/ the market. Instead of i'^le^entin^ detailed

production ^lans prepared and controlled by the an->ror>riate Ministry, t>e enterprise was, for the most p°rt, allowed, a^ri required to r'etermine for itself the tyne, quality and volu e of its output, and its

1. The irea th t enterprises should h e run by their employees, ^irectly or through elected renr-esent-^tives, is one of the oldest in socialist thougv t, but, unlike nationalisation, one of the least commonly implemented. The Truc;osla,vs 'vere, a-^ have re^aAner3, fully conscious
of the scale of their innovation; Tito (1052, p.57) described it to
the 1952 Congress of the Communist Party (at which the Party turned itself into the League of Conr^nis^s) as 'an action of historic imnortance, because, on t"r e one hand, "'prxist tho'-^ht regards it as one of the most essential actions, if not the essential action, in
the transformation of the relationships in nror'uction an^ social '•"istribut-io-i, and because, o r - the otl ^r '"an?, 1+ is im^ 1 ^nen+ed, for
the first time in history, and that ?fter a. very brief neriod of imnlemen^rtion of t Vi e revo^^tion, in a s^nall and hach-rrd country nuch as ours'.

2. This v/as of ^articular importance to the Yugoslavs a 4 the t-'^e, as ^ they sought to define and" justify t^ir o^. tjo^itio-s folding their

r,0.

production processes and inputs. The role of the market was corres-nondin^ly expanded, enabling the enterprise to buy materials, inter-m^diate products and equipment, a^d sell its output competitively, although supplies and prices o a number of scarce products, particularly imports, remained closely controlled.
The restoration, to a su^sta ti°l extent of the market for products,
and to a limited extent for ^ctors, v-as accompanied by a new importance for t^e enterprise ^roflt and loss accou :t. Previously, the 'i^e of accounting prices, and t Vi e absorption o" any sur^us or defici' into
the state budgets, -ad reduced it to merely an accounting device, with no role as an incentive in enterprise activity. But from 1953, the enterprise '--as ^iven the formal right, (subject to state regulation)
to retain and dispose of the surplus earned in production, as the "inaneial counterpart to its rights and responsibilities for the utilisation of social property through t v>e ^an^ge^ent of current production.
The corresponding, and even more radical, changes in agriculture
soon followed. The failure of the administrative planning of production was first acknowledged, in the abandonment of sowing and delivery plans. But continuing difficulties, culminating in the disastrous ^arvest of
1 Q 52, made the conclusion i^rcr.-nahle that tn<? ?rive to collectivisation, launched in 1949, WPS not producing the expected increase in agricultural output; peasant opposition was being expressed in varying d^-rees of non-cooperation, and ma: y of t^e co-o^e atives *.vere ^"-oving very inefficient, having been hurriedly set u^, without t^e necessary equipment, organisation and management to conduct the lar^e-scale farming for -"hich they vrere desi-ned. In 195", therefore, t' e ^olicy

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of accelerated collectivisation V/FS reversed; those pe.^san^s w^o wished were allowed to withdraw, and unprofitable co-o -^: ra tives v-er? wound
The response to this was so strong that in 19 54 only 9 per o^nt of arable land remained in the social sector, against 25 ner cent in 1^52. * In the collectives which survived, the rn.^nagenr nt of production and the Disposal of retainer1 profits, earned through the market, were transferred to the members, as in industrial enterprises.
In agriculture, unlike other sectors, the abandonment of centralised directive planning war? acenrnDa • ied b the restoration, to nrivp.te o'-'ner-ship, of sone of the land and equipment ^/hich had ^een brought into the social sector. The continued existeiice of t^e nrivpte sector, and its important contribution to development, r/ere exn?icitly accepted from 1953-54; while socialisation remained the objective, incentive replaced coercion as the means, and the ti-'e-horizon was extended indefinitely. In an attempt to maintain the supply of land 1- t-e social sector,
in spite of the withdrawals from the cooperatives, the maximum land holding was reduced from its original 25 to 10 bect^res. With the small size of the vast majority of holdings this measure yielded little acreage, but futher widened the gulf between the small-scale farming of the nrivate sector, and the Irrge-scale activity of the social sector.

The Council of Producers
T^ese reforms in t v e position of the enterprise were rrralleled, at
t'-'-e lr-.r el of macro-economic decinion-nakin^", by the esi Ci blishme- 1 , in the 1953 Constitution, of the Council of T 'rod^cers, PS t^e second Chamber
of Assembly at each governmental level. Its members ": ere el^ct^r by tbe 'direct produce ^s' in the economy (the active nonnl-^tinn), voting by
1. Savp7^i Zavo r" ^a Statistiku: Ju <;oglavija. 1^45-^4, '"able ^-°.

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economic sector instead of 'veo^ra^l-rcal co^stitnencv. The number of members elected by each sector was made proportional to its sha^e in national product, in order to counterbala ce the numerical innortance of the agricultural population, in a still ore dominant],- rural society.
The vesting in the Courcll of Producers of responsibility for the coi'^uct of economic affairs was designed to eroress the rights of producers at the ag^re^ate policy level, supplementing their role, through the workers' collectives, at the level of the enterprise.
The further new Constitution (Yugoslavia (19S3)) of 1963 r^nlaced
the Council of Producers by an bcononr'.c Courcil and three other specialised Councils (for education and. culture, social welfare and health, and political affairs), The powers ar?d responsibilities of the Council of Producers were, however, largely transferred to t •- e Economic Council, and since the change applied only to last few months of 1963-S4, reference to the functions of the Council of "'ror7 ucers -d.ves an adequate repesentation for the entire period 1953-c4 covered in this study.
At the politic? 1 level, the over-concentration of 1° 47-52 was countered by a conscious emphasis on the territorial Decentralisation of political organisation, thro^-rh the strengthening of the l^ governmental iriits, the .Repn.blics, districts and communes,

Tbe_?rinciple of Self-r'Iana .-ement
The ideal of the new system, 'decentralisation' or ' self
t v us aim^d at the li 'ilr-itiou of the centralised ^o"-^rs of th<= state in favour of ^ecision-^.a v iu^ l^y society, throu^' the or-anisations and

f ,

1. \3 a further measure of ^: scri'lina.tion ar;ainst the ~>riv 4"e peasant, o"^.V" r the social sector of a. r;r:'.culture \" r ^^ re^esent^d in. thr>
of the Council.

63.
- roups most i^-.edi. tely concerned. The irmlemerttrition o" the ideel in the economic sphere, still very incomplete PS the lrngoslavs themselves readily acknowledge, -.as begun by the transfer of certain r'eci sion-^.hing nowers to the enterprises, and some territoria.l decentralisation of
- oolic' T -making. The majority of further changes made i~etween 1^!>3 and. 1^64 were directed towards the progressive strengthening of decentrali-sation, b' r i creasing the resources at the dis^sal of the enterprises and t^e lower territorial units ('the material basis of self-management') and extending the formal sco^e of t Vi eir decision- ~aking ^o^'ers.
This extensio 1 of the nowers and resno^isibil^ ties of the ^ecentralis units increased the difficulties of the underdeveloped, regions. Under the centralised system, the organisation of development :.n the under-developed re"ions, as in the county as a w^ole, had been the resnonsi- '"ility of the central planners alone; decentralisation extended this responsibility to the regions themselves and the enterprises located there. The equal footing for all regions in the demands on local resources and initiative was to t^e disadvantage of f~e underdeveloped regions, where resources were more limite^, and '.-/^ere de^elo^^.ent required some transfer of resources fro-n richer regions.
Two further features of the system, however, exerted their
influence in the opposite direction. The difficulties of the under-develoned regions under decentralisation have • oe consistent].-?- acknowledged an^1 allevi^te^ ^y special provisions to increase federal responsibility for tVeir development. Even more i'n^orta^tl^, although decentralisation "r ^s the ir'eal, its i ip].enent^tion was frr fr^^ complete, and many aspects of the practical operation of decentral.1 se r" planning modified its disadvrntages for the underdeveloped regions.

S4.

lanr i'n b.Y /Jlobal T r o por t i ons
The repudiation of centralised directive planning, wit 1 - its
objective of the Dlannin--; of every detail of economic life, a-ir" its implementation through directives, did not, ho- 'ever, involve the rejection of t^e planned development o:r the economy. After 1° 50-51 the the Yugoslavs had to devise a ne^ planning sys'em, consistent with t>>e ideal of decentralisation. This Quality of objective 'v?s nointed out in the detailed report on the problems of the planning system, prepared in 1^63 by a committee of experts (Ba':ce -ic-Kucar et rP. (l01 ^, r>^.153- 159)) 1 * who noted that
"The planning system under our conditions must satisfy two
requirements simultaneously: (a) that it ma^es -nossible the
further development and strengthening of socialist rela.tions
in society (b) that it makes possible the o-oti^al rate an^
pattern of economic development f .
The evoiution of the plannin- s-siem between 1953 and 19^4 can
be regarded as a continuing atte^ r:t to resolve t'~e tension between these two on.iectives. In the years 1353-^0, ^re^ter ^ei.rht was attached to
t v'e effective implementation of planned develonne^t, with the decree of decentralisation correspondingly, altho-i.p;h ^ecreasi^^ly , limited; particularly from 1961, however, t" e extension of decentralisation an^eared to fcecone the dominant objective, with the banning constraint operating in relatively v/eak form.

The Basic ProDortions
The characteristics of the decentralised system, of planning by
' ^lobal proportions', in contrast wit 1 - the e?rlier s-st^m, are described by Jelic (I?^2, .141) :

1. This valuable critique o" t^e on^r--t:ion o~ the -^l^n^ing system, b n frou'P of e^'inent T -rn^oslav ec^^onists, s°e-ns t^ ^pye rec^?^-ed no attention -rrom '.Vestern writers o-i Yugoslav economic ax^airs.

'In the system of centralised directive planning, !>e function of planning was linked with that of direct ad -rnistration, through the system -<f obligator.;7 - directive tasks and regulations which originated in the plan itself... The new relationships, baser on self -management, presuppose the se^ ration o:C the function of plannin fron that of direct ILLlZ—'
The second essential characteristic of t 1 '.s system is that
the plamr d intervention of society is red-red to the establis' 1 - ment and implementation of the basic proportions in economic development, that is, o* the framework f^ t^r economic act'ivity of society, which resolves the h^sic questions of t v e rate and structure of development, preventing possible -"
and establishing harmonious relations in '""eve
oiraulta .eo'Tsly with those, within the framework of these basic proportions, in. a money economy'- including a marhet, scope
regains for- trie free initiative of the self- i^na^in.^; organs'.

The 'basic proportions' on wMch plannin^ operated vere three

(Jeli' (1062, pp.U?-146)): l '

'(a) The first of the essential elements in nlannin^; is the power
to influence t'^e distribution of income, particularly between^ co-".••.nation and, investment (or consu iption and accumulation)
and between persona 1 an? socie 1 consumption. Control of the relationship Vi etT "een consunntion an^ investment is an essential element of pla/^.iing, because it deternin^es t v e rate o^ accunr.lation, as one of the factors determining the rate of economic ^ro-'t^. Irom the ot'-er side t n is relr tionsrin a.lso
sirn " It^neously determines f e l^vel of consumption, the ?econd essential element in t 7°e social process of reproduction.
The rela,tiov-ship between collective and personal consumntion, for its p^rt, deternines the relative importance a-'d role of the ^r:.ncipal services in meeting the col^ecti^e requirements of society, and t^e part of income which is distributed ai'ion^ members of societ^, for satisfying their individual needs.
(b) The rate of accumulation and the rate of nro^tr are not the only elements which influence the r;ro^r th o f the economy. VYithin the framework of a nin. r e^ rate of economic rrowth, it is necess^r"r to ha,ve balanced ^rov/th amon,^ the individi;?-: 1 sectors and
t.ranches of production, and thus ensure the balanced, coordinated and proportional -:rov,-t>i o f' the economy.
The relationship '-etween the individual sectors of production,
at a ^iven time, is determined by existi^" productive
On the assumption that these relationships in e"istiver

This anal-si s closelv follo'vs t'-'-^t of Jelic, formerly of the Federal ^lannin/^ Office and the most authoritative expositor of t'^e ^ature O"r the Yugoslav planning system. A similar anal sis is, however, available in numerous sources, Yugoslav writers being unanimous in the description o:~ th^se formal planning categories.
'Accumulation' will be used in i.ranslr t.' ons fro1^ Serlr--Cro.it "-here savings and investment ^^e not di st 'n'-uishe^ as t'-e separate categories which /est^rn termi-'o 1 0°;" requires.

capacity are already in equ'librium, influence in r're^teD on these relationships in fu tn.ro growth firstly tl rou^1 new invest-ment. The DetpT-ninMin-_of_ the structure of new investment accordi~gly also Determines the relative levels of available productive capacity anD thus provides t^e opportunity for influencing the Direction of Development nnD the future structure of the economy.
As a result of this, Determining the s 4 "mcture of investment
is o~n e of the basic charrcteristics of •" pln.nned economy, and one of its most important instruments.
(c) The area of the relations' ir> between the national economy and the '-vorlD market is of central import?-ice. nver stronger social Division of labour brings t^e ever closer linking of the indiviD^al national economy with the world market an.D the economies of other countries. Understandably in considering the planned Development of an individual national economy, regard must also be paiD to the ro 1 e of t^ose factors which affect the relationship of that economy "•dt 1 i foreigii countries (the volume
and structure of traDe, creDits anD t Vi e o;ro-''th of ca->:t.°l, the relations between nrices and costs, etc.) 1

While the 'basic proportions of Development' on which planning

was concentrateD -ere thus essentially only -' T~ree, their influence

covered 'the most important elements which Determine t] 'e growth o:0 the

economy 1. As Jelic (1°62, np.147-150) elaborates, the first proportion,

the Distribution of national product among investment, personal and

collective consignation, influenceD the le el of each of these, the

size of the market for capital, intermediate anD consumer gooDs anD

raw materials, the standard of living, anD, (with purchasing po-er)

the level of ^rices; t--p structure of Investment influenced ^uture

capacity, the level of anD structure of outout arD em ^lo./ment, and the

requirements for labour and skills, while "7-ternal economic relations

affected the volume and opttern of tr^De anD financial movements.

1. These three proper-tie is -."ere ^ot t""ie first v^ria^ts to he FDotted. Kidri'c (1951) outlined the original proportions as t'e minimum
r--te of utilisation of capacity, the l^vel nf i-^p^t-^ent, ?nd the 'r^te of accumulation 1 charged on enterprise revenue; these
tions "'ere applied, ^s the -olanning instru-'i^nts, only in 1^5?
1953.

67.

1. The text o^ any of the plans enacted duri-ig the period
many more details and targets than v/ere co>mrir:er by the "lo v al -nropor-tions. The Plan for 1961-65, for example, after a briief and non-quantitative discussion of tho development objectives for the Plan period, be~ins from the -rov'th of social product and national income, "ivlnm target levels for the en^-; r ear and the equivalent an up.l growth rates,
in total and for the seven major sectors of the industrial classification

2. (Char), II, section 1). * Only then is the first of the bo sic proportions

. riven, the distribution of social product amon": productive investment, personal consumption, expenditure for the 'social standard' (collective consumption together with non-productive investment), defence an^ the
net balance of payments position (Chao.II, section 2). The second follows immediately, with target end-year levels and annual ^roTth rates for investment, in total and divided among productive and non-productive activities, fixed and working capital, and the victor sectors; t ese are supplemented by reference, in the - L ext, to individual bra aches or products, within the major sectors, whic.^ are to r-ceive snecisl investment efforts (Chap.III). Turther chanters cover the maior aspects of individual and collective consumption (Chap.IV), foreign trade (Chap.VII), regional development (Chap.VIII) and e"iplo;-7ien.t and productivity (Chap.JX), On1.' r the goals for the basic proportions, ho'vever, were tpr^ets in
strict sense of the planners having the mea-s to implement them; t^e others served only as forecasts, of an illustrative character. As Jelic (1962, pr>. 151-152) says
'For a range of these categories ('he macro-economic indicators
wl ich -;ive an almost complete picture o" ^conor.v'c growth) t v e
1. Two medium-ter'"1 plans were enacted, for _l°5 7 -60 a^d l^^l- . enn an an"!UP"! plan for e^ch year.
2. retails of the classification are given in Appe"'fi; x 1.

amount of investment. This is a tM "•''-. ici- ran- ot be done b-"-
a market economy'.
(Horvat (1964a, n.l^ 0)).

' \s one OIL ti'e methods for delimiting centra 1 ised r?;:r decentralised decisions, 7 "e can use tbe differences 'n tb/~ ^i-^r-r-rter o" tbe nroblem, in the cose of simple an^ extended retrod <ction. It is B.ssumed that tbe factors whi<~h regulate s ' r^l <-> r r ^ror^ir tion are already ^iven, determine^ by pristine prod otive ca^-city. . etc, To the extent t at these factors, wbirb affect the course ^ simple reproduction, are 'mtiiall.y coor^i^r ter", th^ whoTe process coulr1 be cnrrier" ont bv r^ecentraliser" rlec'.si->ns, air' co il'" •f-? 1 --e "^ n P r e. ^
or less, v/itbout intervention, tbron.Tb the o^errtion o~r norme.l economic stimuli ano the inf.uon.rRS which r'eriv* from t v e "ipr^^ wit^o-it tbe necessity for specific intervention t^ro1!^ centra.I c'ecisi^ns. The snhere of extended reproduction, by contrast,
"1 errr^r1 s special social re.^uirtinn of t>e future proportions in economic ^ro^-1 - 1 -). Tbe criteria a^-d ruide-lines for tbis either cannot be fo".n<5 in the existing incentives anr"1 re"1 Ptions^i-is in the market, or else the gni^e-lin.es ^'ich p"ic r -r e from t^e m?.r vet are a reflection of tbe existing situation anr1 in-n-^ro^riate -f'or
tJ'i.e r'etemi'iati^r o"^ genuine future reouire"aents, or "Tor ir
social criteria o^ rationality, which mav differ "ro^ th c criteria
0" which in^ivir'ual decisions are bas^r'.
(Jelic (!.?£?., p.-14)).

Sirotkovic (1153, pp.2^2-223), however, ^oints O-IT two wa r s in

v/bich t^e market influences t^e ->la.n nronortions:

'Within individual sectors of econo-iic activity, t]~e market
serves as an indicator and corrective in tbe nlann^d man 0 "ement
of investment...

. .. , r ben tbe ^irect producers are deci^i-:™ on (tbe tyne a;^"1 quality
of production) and o"" the uti"! isa a -ion o^ tbe inv^stm^nt resources available to ^bem for this, a.n important role is ^layed b^ kno~ led~e of tbe volume anr1 distribution of tbe relevant nurc n asin,^ no-'er.
anr1 of changes in t^e pattern of demand in tbe course of tbe expansion of outmj.t and incomes. In this way tne market -*r--ovides infornation, as an i^dic^tor for the use o" one nart of investment resources, linked to tbe management of production In accordance
wit1' 1 expenditure requirements...
The To 1 ° of tbe market as a corrective i"i tbe nla"ine^ management
of inv-stment is connected iv it vi the fact that t 1 e influence of planned investment on tbn -rowt 1 "1 of T>roduction and on t'ie -ioney- °"oods balance is effected tbro 1 "^ tbe market. .T-en a market mecbanism is in o"oer.°ti~>n, imbalance's in t'^e nlanopd proportions find expression in t^e n^rket in sbort rr"es of ^o^^s, or increases or falls in nrices, with tbe result that i^e market ^irertly, tiipou.-^ 1 - price movements, corrects t v e ^lan rel-tions'^i ^s or reveals tbo areas w^eipe suitable -^rooortions were not e°1 ab" isber1 in the Dlan.. .

The oneratioj."! of tbe mar'- ^t in t T 'is iM a" brings a o^'tl^iial improvement in nia

70.

The search for the appropriate bslfvnr^ between the Dece^trr.] isation
of Decision-making anD t^e planning of Development t-us involve*-"1, essentially, tbe respective roles of the enterprise, on th^ one har;?, ss the organiser o^ production, a:-^ on the other, of ^ v e i-".vestment system, as t^e r)rincip r--l means of i^^lem^nt^ng ^l^nnec Development.

enterprise offered no adeouate oros^ct of lonrer-tprm viability, it

was to be put into liquidation. In this event, -va^es -ere accented only

as the last claim against enternri';e resources, although a TI! 'irrr'm -PS

~lways £U-°ranteed. The --'orkprs in this v/ay formally took over th^ 'risk-

b^arin^ 1 functions of t^e share-holder under capitalism, v -it^ their

•pecuniary rewards and liabilities.

The le^al position of the ^nter^rise was, therefore, not very

Different from that of the firm "ider private enterprise. An entre-

preneurial type of decision -vas necessary for its establishment; it was

then expected to make profits anrl given the right to retai i ^rr 4^ of them;

if it incurred losses, it '"?.s threatened -vit^ liquidation. It had the

right to decide the volume, assortment and quality of its output,

including t^e right to diversify into other lines of -ro^iction, to

purchase equipment anr1 materials, employ anr" dismiss labour, and sell

its output on the market. Capital goo§s had to he purchased, their

depreciation covered, anr' interest paid.

ihese, l°o T,vever, constituted only the for^nl attributes ot the

1. The operation of v/or^ers' npno^e^ent '"it v-'.-.i t v e ent^rorise '."ill not be ^iscusser here, retails o^' t^e provisions of t v e 1930 Act an^ its implementing legislation are given in r'etro^r ir (1°"", pn. 133-13?) . Eetails of the ne^h-rshi^ and -ieptir~'S of li'or^ers' CoiriciJ.s are
presented by the Federal Statistical Of.r 'ice LQ the series of bulletirs 'Samo-upravljanje u ""rivredi' (3ave?ni Zavod ^-. Strtistivu: Statist-' r.ki Bilter.i^:Tos. 35, 33, "'^ 137, 150, 2°>0, 259, 302, 341).
Yugoslav writings j o-i ^ork^rs' manager-lent i-^cli n ^e books b?r — t - f
I'ovac and il,ievic (1C 53) and Kovac (1961), an'3 articles by Cplic (1958) and Tarkas (1Q '?0). Iss^.e number 5 of 'Cko-'o^ski P'-e^l-d, 1957,
is I r r2ely devotod to articles •">••! this to^ic.
The outstanding foreign source is Inters-0 tioopi Lr^o^r Office
(1962); others include T-Torv?t and Ras^ovic (195°), Tv"ola.ja (1°65), "eister (1^64), oi:-.;-leton and To^hara (1963) ?-\? " r ard (19? 7). Th^ sys'e^ is also drscusspd in T '?l^«rin (1°53, cha^s. !?-!'') -?^d Ne«l (1^5°., c^ap. vi).
Ward (1953) takes a number of th^> at ribut^s of the ' ^ _,c 1 status
of the Yugoslav enternrise as the b-"sis for v is -nor el of ori^e and output de terr r-c-.tio - -under '-ri^rk^t s^n^i^alT sm' ( ou"1 ' "> re o'"nf rs^i-o of the me a ^s of production co-rbiied 'vitr workers' mp- ° -e^en , ; .

73.
position of the enterprise; its position in practice --as strong-influenced by t^e incentives and constraints o^ entire economic svstem.

The Primary Distribution of Enterprise Revenue
The centre-^oiece of the incentive syrjten which replaced the command economy was profit, with the right of the enterprise to dispose of a surplus and (marginally) the threat of liquidation irora a deficit. The primary distribution of enterprise revenue, between the enter^r^' se itself and the state, which largely determined the volume of resources available
- Tor secondary'- distribution within the enterprise, V/FS of crucial importance in this. As the committee of experts observed, (Ep"^ r vic-ucar et vW 1963, p->. 237-233) ) :
'The individual efficiency of the enterprise defends, to a
decisive extent, on the distribution of its realised income...
In the distribution of enterprise revenue it is essential
to ensure not only a positive stimulus to its efficiency-, that
is, the --rowth of net revenue along with an increase in efficiency,
but also a ne-^ + ive stimulus, that is, thpt a decline i^ efficiency below the level determined as socially acceptable enda'-Ters the existence of the enterprise and the wa.-*es of the workers'.
The taxation provisions governing the •nrii'ig.ry distribution of enterprise revenue were often ertre^elv complex, enr subjected to numerous alterations in the course of the twelve ye^r-s, the dominant tendency of -"hich was to"r ards the progressive stren^thenin- of the
oroi it-incentive from an extremely weak initial role,
In 1953 t " e interim system of distribution throngh 'the ran' e of accumulation and. funds' "'as still in force. The net receipts of t^'^e enterprise v^ere taxed at a rate fixed for it in.dividual.ly. according to it?? market opportunities, capital equi^-^e^t, decree of monono^y ?nd similar criteria. " These rates, set as a proportion of the v/?";es f rnd ,
1. v7hen the ' r? te of acci.rn^latio"1 an^1 -h.rids' --^^ introdiicer1 in ^5? the

tes v/ere fixed by industry ~roup, but this resulted 'n s^.ch "/ice sparities he twee i individual enterprises 'n the .le^-el c^1 r>f."^-3'-f! $£,, 0 T ofits thr : in 1^53 the rate was fixer ror eac1 -, entej prise "i r T -ic.uei-

ra

dis
pro

74.

were so high that the" i' effect absorbed the entire ^rof -' t of t^e

1. enterprise.

Pol lowing fie changes Ln the portion of the enterprise introrbioed

a. 4- end of 1^53, the system of ' profit' -.VPS applied between 1^54 and 1~»57.

T 'rofit •'•'? s calculated after all costs bad been met, • clur'in? the 'wa^es

fund', cormrisinsr basic - if a?es intended to cover the necessities of life;

it '.v-'S then subject to co~r>lic^ ted taxation provisions, a ' r eder-l t n x of

50 ^er cent, and variable taxes levied by the Republic and commune, in

addition to the federation, in an effort to equalise t<'e position of

enterprises between sectors a.nd regions. ret nro'p it t'^en became 'the
2
fund for free disposal' b;- r the enterprise. ' Uu^ the hi^v level of

taxation r^d-ioed profit, initially a large ^ro^.ortion of net revenue, to

only a small residual, for allocation to the fund :"or ~ rree disposal.

widespread criticism was voice 1'" of t r e °?ilure of this svstem to

•n.ilfill its incentive function, Dulsr (19 r 7, p. 2^1), for example,

observer1 in 1057 that

'The princi'^1 deficiencies of the present s"S-u e"i of income
distributio'i are
1. The 'vorkers' collective has almost no influence at rll on the distribution of realised income, w^ich is deter-niner1 , v o+h cuantit^ii^el~r a^r1 qualitative!' , ^y factors o^^vith. t^e enter-prise, and by lustrum0 its nrhic/- rre decided uni^o^mly from the
centre. . .

2. The present system of distribution does not guarantee the normal organic ^;ro t 1 ' of t>-e enterprise... It does not ?llo^r simnle re"oroc?ucti";n and ma ves it quite impossible for the enterprise
to establish funds ^or extended renrodi-ction o t of realised income. . ,
3. Society takes such a lar^e pprt or" tot?l income 4Vi ^t t b c; impression is current w? t 1n i.n the '.vorkers' col 1ri ctive t 1 at, in nrinciole, everything is taken ?'"ay, and o^ly t^e m5_nimum
neces^pry for life is left, without regard to the ^ro^ activity anr" profitability achieved.
4. T^e system of distribution Is ir er" com^Tic" ted an^ changes
every year. As n result of this, direct ^r^ducers do not, in

1. Illustrations of the rrtes c'Tr^ed rre "iven in Bic^nic

2. The detailed provisions are described j n Bicanic (1'1 5°)-

5.

- eneral, understand it, and th-t reduces t'~e:'r :.-ter«??t. in
workers ' self-^r'a-'-ement ' .

With effect from 1953, therefore, 'profit' v/s.s replaced by t/>e

corc^pt of 'enterprise revenue 1: rrom total receipts a-n-^ronri- te

deductions were to be me.de, in regulated, sequence, for ^p.terial cos^s

(includin^ interest on loans outstanding, depreciation, the t?x on

fixed and working capital (except --'^ere loans for t'^se ''r ere still o^t-

standing and interest "/PS being paid as a material cost) and turnover

tax. * The remainder, -"ithout ^revision for the remuneration of labour, the

constituted^ 'revenue' of the enterprise.

In the years 1^53-60 revenue rras tared on its excess over basic
2

wages. * The rates of taxation were steeply pro-restive, starting at

25 per cent, wh-n revenue amounted to 120 ner cent of basic "'&.<?es, end

risin^ to 70 per cent pt over 200 per cent of basic 'vp^es. The

resulting 'net revenue', considerably larger t 1 an the old '-rofit', vas

then available for enterprise r'is-'osa 1..

But the high level and progressive nature of tb- tf>: still failed

to afford an adequate stimulus to t^e enterpriser

'Linking the t?r contribution from enterprise revenue e"cl'-sively
to the relation betv/een enterprise revenue ai^d Msic '•vo^es, with
a progressive tax nr> to 20° per cent pnr" ^ronortional hevond th^t, r'oes not provide a s~t±s?rr.toYy stimulus to efficient production
and, particular Iv , to l?bour productivity'.
(Gorupic

'The results of enterprise activities were equalised, which
allowed the existence of ve-"y inefficient enterprises a-r1 ?ctpd
as a disincentive to greater efficiency on the n^rt o.^ efficient enterprises'. - ' Pt al. (1^63, ^23<

1. These various categories are described in An^en^ix 1.
2. :3asic wares were an accounti'M? concent only, for de + r •" -ni -in-" the ^ liability of the enterprise. The rover-T^ent set the r-^p :"or e^ch year by industry-group (and briefly also by le^el o" sir-Hi). T u n total basic wa^es of Pn entprprise "ere t u en c^lculpter"1 h the ap^ cation of the relevant ra j e to t'-e tot-o"! ipbo -r-f orce ,
of actual v/a^es paid. T^e -overn-nent nsualj-' fi-ed/ 1 ^ hp~;r
as a proportion (often 80 r>er cent; o f aver^-'-e err nn-^s in > industry-group in t^e T)revio'^s vep.r.

76.

Prom 1961, therefore, taxation -^3 an^lied d-i.rectly to revenue,

irrespective of basic wages (and still "hefor^ any allowance for the

remuneration of labour). The tax was mare proportional, and supplemented

by a tax on 'surplus revenue', on net revenue less the average wages

paid in the previous year. " * The ending of progressive taxation was

intended to increase the incentive to revenue- -la^imisation by the

enterprise, "hile the tax on m.rolus re^/e^ue effected some equalisation

in the volume of retainer" revenue. The rates of t prat ion were reducer1,

to 15 and 25 per cent respectively, to bring a substantial increase in

the proportion of total revenue left at the rb'suosal o r the enterprise.

It is not possible, from published Yugoslav sources, to follow the

trenr1 in the volume of resources left at the disposal of the enterprise

after the primary distribution, but there is general agreement ariong

commentators that the proportion left to the allocation of the ••"orkers 1

council increased progressively throughout the period, as was the

intention of t 1-i e authorities. Yccordincr to ./aterston (1362, ~>.65):

'At first (1°54) the proportion of enterprise earnings which the authorities permittee! the workers' cor-cils to distribute " r as
small. It T ~ r as gradua.1 ly increase^ until, in 1°60, it averted
about 20 per cent of the total income of enterprises. Beginninn:
in l!?6l t'°e uro^ortion left at the r'lsnos-l o^ the •-•^r v ers' council

was almost treble^ to avpr-'-ge 55 o^r cent of total enterprise o
earnings' . *
1 . Only to the extent th?t t v Is exceeded 6 ner cent of the value of the total assets of the enterprise. The details an'" im-oact of the changes are described, in ^orupic (I'^GC).
2, Organisation for Economic Cooperation and Development (1966, ^.11) quoting the ' YunosJsrr a.uthori ties' sho'vs th^-t, in t: "= y=ars l nfSl-'D4
the sha.re of the e terprise in the distribution of net product between itself a^d the governmental units l.p y het"r een 45 and 51 ^er cent.
:/: en adjusted, t n:is is approximate l v consistent v;it^, or slightly
lower than the figure of 55 per cent give- by V.-'aterston: the OECD
figure gives on?.y resources retained "'ith^'n t 1 e r-terprise , -hile betT.ve f;-i 20 and 30 ner cent of its allocation to its O- T- fun^s h^d to be contributed to the Investment i'u.i^s of the Remi % l:> and commune; since the allocation to funds took, on aver"ge, on^-third of the resources allocated by the e iter^rise, t v e OrCD f 1 :ure , quoted o n i^e same : ^as.i9 as V.a.t^r-ston' s, would be n^r> aps 5 >^ e r cent higher.

77.
Between 1953 and 1^-^, therefore, the ~>rof It incentive vrMch,
the

following Decentralisation and,f restoration of the nr-rVet, ^-PS designer1 PS t/-<e principal stimulus to enter~>r"i se efficiency nnrl initiative in t v<e organisation of production, -"/as severe 1.;'- b'unted by t^e hi^h levels of taxation ••,' v ich channelled a very Ipr^e part of profits to the s + ate. Only after the taxation changes of l^ r i. bad substantially increased t^e portion of revenue which VPS retainer7 by the enterprise :v-ri s the nrofit i--ice-tive ^i^en significant scone,

Liquidation
The negative side of the profit incentive was t^e threat of
liquidation and non-payment of '"ages. In principle, ^his hore harshly
on the worker?, in that, as manners of socrial nroper-ty, the." v/ere v -^de financially liable for t 1- e re sn.lt s, altyou^h the original entrepreneur irl decision to set up the enterprise ""c..^ been tahen. bv rn outside bo^y.
~'ut in Droctice liquidations -.vere extremely rare, an^ confined to sn^ll enterprises.
The more co^non alternative was a public subsidy, fro-i t'"e comiune
\
in tne first instance, an^ from the Renublic or federation if the
?~ 10 nits involved exceeded the resources of the comnr-ie. Subsidies of t^ls sort were kno^r^ to be fp.irlTr fre^n.ent; the conim.ittee of exn^rts (Dabcevic-lluc^r et al. (1°^?, p. 271 footnote)), for p^^mple, re:"er to 'the insolvent economic organisations... which now -^resent a
politic-0!, eco-o'nic "nd social nroble^i' . On this sensiti-^e natter,

2 1 however, f "inures are systematically concealer".
1. Larf:e enterprises were established on the in I + -' a -'-|vp of t^e ^^der-tlon and for Renublics, most snal'.er enterprises by t]i e co'
2. The question of subsidies to ent-rnrises h^^ receive^
•nub 1'.city a.n.d -r^p.n^riess of discussion since the r^^ornn of 1°-^.
Kra.lger, the Vice-president of the "'edernl Icono -: c Executive Council, in a h-i -hlir critical sneec^ In. August of that vear, reported t>a+-
'the sum of subsidies the raw material ^ ->ov/-r -enerrtin^ ,,Sver

7°..

An alternative to subsidisation was 'reorganisation'. If an outside
body, normally the commune, wan prepared to accept Iv v->-clal responsibility, it had tbo right to suspend t<>e worker^' management, " r °^ ^ "to one } r e°r, and install a Director of its own appointment + o organise re-eoui^ment ,
the criming of activities, administrative re-organisation and similar changes. Particularly in the later 1^50' s the combines ten^e^ to favour re-organisation by merger, to conceal losses in a joint account with a profitable enterprise. * Thi.3 ^r^ctice was later curbe^, 'hut not eliminated, b>- a bo^y of case-l^'v w1 ich b".ilt u~>, ^rotecti 1 ^": profitable enterprises against coercion of this sort.
Thus not only was the profit-incentive severely blunte^, on its positive si^e, by state intervention t^rou^- tar? t ion, but on its negative sic'e, the threat of liquidation \vss virtually recover1 by adoption of various ex^efients.

The Regeneration of Labour
The profit incentive to the enterprise as a whole, was, in
principle, extended, by t^o sy-s-'-e^ of secondary Distribution of net revenue between personal incomes a,nd enterprise fnn^s, an.d the tertiary distribution of the allocation for personal incomes amonp; the workers indivirually , to link the remuneration of each en^T ovee to t^e financial results of the enterprise. The dependence of '"a"es on enterrise results was pro-:ressi^r el;"r strengthened during the
industries h-ve '->een granted anounts to several ^un^reD billion
(Quoted in tV; Review of the Study Centre for Jugoslav Affairs, no. 5, 1965, p. 280).
1. The con^une rel^ varions ins-';rn:nents of ' oer suasion' vis-a-vis the enterprise. T f e enterprise commonly reouired t^e guaj-pptpp of t-ie com:vu Tie for fuids borrower outside. Tlie commune was r^s^onsihlc enforcing the many complex regulations governi"1 " the detail of enterprise activities and, "by rigorous interpretation of these,
not infreouently ma,]ce the enterprise liable for penalties.

79.

In 1953, wages derived almost entirely ''rom the 'wa^es fun^ 1 <vhic v
was treate^ as a cost of r>roduction: supplements from profits 'vere of little importance. Under the system of 'profit 1 in the years 1954-57, the 'wage? fund' continued, with vvage rates set by the government in 1954 and by the enterprise, in consultation with the comnune, in l°55- r>7. Supplements from profit became of increasing ?nr>ortance; the nronortion of profit which co^ld ^e allocated to this was closely regulat«=r", hut allov/ed, according to the estimates given by Bicanic (1^63, p.5°4) to rise from 4.3 t>er cent in 1954 to 9.2 ner cent in 195 7, equivalent in general to an extra month's we^es or more in the year.
Prom 1953, when wasres were abolished as a cost of production, and the enterprise was, for the most part, left free to allocate its net revenue between incomes and funds, workers' earnings were muc"'1 more closely linked with enterprise results. Between 195^ and 1^60 the global sum available for personal incomes consisted of 'basic ^a-es', as determined by the government's basic rates, plus whatever nro^ortion of net revenue (conceivably, with only minor reservations, its total amount) was allocated by the v/orkers' council. The wa^e rate at which the enterprise en^ayed labour was (like the basic rate) merely a u^it of account, fixing the relative size of each individual's income w: t vdn the enterprise, and thus his share in the global allocation. The remuneration of a worker therefore depended on the size of t v e global alJocction :"or personal
i comes, of which apr>roximotel^ one-quarter derived from net revenue,
and his share in it, as determined b.- his relative '."age rater o.nl7 by accident would he receive the hasic wage or his own ^a^e rate.
1. A tende c~.r noted at the time was for workers to be recruited at the lo'ver end of the skill ran^e. Their basic "'a^e, a ta.r e Tr evn-ntion to
the enterprise, was the average for the ^ronp, while t'e wage they
were actually paid co^lf1 be kept lower, thus increasing t r '° resources available to the enterprise for ot'-'er n

90.

Fro-" 1^61, when basic wrges ceased to future In + 1 e calculation of enterprise tax "liabilities, ~1 ohal oerso 'al incomes derived Directly, by Decision of the workers' concil, from net revenue. " For the collocation among individual workers, a points system bec^e increasingly nomila.r in nlace of contractual waye rates. Each post wlt^'n the enterprise v?s awarded a number of points un^er various bear's, sn.c> rs t" e level of educatio^, skill and ex^pr'ence require^, aut^orlt- , responsibility,

2 physical aid ^ental effort and vvorkin^ conditions, * tl'P total of these points determining the holder's sh.n re in the a.lloop.tdnn. Various systems of 'co'Tolex rernu^erri tio-i ' v/ere also devised, linHng the in^ivi^iia 1 ' s share +o t'^e productivity either of the enterprise ^s a whole or of the
•>t

^roun in which he worked. * Monthly pt.v^euts ^'ere n^de on the basis of provisional estimates of enterprise revenue, and su'viect to later adjustment.
The principle of the derenr'ence of the worker's earnings on the financial results of the enterprise v/as, ho"~ever, modified b'r t wo guarantees. If the enterprise WPS failing to e^rn a surplus, ?»n^ s n -ort-falJ on the total of basic (or 'guaranteed') vran-es * coulr1 be borro"- ed from the comrnune, anr1 the tota,l t^en distributed in accor^a TCC with the enterprise's owr ooints or other allocntive system. Jr. addition, a national minl1:! 1?^ " r a.,5e was set by the federal ^overnnent, a^olicable in all re-rior'S, sectors and occupations; this set a floor to the amount
1. Initially in 1^62, and in revised form i-i 1°63, r-ertain norms were established restricting the rate at T "Meh the workers* co^nc^l could increase personal incomes, by lin^ii'ig it to va,rious indices of enterori.se performance.
2. A detailed eramole of a -^oints system is given by "Hicanlc (19^°', ^.5 3> A number of v^ri^nts of t Ti is are described In Internetioral Labour Ofiice (1962, p^.21°-230).
4. These continue^ to be set after 1961, although t v ^y no longer se^T 'e r for tax assessment; they vere, ho'vever, reduced from 30 ^er cent of average earnings In the nrevious ye?r, to 60 ->er

31.

thp worker could receive in the enterprise allocation, am" also served as a guaranteed, minimum, chargeable on commune fu."ds, in the event of enterprise liquidation.
The person"1 1 earnings incentive ~-T-S t^us blunter, between 1953 and
I960, in the same -va.y as the profit incentive, by the s^ali volume of resources left to the enterprise, further restricted between 1154 ^nd 1957, by the regulation of the sh^-re of profit v/v; c> coul^ be allocated to personal incomes. Vhe co^olexity of the system of wa.ge-^e termination •vas also a souce of continual criticism. For the verier1 un.!"il I?6C Goruoic (I960, p.°>20) -va? led to conclude that 'tbo material interest of the producers in development and in ^va^ci^g production has been,
to an important" extent, limited and restricted by the current system of remuneration'. But the changes introduced in 19 61 went sufficiently : r ar tov?rds recti 0i 'T inp; these deficiencies for these lines of criticism to have virtually disappeared by 1963. Their t>lpce ^as, ho-e TT er, taken b; r criticism o~r the reverse facet of the incentive sys'.'em, the ir.eoualities in personal incomes to v^ich it rr ave rise, narticularly as a result of the unequal market ^ositions of individual enterprises. As -lil.iovski (lC! 63a) pointe^' out, the system of labour remuneration remained far from implementing the principle of 'to each according to V-is T vork' .

Price T'ormation

Prim 1^52 the enterprise " I7 as made responsible for setting the ^rice
of its output, in order to give it a meani'^.g'uJ o-n-^ortiinitv to ^ursue reve-ue-m'-ximisation. Its rights i.n this iir ere, '-o^vever, s^ver^ impaired by extensive govern'-ie^t -'ntervevt ; on, which te

1. This vini^um w^s kep^ at a verjr lov level; ^n 1^64 1- 1 ^'?s 15, fO dinr-s per montb, les^ than one-t^ir*-"1 o^ t--e average earr'ns; of an industrial, -vorker.

It was, however, on tb° dynamic efficiency of resource allocation
that price controls had their strongest adverse effect. V/v-ile, accordin^ to t^e Yugoslav Division of functions between the market and the plan, 'extende^1 reproduction' ^elon/'ed to thr--- sphere of plan'-'ine;, Jeli' (19^2, p.! 79) recognises the role of nrices in ^u^^in^ the ^ro
of production:
'An active price not icy must taVe into account the complex influence
of prices in the process of economic development. In a system of nlannin^, with the operation of a market, ^rice relations are not
only tbe result o^' supply anr" demand; for the \r own p ri rt, thev
influence ^ne formation of future sunnly anr1 ^erv-ipnr , and the
criteri" an^ judgement of producers ^.nr3 consumers in their
behaviour on t]i e market'.
out many of the controlled prices were set at such a. lov level that enterprises in. the branches concerned coulr not earn an adeouate profit, and thus lacker both the incentive an^ t^e means to increase tv^eir output. It ^-as no accident that the sectors of strictest price control (transport and electricity, industrial ra.- materials and semi-manufactures) also constituted continuing bottle-necks in simply.
T Iorvat (19£3, p. 11), sumiarising the corrna ion report O F a second committee of experts, on thp yro^th of the Jugoslav economy in In 6l and 1962, not^d that
'In an economv which is industrialising rabidly, tl'e consumption
of materials for reproduction ^ro'/vs much more rapidly than total consumption. To t!~e eyten'- i.^at this problem is not r^co^nise'"
arid effective measures taken for its sol^ti^n, a. major deficit
will emerge. This is 7fha.t has hapnened: in^u3 f r-'a.l production
of materials for reproduction has expander5 'ore slowly than the consnnnt'i on of them. This Deficit has incr^a 0?^1 ra^i^ly in recent
. years' .
A stri i/ - *; instr-nce of this, in the c-~~e of cop^ei-, one of Yugoslavia's most -; mportant rav materials, is ^iv^n by Jskic (1°^5,
P. 141) :
' \ project prov-id-'np' for an i'lrre-np :n co-i"»er nro^ucti on was
drav:n UP and submitted "for consider- tion in Bor, "crtr", one o.

96.

Decentralisation and tho Underdeveloped Regions
These numerous restrictions on the enterprise in thp fornat'on P"""1 distribution of its revenue, 'vhich nn/e its position in practice very different fro™. th?t of the firm under private enterprise, presented many problems for the efficient o^-erption of the economic s^/stem. But from the point of vie"r of the underdeveloped regions the many retreats from the -principle of dece-i ^rr ] isation vere, in general, a^vant- ^eous. Decentralisrtion r>osed the threat to the underdeveloped regions
that their enterprises, v/it 1 ' their inferiority in technology and economic environment, would be unable to coinnete effectively v;it? t':ose from the more developer! regions. The principle o^ ^r-> '"i t ability v;as not, however, rigorously applied. The subsidies ^aid, t':roup;hout t^e country, to pvoid the liquidation of unprofitable e.^teprises fl'^ost ce"t?inlTr provided ^articular support in the underdeveloped regions. The steenl-T progressive tares levied between 1353 and 19^0, to equalise t' e position of indivirual enterprises, were greatly to the a,dvanta r:e of the less profitable, including many in the underdeveloped regions. In addition to this advantage from the general structure of profits taxation, individual enterprises in Difficulties, or in particular sectors T vhich the government wished to promote, were granted preferential tax rrtes, or even full exemption. Particularly after the introduction of flat-rate ta-ation in l^ol, the special cases anr" individual exemptions becarie so numerous that h'koiio^ska Politika, the leading economic referred to f a ss^en of exceptions'. " Preferential r?tes of tnx-'tion "r ere never applied to enterprises in the urKerDevelo^eD regions as an individual category, but they nevertheless benefitter1 e:- tensive lv under
1. Quoted in Tioffman and ^eal (1^62, ^.257).

both hea^s.
Irice policy, alt^oM.gh '"e signed on a sectoral basis, inevitably had
a regional impact. Low transport charges alleviated the loc^tional disadvantage of the underdeveloped re^ons of their Distance from p lor^e part of the national narket, but simultaneously weakened the natural protection of their local market. The loirr prices for individual products affected bot* the level of regional output pnd the opportunity for financing expansion from profits. ^ilriovski (1953, 0.264), no
with his native Macedonia in mind, talks of the 'lost income 1 from agriculture, particularly from wheat anr" tobacco, w^ile Nikolic
points out the low rate of accumulation in Vo.jvo^i^a, resulting from the low prices receiver for agricultural and food products. ^osnir- ""erce^ovina, with its heavy dependence on the coal, iron and steel, and electricity industries probably suffered most severel^ of all from the undervaluation of its output and the depression of the rate of orofit; Cecez (l?^';., ^.^03) estimates that in 1PS3 no less t an 55 ^er cent of the I 'dustrial output of I3osni.?-ITercegovina " r as s'lbject to ceiling prices, a proportion more than t'vice as n ''i";'- as in ai.y other Republic, The determination of personal i:icomes v'ithin the enterprise allov/ed 7/a^:es to remain lo- where productivity or enterprise e?rnings wer° lov/. Enterprises in the underdeveloped re^i^^s ^ere thus relieve^ of any obligation, "/hie 1" 1 mi^ht '"ell have been beyond t^eir resources, of paying national w^^e rates.
Thus, altViou^ the many forms of intervention used to ^revent the
full wor'-in-^-out of the -^rinci^le of decentralisation often had adverse effects on the ef ^icie^-cy of resource-alJ ocatio i from the -noint of view of the economy as a w^ole, tie'r effects on enterprises in the unr"er-develor>ed re ions were, for the most ^.rt, favourable.

The investment system was the key element ;.n the operation of the Yugoslav planned economy: j.-i order to inn"' erne nl the -Hrst -: y,-o of the global proportions, the ^ itborities had to retain control e^er the level and sector?.! pattern of investment. For this reason, ^ece:" 4^' lisption came Later than in other spheres of economic activity, and v;as more closely limited. Unlike the decentralisation of production, the decen-tralisation o:? investment too 1 ' the for: ", in t>^e er.rlier years, m?:".nly of a reallocation of fivctio^s amon°; ^over^'ient-?! agencies, and o.v)ly Pt t/'e very end of the ^erior1 were si^i/i rp, at decis Lon-Tal'in^ no ^ers extender1 to the enterDrses anr" to independent banks.

TJie Leve 1 of Investment
The f'ecentralised system of investment fina-.cin^, v/vd<".>- first came
into operation in 1954, * s Q ^arate r-1 'productive' from ' non-productive 1 investment, C":ly the Iptter continuing to he financed fr^m s+rte ^ud
As the source of funds for nro^nctive investment, Social J^vestnent ?unds (oIF's) were set uo pt eac v ';over-iment?i level; for the first "e"r years they ^/ere administered hy the rational Bank, and subsequently hy t Vi e Investment ^ank, established for the -nuroose in l o:5^.
The volume of resources to ^ecome avaMphle in t 1 ~e 3I r 's ""as
specified, in the Plans, and i^lernente^ throng1 J p.x--tion. ^'<e entire revenue yielded by the tax on capit^ 1 assets WPS pllocated to the 3IP's, suonlemente^ , as necessary, from the "or~ceeds o" nt r-er- t?^es. In later years, interest and repayments becr--e P f-irtv er si.^ifirpnt, predictable, source of revenue. Thus the volume of resources n

1. Investment in 1^53 WPS re,~;ul.°te^1 b P 'eTi^orrry Law ^n Investmrnt

to improvements in enterprise performance. "" The ^ut^orit j es thus through provision? affecting both the Tiinimum an'' maxi'mri allocation to funds, retainer! fairl r close control, throughout the period, of the vo^ure of investible fun^s heir1 by the enterprise.
An important Development in the decentrrlisatio ' of investment decisions was introduced, as part of the reforms of 1961, when the banking system was, for the first ti^e, institute^ as a ^.?:}or sonrc r- of

2 investment Pinance. V.'hile the Investment Bank "* was, in spite of its

nane , essentially a 'fun^', deriving its resources from taxr-tion, the new institutions were "n an l:s in the stricter sense, creating credit by accepting deposits, fro^ enterprises and in^ivir^ials, and le -di--g for investment purposes. T^e ne'^ banks v/ere decentralised 'n bo^h the territorial and functional senses; the comnune was the b.»sis o.' t.^eir organisation, national ^etworks being pro 1-1 ;.bited • the" r vere autonomous, profit-making or^anis- tions, aad, "/hile they -'-ere expected to conform to the investment targets expressed in the Plans, no snec'.fic Plan instructions applied to the1 -:. , as to the 31?' s- the only weapon pvail-ble to the central planners for controlling the volume of bank lending v/as the fanilirr credit-policy instrument of conr-tulsor' T r'eposi^s, which could be froze-- by the national Hank. The profound implications of t-is development for control of the level of i^ve^tment v/ere, '"O'vover, only emerging in the last years of the period, as the time-lag involve r while the banks we re brought into operation '""ela-ed their i-P°ct on investment

1. As this provision -,VPS revised in 19^3, the enter-prise rould c' oose
i ['3 guideline for t'"e gr^wt 1 " of -tersona 1 inc^^es from five se^s of norms, involving the change in net pro'-h.ict pr-r --or^er, ^e leve"1 of revenue and accumulation ner vor^-er, cp.nrcity u' i"1 ISP tion ^ r" t'le productivity of capital, gross output per worker, an^" c;ross sales relative to tot^l costs.

2. And the p-rallei, ^ut much less important n ^-iks fo^ Arricu.l' ure -nd Foreign Trade.

financing until 1063-34.
hhe more ^en^i'ie decentralisation of the investment system,
represented b" r the establishment of the new banks and the liberalisation of enterprise investment, was thus inrDleme"' 4 < Q d to o^ly a very limited extent, in the ye-r-s under discussion. Por the rest, wh'.le t 1 e ^e^ree of centralisation and directness of control vere re^uce^, '~\y comparison with, the years of investment financing from the hu/'jets, the authorities still maintained close control over the volune of nro^uctive investment.

?u ^ Sectoral^Allocation of Investment
The allocation of investment fun^s by sector, implementing t^e
second global proportion, "/as determined in the plan ing process, and was formally separate ^ro/n, and prior to, the choice of project. The Plans normally stipulated targets for the seven riar'or sectors, supplemented oy indications of individual tranches or even 'oro^uc~s
' rr hepe investment v/as to be particularlTr promoted; t v:e -.lore detailed allocation was worke*^ out bet'veen t Vi e nla^ners anr7 t^e managers of the

Q T -n t e,

O JL J. O »

xhe nlannin?; decisions 17. r ere designed F, s a ^rocess of 'iacro-
allocation, on the basis of Plan objectives, demand projections an^ the expected availability of resources for the Plan period, " and r-efore specific projects were presented and their r>rofitability appraised. 3ut, inevitabl;--, individual nro;iects had to be kept in. ••>"'/. d whe~: certain branch allocations, particularly for heav;- ir/"-'stry, '-rer-^ nla-^'.ed, and the managers of t v a oIF's '"/ere closely in to^ch *"itii the po?:itio^ af many individual branches an^1 projects.
1. ""any o r the plan^in • -'pch-'iques apnli.^c! are descri"^
(1961).

93.
Project Selection
. Ithough the SIF's regained government or~a::is, resoons:' ble ~->r "the implementation of Plan decisions o 1 -? the sectoral ?! location of investme-t, their establishment introducer! an important measure ot Decentralisation into investment decision-making. '1'rc essential feature of the re-organisation of 1954, and the oi?e which charao terised the re^a infer of the period, was the withdrawal of state organs fr^™ the actu'- 1 r>lan~-ing of all but a few projects, anr" their restriction to the allocation of investment finance among projects submit ter- to them; while the control of fund's remained centralise^, the initiative in conceiving and desi^rirg projects was '"ecentralised to the enterprises a o lorver nolitic^l units.

The Auction System
When t u e SIF's were established, the auction system was introduced,
with t e intention that it should he the nrinci^al method of allocating investment credits, particularly from the "ederal Cteneral Investment liind (CrlF). * For several years it ^laye^ an i^-oortan^ , but by no -ear.s dominant role, in project selection.
Official Yugoslav sources do not give figures o the volume o'r
resources allocated through the auction, but Bla"o0'^vi' (lq ol, p.6°0, footnote 11), who was at that tir~e on the staff of t'-.e Investment Bank, quotes that in 1959 the auction allocated around 56 per cent of the loans approver3 from the GIF (equivalent to so -e 22 ~>er cent o" total ^ross investment). The very tentative estimates presented by Neuoerger (1957) and (1^5?) for the years 1954-5'^ sho'." t-e auction allocating a minimum of 21-24 per ce^t of GIF fun^s, and a maximum of Z~> ->er cent in
1. . or^al auctions ir/ere little used at 1-^wer political levels. Yur;osl--iv Discussions of the auction system, for example by Blar^levi^ (1Q61)
anD Goru.pic (1962h) re r er o-ly 'L o tie GIF.

95.
The ty^e of project i icluded in t'-e auction system ~:^s gradually 
extended. In the eprly yer-s, the principal areas cove-er1 "-ere tve fo^d-processing industries, agricultural equipment, construction: IT---f-e rials 
and ^ublic transport vehicles, but in later years funds wer^ also offerer 
for electricity generation, chemicals and some engineering products. 
The 'basic industries' i-ere largely exclu^e^3.
Original!;", t^e criteria for project selection, announced -<ritb tue 
auctio:'1, were normally only tv/of f.e i'l^er^'-rt rate o^fere^ ^nd t^e period 
of the loan. After the preliminary elimination of projects 
unacceptable in concept or elaboration, acceptable projects 
according to the interest rate offered, and accepter1 IP sen1 
the available funds had ^eeu taVen ^'P; all then recel~rod their credits 
at the interest r^te off ere ^ by t^e marginal project.
The auction sytsae'" was crit'T ciser7 ip a, rummer o:" r^spec^s for its 
clumsiness in oper-tion. The ^^tailed documentation to accompany an^ 
apolica.ti'on require^ tire an-'*, o-°ten, e?^pe-'"t: hp i_-n fpo^n outside, to prepare, 
yet, according to Gorupic (13^?b, P.7ql), the ti^.e aJlo-ve^ for l^^^ipg 
applications could '• e as short as "ifteen days which ofte'- re^ulter" in 
hasty planning. In spi^e of t^is initial haste, the processing of the 
applications was freou.ently a ->rotracted affair, and C--SPS occurred of 
betv/een t:r'o -Ond t"iriee years ^lapsinT between t^e anp-ou-ncemen^s of the 
auction and the allocation of credits- f'nrip-; ^ha^ t-.-ie t^e enter ^ri^e 
was kept in indecision, "rith the resources --b-^ch it w.-.-g of ering as 
p^rticipat:on committed but unutilised. because tle volume of applications 
far e^cee^ed tbe funds to be allocate--" - les^ t--an ba"1^ of ^he 
appl i c^ J'i-oris T"''ere accepted - mnc'"1 of t1":^ effort devoj-e'r"1 to tve 
pre^^r" tion of ap^l icat:;.ons brought PO renu^t, T'b-']e tnp large 
of applications ^?J an p^-nr^P effect or t1 e

scrutin;r and selection of projects.
The most fundament" 1 Difficulty of the auction system was, ho- ever,
its periodicity. \n enterprise or con^vnp ~\reparing a ->roject, even within a field where auctions ",r ere relatively frequent, '•i^'t well h-ve to wait m?ny months for an auction in which it '.vould he eligible. This, pllie^"1 to the hi'^h rpte of rejection of applications, pro^nted an application wherever possible, v/ith the enterprise or com'-iine '-"e eking loans from auction to auction rather than working out a suitable Development strategy and adhering systematically to it. This unwielDiness in the auction system w^s the r>rinci^l reason for its abandonment in

- '.llocation outwitk, the Auction
"or the substrntial part of SIP funds r^t involved in the auction system, and t'->e entire funds ^fter 1^61, a process of continuous allocation was applied. The enterprise, commune or 'e public seeking an investment loan submitted a Detailed application, as for t 1 e auction, which the Bank then scrutinised in the li_ht of its full implications for Plan objectives, th° funds available for allocation to that branch, and any co^petin^ pro.lects.
The only caiid.es to the applicant on its prospects for securing
•"unds were t Vi e statement of objectives ^i.ven in the '"l^n, anD the relative sectoral priorities implied -'n the in^est^ient targets. Project selection was firmly constrained by the pre-allocation of fund's by sector; when ^11 the funds available to a sector had PlreaDy been allocated, an acceptable ap^lic-ti^n mi-~/it be helD o^ r er until t %'e following ye^r, ^ut 7"~s IT.rely substituted for a le?" f r vou"^^le
1. ''ur + her practical difficulties are described by 'h

from another sector.
Although the a-o^licntlo?i could be lod^e^1 whenever ^ro'^ct
elaboration had been completed, without waiting for an appropriate auction, many r'elpys in the processin •• of ^pplic? tio i- still occurre

Investment by t" e Enterprise
The enterprise, >"ith its ri^ht O F initiative and the volume of
funds at its Disposal, player" an apparent!'17' central role in i"~-estment decision-making, but one ^ <rl 'ich was, in pr°otice, closely oirc.nmscrihed. Unless the enterprise could finance 3. nrrgect ent \rel~ from its own resources, it ha.r? to see> a loan from the Sir's, p.n^ be e^^oser1 to t v>eir Decisions. The participation requirement WSR evolved as a ^o'Tr erful instrument for change ] 1 in-; enterprise resources into ^rejects which accorr'er' with the •olanner sectoral allocation of inv^st^ent an^ the other criteria being apr>lier by the 31? managers: t^e prrticipp tion coulr: be flexibly ar'jus'1 e r" to absorb mch of t^e reso rces w'~ich the enterprise had avai1?.ble, or nrovic'er' "rom other sources, if self-finance was i'mossihle. ' Gorupic ( l";^2b,pn. r70 4-7 35) esti^p :"es th^t in 1^60-^1 the GIj1 financed 42 ner ce'it of inr'ustri?! investment directl", but the ^^rtici nation provisions extended its influence to around 70 per cent. A further r>.=.rt was sublet to siznilp.r influence from the Republic anr" com-^n i* Sin's. T^e comnittee of ^rperts (ra>cev-i.c- vn.c?r et. ?1. (1^63, ^.294)) ^i^il^r-ly co-cl^er" that 'through ' the s^.^ten

tjl o^ nprtic:.^3tion L, 7

, a^ n.^^ort^nt r>prt of the
^ecen^r^i-i see resources " r ere centralised... Investment resources within the economy - enternrise funds an^ amortisation - se^^ed
^irst of all for the re^a^ment of loans, and for n- rtici^r tion \n loans, while the irr"»lementor of economic develonmen j -n r"
1. Particinatio'' could! he reounrer' from, the commune or Rp^ublvc as " r ell as from the enterprise.

98,

investment policy v/as the com' r 'unity. '-'-he community organiser"
and finance^ economic Development'.

Investment Criteria

I1 he retention of centralised control of investment was Justified by

Horvat and Jelic ' as necessar for 'the synchronisation in t!">e and

structurally of capacity chan -es' and the application of 'social

criteria of rationality'. The deficiencies of inr1 '.vldual Decision-

making are elaborated by other writers:

'T'-'e individual investment project is not in a position to °;o
beyond its direct economic effect, that is, it is not in a nosition
to measure and include the indirect effects of a q;iven investment
(its effect on the development of other ^ro^nc-f-lve hy-anches, on
the growth of the social productivity of labour etc.).
(Stoja"ovic (in-"',h, r>.345)).

'In decidin 0: the direction for investment, v/e must not begin
fron profitability in the existing syste a, but f^o11! that of the system vi'bich lears to the realisation of the objective of develo^- ment. The appraisal of profitability as the indicator for invest-ment must take account of the differences in •orofstability v etween
the existing system and the new relations arisin~ fr?"- t'.e ef'ects
of the investment. I'he lav; of value, ~'n this case, operates in a specific way, in its "persoective aspeci"'.
(LaV^-vic-Kucar et, al, (196.% p. 22?)).

"^ut to revise and implement the an^ro^ri^te social criteria

•^•resented the system v;ith its nost in'' rr,r + ? x le ^vohlem. T'-^ many

interventions in ^ric ?>><?; re suite-"" i" t^e distorted "e'lre^e n t'- tion o

the prof ita.hility of i ^vest^e'i.t in differs t sectors end in t'~e '"eg

of dependence on external fencing. Pilir (1^53, -n.241) oointe^ to

this:

'(""he lo1 '' level of tranSDor--'- Griffs) -ive^ rise t unne'-essF.r;r
tra vsportation o; ' the raij."r a. "s, v:n iJe ^hey struggle wif-i the m^inta.inp.nce of their already obsolete c^^-^cit:', At the s-^ne
time, so""e inr'v.str:'.•"•!. branches accv^ul^te r" ln~ estme"•".>"!; re^ov^-res
e o f" the lov.r ra'.l -'-rif^s...
The ] i 'h acrumul" t^ ve can.rc.ity o:" ind^s"'"?"1 " 7', c the o-!- 1 &•*- v a

1. Quoted on pp. .68-69.

9°.

"requently lepds local 'ovev-.^nent orga- s to the orientation tov/c.r^
pn industrial project in preference to innrovin- agriculture,
because the former activity ^ives far more rapid an? sizeable
profits' .

The distortion^ arising fro'-1 the price system were less

\vithin each sector, but even within the auction system, w^e?'-? ^h<v rate

of return "/as most extensively applied, a/ditional criteria we re often

felt necessary; fron I~h5£ criteria such as nee ting 'the area o:r -reatest

need', pr^vidin™ 'the most rapid increrse in output 1 a-d similar

formulations ^ecane increasingly common, expressed ±^ -><'> siral units,

to avoid the difficulties of valuation.

The deficiencies of t^e price sys'-e^ an:"1 the multiple cri"-e"ia

implied in the ri?:i objectives conl r? .n:^ve been ta^en into '^cconnt through

shade"; prices, but there is no evidence that decisions '.'/ere s'^st

in this "/ey. Indeed, the decree of Discretion, - .'most r^n^omness, in

the Bank's decisio'-i-Tiahin^ was criticised b^ Gorunic ^

'In the bank's choice of ^roject, not only are these economic
cri; '-ii- applied, but there is else frequently a c
economic an^ non-economic criteria, P -'.yture o~
an rl influences, ^ith the result thct p^^llcpnte for loons do not
- •"l T -'ays hr^e adequate elements for their o""a orientation'.

The committee of experts ("'ahcevic-llucar et. ol. (19^3, po.259-270))

•.vere also highly critical of the quality of investment declsion-makin.?;:

1 National investment decision-making is largely dependent on
the application of suitable analytical tools. Th^ nresent analytical methods used in examining the efficiency of i^^estment are -'~oo
much, even quite exclusively, oriented towards pri vary effects •
and rn o not inclu.de secondary effects and further consequences,

1. i.'he auction of fund's for hotel construction (l n rr-c 1 - 195 q) "' r ^ to favour 'are?s v/ith the lo' v est ratios of Mtel ca-ipcity to t'-e -mmVD r
of visitors', T V iJe ^rojects for construction materials (1? June 1 0 5 v/ere to be selected pccording to the interest rale, hh o extent to which they solve 1'"' the •"•rob"! era of su-^l:/ ": n ferir'* combiner;, reduced f'e cost of production, ^-r^ r f-vour^ble e"r ect on thp Va^.ance of payments, P.n/1 achieved the ^reaiest iv--e of by-pr-o^ucts, in pdrii
•^o the participation offered and the period o-r repayment.

100.

which may be even greater t^an primary effects a.-.id even nullify them. .

... The methods of macro-economic analysis user at ^resent in
eV bora -tin ~; social nlans are not satisfactory, an/ cannot allo"r the !vorkin~ o:i t of necessary alternative ^e^e Torment possibil
for the country as a whole, allow neither the consir e ration o
t"-ieir consennences nor, therefore, t^e o^t i-^1 ---election and irrnlement^ti^n of the development ->olicy which ao-ne-rs Jn the
socia.1 Plans in practical imestrr-nt
Thus the opportunity for rati'-""^ 1 in-pstme^t 9 offerer1 b~ the reT,r iew
of investment ^rejects as -^rrt of the process o: allocating fun^s, was in practice Irrgely di^si^ated by the poor quality of muc'i centralised decision-making, both in sectoral allocation and -nroject selection.

The Investment oyster and the Underdeveloped P.e^ions
The re^i^nal allocation of investment was not ranked ey^i
amon.^ the brsic proportions for develonrnent pl^nninq;, but the ele
of the investment system, v; hich ^a^e the authorities such extensive control over its level and sectoral distribution also afforded considerable control of its regional incidence, ir re'-tly to the adv^ of the underdeveloped regions.
recentralisation, v/it^ its emnhasis on reliance on loral r
anr1 initiative "'otentialiy nosed ?. serious threat to t-~e level o~r investment in the underdeveloped regions, due to +'->eir l°"r cao^city to generate savings: v>nt this threat was aver^te'", i10 r-prtice, by the application of decentralisation in investment only to tM initiative
in project-elaboration and not to either th* accumulation or tne distribution of investible funrs. The relatively limitfd rol^ of self-finance from retained ^rofits, and the a.d.-iustmsnt of the p r?"tici^ation require nent in ^ccordance with t^p resourr.es a-.T n.a IP to the ^nter^rise relieved the underdeveloped regions from muc 1 " o:p the deficiency n f their small volume of orofits, while t^e ^ccvv i 11 • a tl -»i of GIF r^s^urce^ through.

101.
taxes on the enterprise, particularly the tax o-< c~--n .tal assets, drew proportionally les~ from the underdeveloped regions. TLe position of the GIF, as the central reservoir for investment funds, eliminate^ any institutional obstacle to the inter-regionrO. moVli-'n- o^ s'vin^s. 'Toreover, federal determination or" the proportions of the r-eve.iue from various taxes allocated to the GIF's at the loT " r er poli1l<°-i levels, and their v-ri?ti^n by region, was the major influence on tb<= volume of resources available, -onrticulrrly from the Republican SIF's.
The decisions o'-~ project selection, the second s-fre-e of investment allocation, of themselves involved decisions on location? the re-^i^nal allocation of investirent was, at this level, whether explicitly or implicitly treated, inseparable from questions of sectoral allocation. But the principal difficult;- of the investment system involved not control, but criteria. Social surveillance of investment decisions, on the oasis tba~'" ' t>- e enterprises proposed, the ^lan"-ers ^isr>ose^' , designed to allov/ account to be tr>en of the f^ll social conseouences of investment, provided an arrangement n--rticularl.v favourable to the under-

* developed regions, 'v" ere the external economies o;r develo^mpnt co-ild v.e expected to form a larger pfrt of the °fleets of investment. ^os j: Yugoslav commentators doubted, hov/ever, whether a "r'ull an^-r^^.spl "T aG o.nrlied, in soite of the frame'-vork nrovinpr1 --,y the investment s: rr:teqi: but their criticisms -ere usually directed not so "'uc/i against t e over-rigid application of the rate of ret^r-", v/h-'ch wo'l r" have v een
tageon.s to the underdeveloped regions ^^ecific?ll*r, r-s
unsvstem.° J ic and technical?.'/ weak ^ncision-mpkiny.
1. Th^ complementary nrturp of the +VYO type 1? of ^ec.'sio^ , ?• d ii~s implication for r^^io^rl nollry, is stro^~ly -^^e n'n 3t ^'t|n nov: c

102.

(v) The Regions avr! the Planning Process
The principle of decentralisation conferred on all units, t v e federation, Republic, com -nn'-s and enterprises, the right to formulate their own plans and participate in the planning process. "lan preparation began, more or less simultaneous!-/-, at these various levels, with each unit drawing un an outline of its objectives for t 1 -e Ilan
period, loosely within the constraints of the resources eroer, -' -e'7 to be available. The elaboration of the Plan then consisted o^ a tv/o-vs.y
process of adaptation, to secure consistency anon.-: the various plans,
and between total objectives an^ available resources, "Thile the planning levels were territorial, sectoral and group interests were also '.veil represented, with the Economic Chambers representing the various Industries,, cons:1. er associations and trade uniors tr^in^ part in the discussions.
In the -oolitic-1 sense it ^as true, as Lang (l0/"3, ^.3^5) pointed
out, tbflt the process of planning consisted in 'a dialogue o:r equal partners, on the best ways and alternatives of development', but Yugoslav planning v/as concerned essentially \vith investment, and only in a
secondary way with the elaboration of ot^er tar .rets, wit 1 the result that the crucial decisions were those af^ecti'og the allocation of investment, thus giving corresponding im^orta^ce to the units responsible for t v e disposal of inurestment resources. The federation and t! ie enterprises predominated as sources of investment fimds (Table 2-2), and the regulation of enterprise investment, t v ro.igh the restrictions on t^e use of amortisation funds, and the ^artici^ption reouirement, made t^e federation of dominant imnorta^ce. The share ^f the -Republic ii" invest-ment financing remained very stable t'-'roughout tVie ^e^iod, while ^'-e share of the commune increased notably, due largely to t^e expansion of

104.

the Com<-'Trie Fousing "u.-ds rather than to an enhanced role -'n the

financing of productive i

The Republic

The role of the Republic in the ^l^nning ^rocess did not -ch.ieve

clear definition during the r>eriod. Republican "lans --ore cormrrable in

form to the Federal Plan (ap.-rt fro--1 the exclusion of foreign tr^^e), in

dealing '~/ith the outline n-ttern of Development for their territory and

in having as their key sections those setting out tbe global proportions

for investment, f As t 1 e first lev^ 1 of terr'torial disag.-regra-*- ion of the

federal Plan, their position " r a.s obviously im-n^rtant, yet suon^rted by

little real po'.ver. In accordance with the federal structure of the

country, the ?.e public was responsible for nro-jects of ^e^ublican, as

F r ainst national, importance, but Re^ubliccui resources -<"e^e seldom

adequate for it to implement these without resort to federal firancing

and, therefore, surveillance. This tension betveo-i the important planning

role of the Republic an^ its lirnite^ resources was c^1^, e.iter r»n b^r the

committee of experts (Tabcevir.-Xucar et. al. (19'^, "0.273)):

'In rievelotN "ient to r?ate, investment resources hsve been ^ol
with the two conductors of investment pctivit", t'n e federation and
the enterprise, v/h:'le in non-economic investment t^e role of +he
district and cormune has increased. The ro">e o^ ^^e Republic hps continued to d---in61= , wit 7"1 the result that i~i tbe ^erio""' l^^-f^'^ it carried out o.nlv 7.5 r^op cent of all •'nvestmo n -f: i-~ fyypr' assets.
The Republic h^s t' us been almost e- eluded a.^ an economic force in the field of investment. Its nolitical responsibility for "con^^ic de^elopraent on its territory >as not ce^.s^r" al'ng "/itb thi?, P^d the Republic Vi as emer^'ed as a noJitical force in tbp demand "or
inv r stment resources - and in influe :clnr the central decision on t^e distribution ^^ investment ar^"1 o- eac 1 ^ more -'rtimrt^nt Inr -: visual 1nT 'es -1 ment decision. '-i-'^e investment resources of the Re'ou'ilic for

industr--ts r ar- evoended - .. . mainly ^j as ^°r ' i^i-nr tion in loans fro'i the GIF and hel^ to their o--/-i underdeveloped arear^. The ^nabilit-- of tbp
A 'Lep blic to co'-r-uct Invpstn^ut, Fn^ t^at • > ip>r.ns a 1 so -"evel-^ -^n 4-, nolicy on its ter it cry has reouli^ i^ t" e i-ive^t^e^t -^ol'ry of the federation bein^ under strong Dres^ur^ f ro n the Re-nublirs, r nd

under indivirTu.pl pressure from the con-nines and enterprises.
which lowers the quality of central investment ^eci ^ ion-ma ki••

Commune

The com -nne (opsti.n?.) wa^ inaugurated PS t Vi e or^an of local govern-ment in 1955. In that year, 1479 communes were established , with an average population of under 12,000 Inhabitants, hn< t eir ni^nber w-s nro" restively reduced b r amalgamation, until in l c)64 they numbered only 577, with an aver" -e nonu.la.tion of 33,000. * Larger cities ha^ a city administration, suVivir'ed by v/ards.
The commune's responsibility?- for 'social survei!1 lance ' of the enterprises ^ave it a special relationship vith the; n. Lar^e enterprises ^.i^ht discuss their affairs with the Republican or federal authorities, but the m?,.iority of enterprises ha^ direct dealings wit^ t^e political authorities only at the level of the commune. The economic af pirs of the commune were conducted by the Council of :. roducers, representing

2 local enterprises. *

The requirement t'-at t^e com^u^e an^rove the fi^pl. annual accounts
of t v e enterprise ( i- na^'-t, a "r'orm of aud't, to sa^e.^u-0 ^^ against illegal actions by t^e ent^r^rise) kent the conv'-ime infornie^ in. detail of the enterprise's position. The further ri^ht of the co n '-nne to receive and discuss the ~>ian o^ eac^ enterprise ^PS designed to nromote the coordination of the activities ^1-mned on its territory. The Council of Producers ras not em^o'-vered to require alterations to
to enterprise plans, '-ut had the ri^ht to ma.Ve recommendations ^hi
1. Savezni Zavo^ 7,3. otatistiku: Statisticki Godisr.jsk 1">64, Tr.hle 10 1 -1.
2. The com "ine Council of ^'rod'icers \vas elected as t'.-'o colleges, one for n".ri culture and one f^r ot'^er economic sectors, the membership of each
n e -;-,--r proportional to its s^pre in social nro duct. ..itJ-nn e-ich
college, seats on the Council were allocated amon;j -i-1^7--' du^l en'e^'-

••irises, or --roups of smaller e v: terr>risftR, in ->ro n ort-'^ ' ~o t eir ''r of emnlo'r ees.

the workers' council v/as boun^ to consider, and often, I n
accepted. Even -.ithout a form-1! -r^co^e ^ation fmn f'p Co^nc'i of T-roducers, the enterprise, in its turn, could be hcpt informed through its own representative on the Council. The influence of the corn-rune on plan ^reparation derived, in ^ n ~ t, from tho clarification, v'v ich resulted from the process of discussion within the Council of Iro^ucers, ' ut t i: <r o concrete nomers gave force to its recommendations. The resources of the commune SI?, \vhile li^iter* in volume, "vere an important source of finance for local enterprises, and the commune was often required to guarantee any loan sought by an enterprise fr~>m the Republic or federal SIV's; by wit hoi ding these, the commune could check developments of which it dir1 not approve.
The commutes in particular, but also the Republics, ^r ere given a
strong vested interest in nromoti'ng local development, through tl'.eir right to retain specifier1 shares ii the taxes on the enterprise and on personal incomes raised on their territory, and to levy su^le^entary : '°.-'es. Equally, the Provision f"at the com une, b-?c>er7 un ^r t^^ i^nu^lic, T '"-?s financially responsible for en.t^r'irise losses, gave them an interest in efficient ^evelo^rent. To -oro^ct t v e enterprise and its nr^fits from exploitation, the taxation rights of t n ''e commune, an^ in particular its Discriminatory pO'-;. r e:rs, "ere often regulated by t'-te fe^errtion.
The commune plans differed from those of the Republics in being preparer1 with reference to specific nrojeots an r-1 pfter ^"iscusoi^n ' r>'ith t rie enterprises themselves, ra.t'-er than as hpsic proportions of
ment. i'he com mane impinge r1 on producers' plans rirectly, t'-rongh
1. Until l"1 ^?- the commune ha'3 extensive ^o^'ers of tp-pt:' ^n over private sector; its rut v les" use of t^ese, ^-Tming t Vi e dpve.l^
of handicrafts, catering and tourist service?, 1^'" to the curbing of these powers in 1962.

107.

by the Coined 1 of Producers, wbn le the Republic influenced development pri'.iarily through the inplementation of the basic proportions, to the extent that its 11 - ited resources allowed.
The enthusiasm f^r decentralisation, ~>- rticular 1 in the early
19^0' 3, le'-"' mar y Yugoslav writers to exaggerate t 1 e importance o~" the cormune in plan^in"; economic development. Ku-ovic (1959, r>-n. £1-62) , for example , claims that :
Tirect management of t^e economic development o:F the country is
tbe responsibility of the Conr-u'-e, which fulfils its •'-ash v/ithin
the framework of the '"eneral planned proportions and by eans of
its own plan o -r> economic de^eloppent. These plans also form t v e essential media of co -' |; ' u vi..- 1 self-government in the economic flel^.
This lends e^cention^l i r T">ortpnce to th.ese re^i~>nal nlens a^d causes
the essential difference betveen t^e- and other general plans'.
out, apart from inves^n^nt in h^usin:^, not only "":> s the s-'sre of the coiT'iime in the financing o: r development small, but f^e disposal of its resources was heavily inline::' ced by the requirements of Republican and federal participations. Only in t Vi e case o:r small proj-c-s ^±r> the
com une have much autonomy in organising development on its territory; for m-ny projects, its initiative i/"> or-opisin^ further ^evelonmenvs was largely offset b^^ t v e need for outside finance. The lack of skilled personnel in the com u?ial planni"1 ^ offices ( co-m^ented on by D^bcevic-Kucar et al. (19$?, r».131) and Lan^ (19o3, P. 305)) res^ricte^ the respon-sibilities which the centr-al planners were, in practice, prepare^"1 to confer on the communes. The Cou.'.cil of Producers, the '"ody responsible for exercising the com •••tine's .functions in economic °f fairs, came to be reorder as o->e of t^e less successful of t!> e innovations litrodured vith decentralisation; in particul-r, adequate co 1 esion wit' ^'n the Council Mras o: ten difficult > o secure, 'vit^ its members re -ire --e t : n r" the individual enterprises whose affairs were closely involved. 1 «
, T1' 1 '1'" -^oint is '"' sr^e^p -" in P w-i^c-T r-^^ + p^-ir^ ^ Ati+y

108.
The "'istrict
The district (sre7) \vas much the least i'li-^ortant of the ierritorlal
units. In 1355 107 of thr?^> were established. " PS ^ronns of a '\jncent con 'lines brought to^et^er for ^ur^oses for v/^ich the com -i me ivas too small a unit, and the Republic too lar^e. ~ut the progressive increase in tbe average si-^e of the commune eroded their usefulness, brin^in"; a declire in their number to 40 in .19^3-^4 am" the d-oislon, embodied in the 19^3 Constitution 1 ut delaye^ In implementation, to abolish them.
In the cases of "lontene^ro anr1 Kos^et, t 1n e Hem.ihlic or region rjro^ed, of itself, a sufficientl-' small unit, an'"7, from 195°' anr 19GO resTje districts ceased to exist in tbese territories.
Tistrict T)lans were, in the m?:Vn, sin^l;; e^^re.^a tions of tv^
of member communes. Their major role l^y in the coordination of certain types of i-ivestment: infrastructure.l investment, for roa^s, electricity networks, irrisation projects a^d specialised education or he^lt>- facilities, the exploitation of forested prea.s, and activities s'?.ch as food---;rocessin^ w""ich required several separate, but coordinate^'j 7ro: ects, used
The limited investment resources of t s e district -verol ^--r-ely for financing infrastructure, but ^n occasion also f 03? assisting rj
'ied b;T communes, particularly through - contribution to the
tion r^nired. The District functioned, therefore, as -?n Inter-
mediate unit for coordinating individual t;/nes o:1" inves'^rnt onlv, rather tban as a full planni:: 1 ™ urit.

Inte^ration^of the Plans
'.Vhile all the d^centrrlise'" bodies ^ad t^e -formal r'.r^t to drav in

thei"--1 ov/n plans, the retention by t v o central aut v orities of e-/t^ns.".ve
1. Save^ni Zrvod zn Stat-Rtiku: Statis !• i '•"-' G-d-'-nja!' 1^6^, Table 1^1-1

control over investment resources 1: lile'"1 t^e ran^e of realistic ni an

alternatives; a ^lan v/Mch failed to accord with national objectives ^ad poor prosnec^s of subsequent i'tmleme" tatlon, 1^ t'-<= common s^'nat wh.ere outside financing ""as required. 'J-e planning process, as it operated between 1953 ?-nd 1964, did not evolve & satisfactory solution to this tension between decentralised plan preparation and centralised control of resources; the break-row- of the national r>velo -vient objectives into deta .Lied regional and sectoral implications and to prospects for the Individual enterprise, remained a tenuous ^rocess. The lack of guidance from the centre to t"'e com-nmes anr1 enterprises responsible for nro^osin^ many of t^e new nroiects v 'hich would implement t^e global objectives easily resulted in misdirected nl^nnin^. This criticism '"'as made by the committee ov experts (Pah'cevie-Kucar et al. (196^, pi). 15°-154)):
'The economic syste 1 "1, witli its essential c •"'"racier :.sti.c of
the interaction of central aV decentralised investment decisions, demands a clearly and Definitively formul- te r"" Yugoslav policy for economic •""'eve.1 o^ment, w> ich v;o''ld ser\r e a.s a definite orientation
to enterprises and com'iunes in makinp; investment decisions.
The lack o:r such a poli.cy is unsatisfactory from many aspects.,
and is, in nart, the ca^.se o-° on.r current economic riff lenities' .
ic (l°62a, pn,47S-47 o) si mi 1 a.r br stressed the di ff i cuJties arising
from 'the lac]: of a sufficiently clerr and consistent national Yugoslav economic policy, wh'ch would be consistently eye cute r" and "'ould
se^ve as a more definite or': er ''~e- ti^n for enterprises and convenes'. Although the nlannin^ process ": as intended to secvne the Integration
of the nlans o:r the m? y decentralised bodies into a c^ns 1" ^^en"^ v/hole, complete dovetailing was not re^ulrer1. Jhis arose -r r^m thp recognition that such a decree o'1" nrecision ?/as unnecessrrv, an r" also ina^^ro-*ri' te to t^-e uncertainties of economic life, oprtic" h'-vly as ^a y o^ the ^l^n targets, such PS t^ose for f e ^ro"'th of o^tnut and e'i'O ~»~ r ~e t, were
not strictly operational in themselves but v*re only predictions,

111.

development Dl^ns o^ t e communes w^s the Rertn^lir, v^' r> rouJd derl
v-i t n -i a su ficientl-r small number o r commmes to allow rdeau.^te •oro;ier.t-scrutiny and loc-^l knowledge. Ti-e Republic, however, not oil^ r*±f not have sufficient reso^rce^ at its r>is-nos?l to fulfil this role vis-^-vis the communes, hut itself ha^ to devote much c>nergy to win Voc- ^llocetions frO'n the le^er-^tion. The federating was thus under -nressur^
individual communes fis well .°s frnm the ^^e^^hl i cs. 'j-'his o^.^e
ti^n of decisions, ar? a result of the concentration of ^nndS' ^rid the participation requirement, ^^ve rise to ^oor dpn' pioT-m^kin^r. T^e weakness in the investment system was no^ the territorial structure
of the SIP's, ivi itself a very serviceable arrange Tien+ , hut the inability of the Republic, with the ina^eou.pte fund's at its disposal, to serve as the first-level coor'^inator anrt filler of investment decisionSo

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to introduce a new Ion -'--term. plant the I'er' Irr rr- '-^:ment Prof -ramme , the limited pro. gramme adopted to s.?lvpge certain specific ^rorlects from wreck of the rive-Year Plan, continued ii force, ^ut, for t Ti e rest, development planning was conducted only through annu.pl Plans. These
- ^ears, 1953-56, were years of decentralisation without long- J erra ^l^
The }"p lar for 195^ did. not mention the 'underdeveloped regions' as
a specific category, but special assistance can be -;--rerr D d r rom variou provisions. The temporary ^asic proportions of the 'rate of utilisatio of capacity' an? the 'rate of ^ccivn.u.1 ^tion and funds' were still in force, * an r" t-e in^est^nent •nro tiec'f:s to be undertaken dn.rin"* t v e year xvere listed individually, ^ncluding a number from t"'e
regions, but with no indication as to whether t' n eir adoption stemmed from special efforts for the^e regions, or fro -a national r>olicy Decisions, independent of regional considerations.
Ihe regional element was clearer in. t'^e accn nnl-^tion of investment
funds ; the proportion of the revenne raised in eacb ...e public b^ the tax
v\

on 'accumulation anr funds' , which ivas to be contributed to the federation, v;as specified: in Slovenia 66.6 ner cent, '.n Croatia 56.6, in Serbia 53» C3, in Bosnir-lTerce^ovina 46.2, in .acedoni^ 61.5 an/"1 in tlontene^ro 21.1 per cent; not o-^l; r was I'lor.tenegro thus p-rticn" arly favoured, but the four poorest Republics were to ?--ecelve interest-free credits from their contributions to the federation, in ace^onja and "lontene^ro of their entire contribution, in "3osnip- ercegovina of 96 ner cent of it, and in Serbia of 7 per cent. Macedonia and o-.ite ^e-ro, moreover, were each to receive credits from the federal bnd:-e j' ri a special interest rate of 2 per cent. The-^e -interest-free ?•?-?• " ^e r cent credits were to be n-e^ rnly for the -ourpo^e^ of inve^t^e^t , to
1. See pps. f8| ?Z •

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requirements contained in the various plans. (Plnn (195% r>aras. 4, 5)). Grants from the federal budget \vere also allocated to T;T o.cedonia and iviontene^ro, to help cover their bu/^etary expenditures. This nrovis.'on was renev.-ed in each year throwrhon.t the per?'.or", and w<s of considerable importance to f-ese Republics.
It can be inferred from t s ese provisions thr> t snec.'al assistance was being extender! to ™acedonia and Montenegro, and, to a lesser extent, Bosnia-Herce^ovina, through the increased nvaii"bility of investment
funds for approved projects. ^ut as the reorganisation of the en'.ire system of investment fi:i^ncin°; r-r as i ornlnent these provisions were intended to be only temporary.
m

The Plan for 1954, the year in which the competitive allocation of
fun^s from the GIF WPS egun, introducer"1 federal frisncinr of ' lar^e ^rojects of eneral i'r^ortance' in the T.iderdeve 1 o^e^ regions. Credits for these '-"iffere r1 from other allocations from the GIF by being laid down in the Plan a^d therefore independent of t^e "eneral competition r.r.d interest rates offered. Moreover, the interest and repay ients on them were made repayable to the Republican Investment ~unr (Ri:."'),of the Republic concerned, and not to the GIF. ^y being re^ Table, the firi^s came to the projects involve^ in. the for™, of a loan, t.' encourage their efficient use- but, by originating in a federal source, and beir^ repaid to the Republic they were equivalent to an .investment °;rant to the epublic. The renr-.y Tents strengthened the resources of t^e --I? both for real loc-t ion within the Renu^lic, anr" for nrovr'.din.c; nprt"1' ci-- tions to hel^ projects ^ro:^ t'lere in th^- auctions for loans fro*1! the GI... 1 (vv^re projects from t^e unr'er^evelooer' Republics co-'ld connate in the ror'^l way). Considerable use was ma^e in l^ter ye-r-i"s ^^so, o ° this for"1 of provision.

1 1 -7 J-JL i •

The continuing repayment of earlier federal investments to the "IP's
of Macedonia and. Tfontene^ro, but not .Serbia, was confirmed. The re pay-ments due on federal loans to Bosnia-r erce.r;;ovina. in 195?' were tra.ns "erred to the .Republic, to be used exclusively for education an-" health -irolects. '.Yhile >>elning to enualise t^e position of osiai^-Eerce^ovi a, ±--i the financing of social capital, vis-a-vis i'acedonja and Toniene^ro which receiverl an-:UP! budget grants from the federation, this somewhat unwieldy provision, involving an amalgamation of sources of ^rodvi.ctive a d non-T>ro r1 victive investment, WPS not repeated. (Plan (1°55, chans. ir, rv)). The provisions in the Plan for 1^5^ tailer1 off slightl.y, in
anticipation of t 1 e introduction of the ne T v Five-Year Plprt. Global allocations -"--•on1 the GIF T vere a^ain -larle to race^oni'a. --d 'Iontene rr-:ro, but in the '7iore direct form of ^rauts to t'--e RIF's t 1 enselves. Intended i-the first instance for the completion of projects alr^pdy under way, and for providin^ particir)c?tioi ->.s and <rurran j-ees for applications to the Gil?, any surplus on these allocations coul^ be used, for new ^rojec + s, if approved by the federal Executive Council. jlepayments, including t''ose on all loans since 1953, were allocate^ to the P.IF's. (rian (1°5 C, chaps. x, xxv)).
In its early years, therefore, special as-istanc^ to the ~ nr"er-
developed regio s was arra^-ed on a --ear-to-year basis, both in "he selection of eligible regions and. in the for-> in r/hich assistance ^ rr as given. Llace^onia and "lontene ^ro alone -vere schedu.led in each of t'-e four years; Bosni--IIer-ce^o\r ina featured only in l c>53, and, for social cppi^al only, in 1955; oerbia, after a minimal conce^oion in l a ^3, T '^?-S strongly represented in 1954 a-d 1955, b^.t ot at all in 1^56; Koi^e '. V.T.S mentioned explicit!./ on 1 /- once, in 1954. Alt^ou^'- the a^i icat' on of

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investment assistance was pro"r^ssive]*r -vidoivd br the 'oro---' sion of global credits, it r/as confined essentiallv to a small number of individual projects, scarcely amounting to a re~?'ouPl development programme. Irlickov (1958, ^.27°) -rove as his verdict on the years of 'decentrali-sation ""itho^t lon:;-term planning' that
'the lack of a lor --terra policy for the development (of the
country) as a whole and. for the development of the underdeveloped regions did not allov/' stability and a lon°;-run character in the methods of financing, a ~ r ^ct which had an entirely negative effect
on the efficient solution of the (regional) qi;?stion' .

Guaranteed Investments, 1^57-60
With the retrr~ to logger-term ^TanniiT, in 1957, and the greater confidence in the country's economic prospects wb.ic 1- 0 it expressed, the development o the back'v-rd regions received more detailed attention. The Plan for l c'57-6l lister"1 a^o-ng its summary oh.iectives for the neriod 'to assist the development of the economically l^ack-vard repjions' , a.nd includer a chapter on 'ren;i">nal development' -ivin^ t>:e substance of its provisions. (Plan (195'7 -6l, chap, viii) ) . "he federatior v/as to
' ta v e measures for the development of the economically back'"rrd
areas in general, and, in D^rticular, -.'ithin the Renublics of
T.'acedonia and iiontenec-ro and the autonomous region of /.osmet'.
The measures co-rm-ised priority i^ t v e GIF a.llorptious for projects from these regions, 'provided they satisfy, to pq equ^l de~r»°, t 1 ^ crilerion of prof itabil.ity ' ; a guaranteed allocation o p Lvwestment fu dg to each region, over th-- Plan period; t >: e provision, from thr GIF, of the necessary fun^s for guarantees and pertic-' nations, and t ^e repayment of all loa.-'S from the GIF to the appropriate KIP.
This was the first time, in the tv;elve ye-rs since the end of t^e
'./ar, (apart from a brief nention in 1954), that Kosmet ha^ ^e»'i sc!"^ -led for special trea^me'.t, ?'n s ^-' te of "' ts stptun as on --"t-o'T^^s r^g'^n nnd

its undoubted poverty. * Bo?riiia~Herce~ovina -^as omitted, 'beer-use of the success already achieved in the earlier period' ? accor^ ' .ig to Uvalir

Of t'~e various 'ieasur^s of assistance, b,» far t<e "oot f^nortant vas
the 'guaranteed inve^tnents' , an extension of f>,o r, l lor.? -*•-: on of gl v-rl credits already applied in 1955-56. They vere alloc c'~'ed by branches in

2 the annual plans, as v-o^rprmes and ^rn;jects were approve'", * and -->prV-

repayable to the RIP's.
The -\riority of rrojects from t^e underdeveloped regions in the
"1 locatio^ of GIF funds, ~iven eaual profitability, r^ade little co'tri-bution to channel.1. 1'.r";-: fu^ds to thes° regions. No figures can be 'iven of amounts involve <•", biit Yugoslav economist? concerned v-?t v t':e
fiir icin^ of the underdeveloped regions, tended to dismiss its usefulness, on the ^r^unds that coran^-rrble projects, fron di:"ferert parts of the country, offering equal profitability, did* not arise.
Preferentic-l.ly lov interest rr.tes -. -.d extended re^ay-ient per'iod?
co^l^ be granted by the CUE, hut, "/-'.-'•'- the III? ~: tr^e"'.f T-eceiv:'ng ^eRe repayments i-q each Republic, I^"^T nartic-1' nation ' r< as a ^or°
concession.
he reoaTr ments of all credits allocated iron t^e GIF for
in the under-developed re g -ions, and not onl'; r f ~>?e fro~:n t v e 'guaranteed investments' -'ere granted to the RIF's. In t 1 ^ oase of Kosmet, ^h.is

1. ..'rorn this time, Vo;ivodi-.a and Kosnet ".r ere incr^a^inn-Tv ;-i*-en parity of treatment with the republics. An incidental, bu^ important, consequence o:C thl^ '' rr s the :'.-proved ava ' lah^' li"L y o~ data ^or "'"''-em, including national -V'l^oj^e accounts.
?. Plan- (1957, chaps, y, /rxvl), Plan (1353, chans. iv, xi-) , I'lan (l!)5°, c 1)?^?. ill, xvjl), Plan (l^oO, rha^. iii, para. °), Flan (19"1, chap, iii, para. 7).
3. The ^ener^l uv'co^''netit-i.ven.es r5 of ->ro"lerhs fro:-1 the underdeveloped reT/.ons " r as ach'-yowledged! by ^la/enovi^, Fe^'d of t v-e Regional Section of the Federal Planning Office, in int^rvlevr on 2" September 1^'^.

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technical services a*-.C skilfeD personnel, hy other boD'es, ^ c.omnu" es and enterprises in t^e underdeveloped regions.
"Torn t v e r>>">int of view if the underdeveloped rep-ions, tb f% co^stitu-
tional provisions during these years '"ere far from satis "actory. As arrangements u.nDer the systein of guaranteeD invest-.'tents were w^nnd un,
the special allocations were a-ain naDe on a year-to-year basis, i^^eding lon.j-tern plaining. The Discretion given t^ t^e regions in the allocation of the block grants among individual projects was mo:--e a^p- rent than real, as they were often seeking other finance fr^m the f°deration, v-hioh exposed their activities to scrutiny. The underDeveloned areas of Serbia Troner, Bosnia-rerce;-;ovina. anD Croatia, while cnnnrrlsln^ adjacent districts anD com-iTnes, lacked their o"<^ plan"; ing and administrative organs, which, resulted in ^elays and noor coordination in the use of funds. Tlus, aj. though a substantial volume of assistance was ] eing allocated, t V| e method of its adr; iinistrc ~; ion made t'ese frustrating years for the underdeveloped regions.

The Volume of Assistance
The narrative accou t n the evolution of special measures in favour
of t-e underDevelo""!'"'d regions shoe's tl.^'^ a.ssistaice " r a,s •-i-^e ava ll^^le principally t^ron^1 -1 the Direct m.ethoD o-': the channelling of investment funds under a number of Different heaDs, but also t^roun;1 t^e i^/irect method of nre'erenti"! interest a.-d repayment ter^s anD 1 y<*T "'-rticipation renuire^ents. j.'he practical Difficulties enc •u.ntere r" in est"lma H ; n c~ the amount of assistance given to each of the unc^rDevelop^ regions ^roT ~ed consiDer^ble. Certain I "'"ems, notrhVr t 1 ^ ar^^^nts o^1 ^ ^vest^ent granted
as a, result o~^ lower participation re'm.ire^ent^ anD other ~>rp"r <?"r-e"iti "1 terms, were i-ibr"; "sical 7. Difficult, 'f not l^.-oossible to e? s

"I
.!-

even v.^ere the a^on. .ts were, i nri ici ^le, calculable, details -ere n^ readil;"- available on the extent of assistance. * '-nv. •*• ••_* j n ^r'- - "!->•»• t/ -no J -pj all, allocations "/ere specifier1 in the various Plr.ns, bnt, even in an economy '": ere investment ^lanninc was the '-e^rt of the planning system, Plan figures are, at best, a t>roxy :Tor realise^" i.nve-t, -nt.
"But a 'more fu.nr'ame.^.tal r^i^fir.ulty in t' e p.^-irai^a"1 ^ r ib° extent
of spec:".'5! assistance is co^ce-ntual. opeci-.l assistance ": TS only a particular measure within the s/stem of nlanned ^eve^opmenN Its sphere of application could, and did, overlap with ^lanned develo^nent implemented in the normal '-a---, ^-rt: cnla^ly thron.g;h the rather Discretionary allocation of GIF fuVs out-vith the auction. The same •oro.lec'- could Ve f in~nc^, soneti-^s "rom the on^ source and so'iet-'mes from tv-'e other. The construction of the harbo--\r at ^ar v/as specified,
- Jn the Plans for 1^54 and 19?5, as a nro-'ect of federal investment in transport, in t^^ same way as, for example, the building of '^el-rade airport an^ certain se^tio:-s of railway, an^ ap^i't fro- special
ascia.-L ance to Tontenegro' hut under t n ne I n 57 - c l Plan i^ - '-s an ^D^-roved r,ro;ject -vithin th» system of guaranteed investments. Similar y the ' limd' resources, in t'->e years 19^1-64, were specifically restricted to the
. p inane In," of proj^c^s in manuf' ctn.rin^ industry, agriculture and local transportation, while projects in the basic industries, including transport faciliti-s, ^ere to v e financed from t'-e "I?; but allocations, such as for 'the construction of roa^s in Macedonia T feature'- in ^he
. ^ener^l list of plann-'" allocations from t^e Gir a^.d not, in spite of their close re<m: ionship to x'nnd acti\riti"--s, as part of special

1. The Investment Fan]', on bein^ ap^roac'-ed by the author, decMne r" t^ mahe available inures on the amount o:r' investment financed from special ass '.stance.

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assistance. The exclusion of t v e basic industries 'rom fur.d f inane-'ap-moreover, iimlier1 special treatment for t'~em through tV? GIF, unless rriless development in the under^eve 7 oped regions - r 'as to be specificrilly biasse^ av.r a,y from the'i. In the Yugoslav content, therefore, of planned neve I'"1 •'ment throng1 '1 investment •oi Q nning, tie volume o F ass '-S~' ance linger special measures cannot define, v/iti any precision, the extent of federal'efforts for the underdeveloped regions.
A '"uc 1" more useful ^er.sur° is t^e comparison, a/nong the regions,
of the -oro^ortion of t^eir total '.Jivea^n-nt which -va,3 fin-nee*-" from federal sources (Table 2-3). This measure has the ar'vantege of i
all investment fin-need, from "er'er-l so'T^es, irrespective of the category (budgets, ^uaranteer1 investments, GIF, Tund', etc). thro-.v~h which it was r'ade available, thus avoi^j .1 ^ the dif "icu.-ty o\ trying to trace a?_l the amounts allocated, fr^m different sources. Conversely, it fails to separ-te 'assistance' to the underdeveloped regions ^rom funrs allocate-'' on a competitive basis; investment management, however, vhich made investment allocation mainly an a^^inis ^rative, refer than a competitive, process, severely curtails the applicability of 'the investment cost' of the policy, to be me- r^ured by sneciri allocations. These figures, w'-ich are available onl;y f-»r f--e six Republics, sho^
a. ran.Vin^ exactly inverse to th.rt by level of Development, the richest ^ermblics receiving the lowest proportions of their investment finance from federal sources, and the poorest t v e highest r>roportio-is. -"-'he high share in T ontene^ro was notable throughout t n ^e period, and in Macedonia particularly between 195~ and 19^4.
An indication can be ypvie^, in th'? case of bo-met, from tv-o pmiu^l
s in the level of total investment, shrv'n in Table 2-'t. The low

1""S.

level of investment there, observed for 1947-52, * discounts much impact from the changes of 1^54-56, but the ver^ substantial increase ~: n eac v of the years 1937, 195^ and 1°59, to a level more than sustained until the end of the ->eri^d, strongly SU^-PS'S C'-vsiderabl.e assistance from outside in t'~e latter ^art of the period.
Through the various instruments at its disposal, therefore, the federation made a substantial volume of investment fun^s available to the underdeveloped regions, nrnbrbly leas^ in Bosni^-Hercegovjna, and only latterl^ in Kosmet.
However, although t 1 e regional allocation of investment intended
by the planners could have been secured through "^^ general instruments of the investment system, without special provisions, and although the speci ..1 measures themselves we -i 'e not entire 1.'' separable from general planned investments, the >~;u~ ran teed investments and similar measures "ere advantageous both to tnp nlanne:-~s and to the reci^ie^ regions. Prom the pla.n ers' point of vie-'.-, the planned allocations ''0 the under— developed regions exempted -^^ese fun^s ~"rom t 1-i e process o:c negotiation and ^argai^.inn; involve^1 in securing a p^rticul^r re-:io-'a,l allocation, thus simplifying their tasl:. From t^e noint of view of f- e regions, a minimum volume of funds -as guaranteed, and its amount ('-.'hen lon~~"'~erm plan"in^ was effective) lznor.ni for so ie time a'esr"1, thus allov /in" longer-term plan'iin- at the region-1 level, The special measures of assistance served as a political gur>-nn + pp to ohe underdeveloped regions, and as a convenience in securing a distribution o^ investment •"^•-ds -rhich, given t r e institutional franework, could ^ave h PP - securer'' without f-em.

1. Table 1-6, p.

rational Development and the Underdeveloped Tte^'^ns
T^.e development o^ thp backward regions, xnrrlemersted par'ly w
- rhe system of planner" Development for the country as -° vr>o^e and --x •^Tou^h sneci^l "^easures, T "a» p°r1 icularly vulnerable + o the weakn
in coordination al^rdy observ^^ in regionnl planning in ^ener-0 1 . Both of the V-ter Five-Year '. lans, for 1957-61 and l°6l-65, ^clar^d tv. e ir objective of nromotin°; t'-e more r^pif3 gro-^t]« of tb 0 un^err'evelo-ne'''1 regions, but without s^ecifyin^: v 'ov rauo v more rapif"' tbpn i n tVip. r^st of fi-p coirotr^, or any t-n r "et ri.-vte for the achievement of conver -e:ire. As late as •r"1 nrin rr th^ discuss 4 ons on the ^iraf^ of tbe r- bortive ,-I even- Year Plan ^or 1°^4-70, "iTpovski (lr'G3 1% P. 672) \vp.s voicing s+ron~ criticism of tbe imprecision o-p lan formulations:
' Tbe Plan texts Co not -;ive us tb^ answers to sever?! funda-iental o^estions :

1, '."^e: 1 " r"o not ^ronose a desire^ re 1 at jo ^s/'i'^ between ^he levels
of economic development of t^e deve^oned and less
regions, althou.^-" this is an erce^tionplly import an 'f nuestion, bot1 " 1 for economic reasons a^d because of the socialist
relations within our country...
2. They do not nropose r, +-; ---IV-^^T^ ^Q^ , f ^eriod within w'-'ich this relationship, sought after, economically rational and sociall
Desirable as it is, is to :e achieved.
3. They do not su.^^est the rate, _o_f "^"'.•._Jr. +.h nr cessary "; "^ ^
nroc r ss of undermining and narro^r inc; the dif-'ef-erces. '
Any Plan targets for the '-rov/t^ o:p total o^t^ut would not themselves have been, '•"''ir^ctly in^le^ented under the s" r s L em o^ "r»lar>iiinT by ~lobal proportions, T- tr here 4 ^e^ served o:^ 1 - r as the final objectives, the intended results of the operational objectives for -"nvest^^nt. : ore detailed ela^o-a tion would, however, ^.ave helped to s"hstan; i" J e the decree of consistency a^'ong the various PTovrth oh.-i ecti^-ec, an'" het'-'e*^ tbem and the resources available. 7>ut in orar.tic^ +he declare'" --rovi;h objective for the underde~r elope'" regions and t v> e various allocations of investment funds an^e^r to have been only loosely coordinated, the

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j. APPROACHES TO REGIONAL DEVELOPMENT

Western studies of regional growth, at the theoretical level, are
often concerned to explain the causal mechanism involve^, on the assumption of the more or less free operation of economic forces. Leading examples of regional growth theories on this pattern include the model of cumulative divergence suggested by Myrdal (1957), the 'export base' theory of North (1955) and Andrews (1953), (1^56), and the more complex model, based nn exports and labour migration, by Borts and Stein (1964). Yugoslav economists, however, concerned with a planned, and not a free market, economy, and with changing the regional situation rather than anticipating its evolution, direct their extensive writing on regional development almost exclusively towards deriving guide-lines and techniques for policy-making.
These will be "treated under the two heads of 'growth strategies'
and 'locational strategies', although, for the purposes of practical decision-making, the two obviously camnot be strictly separated in this way, and even in the discussion points of overlap will occur. The Trowth strategies will cover the sectoral aspects of development, in particular the related questions of priority sectors and choice of techniques, while the locational strategies will deal with th~ territorial aspects, the geographical concentration or dispersion of development, and population migration. The sectoral as-nect gains particular importance in Yugoslav development planning, not only from its formal position in the second global proportion, but because the limited comparability, between sectors, of the rate of return on investment, and the rigidity of the sectoral allocation of investment funds tended to make the sector a discrete entity. The friction of distance, and the immobility of certain resources, on the other hand, constitute ore of the special

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characteristics of regional economics.

(i) Growth Strategies

The Build-up of the Basic Industries, 1947-56

As has already been observed (Chanter 1 (iii)), the first approach,

introduced in the early Five-Year Pla^i of 1947-5? and continued under

its successor, the Key Investment Programme, until 1956, treated the

development of the backward regions in precisely the same ^ay as the

development of the economy as a whole; the key to progress was to be

industrialisation. A detailed justification for industrialisation is

given by Cobeljic (1959, pp. 55-56):

'1. The greatest opportunity in the development of under-
developed areas is offered by the exploitation of the great difference in productivity which exists between industry and agriculture. In underdeveloped countries real income per head
is commonly three times less in agriculture than in n^n-
agricultural activities. This difference reveals the full importance of industrial development and a change in the economic structure. The transfer of population into industry and an urban economy brings a major increase in average national productivity. In this way underdeveloped countries achieve the most rapid increase in income in total and per hear1 of the population. . .
2. In underdeveloped countries, where more than two-thirds
of the population and labour-force are employed in agriculture, improving agricultural production is impracticable without the rapid development of industry. . . The development of industry reduces the agricultural population absolutely and relatively. This brings an increase ' in average productivity within agriculture and simultaneously establishes the conditions for its
mechanisation... On the other hand, by increasing the real income
of the urban pop^ation, the development of industry creates an internal market capable of stimulating the intensification of production in agriculture 1.

The Plan revealed its Marxist intellectual forebears in the

priority not only of industrialisation, but of the development of

'Sector I', the basic industries rroducing capital equipment and

industrial materials:

'The fundamental reason why economic development must be conducted with the nnrera^id growth of Sector I is that this

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Sector must continually provide an ever greater volume of capital equipment for extended reproduction. In underdeveloped countries the shortage of capital equipment is the principal limiting factor in economic development. For such countries it can therefore be said that their economic progress depends above all on the rate of growth of investment in the means of production produce^ by Sector I. As long as underdeveloped countries contain large reserves of unutilised labour... the increpser' production of the ^ans of production and particularly of eouipraent is far more Decisive for the speed of economic growth in this initial phase. Only in a later phase must the structure of investment be increasingly varied and coordinated, that is, increasingly including products from Sector II 1.

'It is impossible to envisage economic development where the construction of transport, the installation of larger energy
units, the mechanisation of agriculture, the establishment of
light industry and. so forth depended exclusively on the import
of foreign equipment 1.
(Cobeljic (1959, po.59, 61))

The dominance of this sectoral approach to development, in the

priority of the basic industries, left little scope for a specifically

regional component. As Todorovic (1962, p.103) points out f an under-

developed region is included in this process only to the extent that it

contributes to the acceleration of, or at least does not reduce, the

over-all rate of growth 1, and development must, therefore, during this

initial phase, be restricted to f certain underdeveloped areas, which

offer the conditions suitable to national economic development 1.
•^ ^

Cobeljic (1959, pp.111-120), in discussing the choice of the level

of technology for industrial development, recognises the limitation

imposed by the necessary capital-intensity of many of the basic

industries, but also points to other extensive areas of investment,

where a greater choice of techniques is available. He particularly

emphasises the opportunity for deliberate regional variation of factor

proportions:

'The very fact of the existence of lare:e differences in the level
of development among individual regions supports the varied
treatment of factor proportions from one region to another. In

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the underdeveloped regions of Yugoslavia, which are characterised by the greatest population pressure, the widespread mobilisation of unutilised reserves of labour in small-scale industry, the building of communications, the implementation of various local investment projects etc. can be very useful, since in t?'is way definite initial impulses to development are relatively cheaply obtained. But even when larger investment projects are being undertaken in regions such as these, their implementation should
be effected with less technology and greater use of labour. In other words, it is oossible to adont different ^actor proportions,
by region, even within the same sectors of production, since in a
large number of sectors the same product can be produced at different levels of technology*.
(Cobeljic (1959, DP.118-119)).

This dogmatic emphasis 0:1 the build-up of the basic industries,

and the subordination of other objectives to it (which can be paralleled

in the development policies of a number of less developed countries, not

only in Eastern Europe), resulted in scant attention to the detailed

application of the economic criteria of costs anc* social returns, and a

consequent disregard of other, sometimes more favourable, investment

opportunities. Stojanovic (1962, p.53) is harshly critical of the

'irrationality 1 of the policy:

'This exceptionally strong emphasis on heavy industry in the
first years of socialist industrialisation, particularly in under-developed countries, where a scarcity of investment funds causes
rather one-sided investment in the basic industries of Sector I,
has a strnng tendency to smother the consideration of rationality
and severely limit the optimal combinatio-i of factors of production.
The rapid change in the structure of investment so occupies
economic policy that the attention given to the sectoral division
of labour far exceeds that to the territorial division of labour,
which is thus condemned to be an at>r>enda~e to the former'.

Development on a Broader Front, 1957-64

This initial phase of development -as regarded as successfully

completed, under the Key Investment Programme, by 1956, and the new

Five-Year Plan for 1957-61 marked the inauguration of a strategy of

development on a broac'er front. For the country as a whole it

emphasised the importance of bringing into full use the capacity,

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largely in the basic industries, installed in the proceeding years, and extending growth into the consumer industries, particularly agriculture and manufacturing industry. It did not, however, set out a sectoral pattern of development for the underdeveloped regions, either individually or as a group, but merely urged 'the optimal utilisation of the available productive forces and development opportunities in economically under-developed areas 1 (Plan (1957-61, chap. viii)). Its successor, the Plan for 1961-65 (chap, viii) similarly outlined the general orientation of development in terms of 'the greatest possible utilisation of material and human potential 1, but then more specifically that
'the basic method for the development of the underdeveloped
regions is the more rapid and intensive introduction of industry
there, particularly in cases where suitable raw material resources
for this are present'.
Industrialisation, as the later Plan particularly indicated,
continued to be regarded as the principal means to development; there was widespread supDort, sometimes less articulately expressed, for the
^

double reason given by Cobeljic (1959, pp.55-56), that its high level of output per worker offered the best solution to the problem of general low productivity, " and that, by reducing agricultural overpopulation, it made a necessary prior contribution to the long-term improvement of agriculture. The broader front for development as a whole made available a much wider range of sectoral strategies, while the very general terms of the Plan formulations left great scope for variation in the individual strategies proposed.
Mihailovic (1963, p^.60^-610) suggests that the gro-th objective
L. A detailed discussion of sectoral differences in output t>er worker is given by ifiodrag Nikolic (1965); like Cobelnic, be uses average productivity of labour as his measure, the concent of marginal productivity, more strictly relevant to the reallocation of workers among sectors, being seldom applied by Yugoslav economists.

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for the underdeveloped regions will follow a rather different formulation than for the more developed regions. The Yugoslav economy, he maintains, is in fact two economies, characterised by different structures and different proportions in factor supplies - regional constellations which require two separate concepts of development; for the backward regions, the emphasis will be on the expansion of employment, new investment and the growth of total output, to give 'the chanye in the structure of the economy and population, the intensification of industrialisation, and the activation of their natural resources a-d underemployed labour 1, while the more developed regions will be concerned to increase average productivity through the introduction of ne^v techniques, rather than through the creation of new employment, ^n terms of the 'structural 1 and 'productivity' aspects of underdevelo^ment, the backward regions will seek growth to a greater extent through a structural shift in their employment patterns, while the more developed regions will concentrate on higher individual productivity.
The contribution to the development of the underdeveloped regions
to be derived from the structural shift in employment, independently of the introduction of more advanced technology, is emphasised, in slightly differing ways, by several writers. Miljovski (1962) distinguishes three types of sector (a) those where the greatest possible use is made of existing equipment, thus maximising employment with a low level of Cc.pital per worker (b) those using an intermediate level of technology, old equipment being superseded by domestically produced replacements and (c) those equipped with the most advanced technology available inter-nationally. The sectors of category (a) cannot, because of their low level of technology, serve as engines of growth in the lon.p;-run, when

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development will consist in the shift of employment from it into sectors in the other categories, but the shortage of capital, including imported equipment, and the abundance of underemployed labour <^ive all three categories an essential role in development, the industries of category (a) making their contribution to higher average productivity of labour by absorbing unemployed or underemployed labour from agriculture. Todorovic (1962, pp.112-115) similarly distinguishes between industrialisation as 'the basic method of economic development 1, through the establishment of lar.^e-scale industry linking the regional with the national economy, and industrialisation as 'the general method of development', based on small-scale industry and treating the region as 'an economic complex within its own economic space'. These two approaches, he emphasises, are not mutually exclusive, but rather inter-dependent, as different aspects of the process of industrialisation.
The line of recommendation which receives much the greatest support
is thus the promotion of a sectora1 shift in the pattern of output and employment principally, as laid down in the Plan guide-lines, through the expansion of industry. The Plan for 1957-61 (Part V, chap, xiv), however, made the improvement of agriculture a priority for t< e country as a whole, and specified this particularly for Macedonia and Kosmet. Srebric (1964, p.321) supports this, pointing out that the regional differences in the level of output originate not only in differences in the amount of industry in each region, but in the quality of agriculture. In general, however, the improvement of agriculture is little favoured as a means to development for the backward regions of Yugoslavia, at least in the initial phase. The conclusion of Todorovic (1962, p.112) is typical:

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'Even the limited intensification of agriculture increases still further the number of working hands which cannot be productively employed. This brings an even greater sub-division o"~ holdings,
which still further reduces the opportunity for developing regional production and production in the economy as a whole'.
The improvement of transport facilities also commonly occupies a
low place among development priorities, more direct measures to increase the level of output being preferred to a longer-term programme of creating external economas through the provision of transport facilities for future use. Miodrag Jelic (1965, p.36) points out that the creation of infrastructure does not of itself bring development, and may even give rise to a colonial type of economy. Aleksic (1962, pp.279-293) is one
of the few to emphasise the necessity of adequate transport facilities
if the subsistence economy in the underdeveloped regions is to be superseded by production for the market, as through the sale of agricultural products in urban markets and, more generally, the integra-tion of these regions into the national market.
While these considerations set the general guide-lines, it is recognised that development strategies must be devised, both in the selection of priority sectors and of the factor proportions and level of technology to apply, for each region according to its individual situation; Stojanovic (1962, ^n.59-60) particularly stresses th^t the impact of a development strategy must be appraised in full, including its various indirect effects:
'Starting from the principle of maximum efficiency in the use of
the factors of production, and therefore that their optimal
combination can vary by region with the availability of the
material pre-conditions for certain particular sectors, we must
treat the question of the choice of -priority sectors in concrete situations...
In estimating the importance of an individual sector for a
region as a whole, it is not sufficient to consider what proportion of total regional Droduct it -orovides, but it is very important to know how mary people it employs, ho far it succeeds in integrating

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the region with other regions, how it links various sectors within the region itself, that is, how, in totaJ, it utilises the factors of production from within that economic area...
In view of this ,^reat importance of the relationship between
the input of factors of production from a given economic region and
the size of its output, we believe that an input-output table with regional divisions is of as much importance as a table by sector 1.
But regional input-output analysis was far from being an operational technique in Yugoslavia, although exploratory work had begun. Horvat (1962) makes an experimental contribution with a two-region, two-sector table (for the developed and underdeveloped regions, and for industry and 'other' activities), but concludes that further development must await the improved availability of data. Exploratory efforts are continuing in Zagreb, focussed on the compilation of a table for Croatia for 1962; some of the initial theoretical issues encountered and. their treatment are Ascribed by Rajkovic (1965).
But, although formal tables anr1 precise coefficients were not
available, regional planners were not entirely deprived of this powerful tool. Within the period, national tables were compiled for 1955 and 1958, and a table for 1962 was completed in 1966; these provided technical coefficients for up to 93 product-groups, but the applicability of national coefficients to the underdeveloped regions was severely limited by the different technological eras to which the regional groups in general belonged, and further by the heightened aggregation problem arising from the small size of many sectors in the underdeveloped regions. Ad hoc or unformalised use was, however, often made of the input-output form of analysis in sectoral planning at the level of the region, particularly in the application of 'material balances', a planning technique commonly applied in vugoslavia, with which input-

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output analysis has close affinities.
Similarly, no formal use was made in Yugoslav regional planning of
the other leading techniques which have been devised for regional

2 f analysis: * linear programming developed by, among others, Leven (1964),

Johansen (1967) and Boudeville (1161), (1966), and applied in other planned economies as a method of securing consistency between regional objectives and available resources, and the regional income and employment multipliers, described by Isard (I960) and applied by Archibald (1967), tracing the total change to result from an initial increase in regional investment or exports. But, as with input-output analysis, while the techniques were not formalised, some empirical approximations of at
least the larger and more direct effects were normally estimated along these lines.

Market Areas
These suggested guide-lines for sectoral planning concentrate
heavily on production possibilities, while demand factors, such as the size, growth and geographical location of the market for expanded regional production receive, for the most part, only implicit treatment. Stojanovic (1963a, p.684), for example, obviously has in mind
production for the national market of products with a high income-elasticity of intermediate or final demand when she proposes to link the development of the underdeveloped regions with the growth of key sectors of the national economy, through the division of the country into
!• The application of this technique in Yugoslavia is described briefly i in Sirotkovic* (1961, part III, chap.II), and more fully for other
Eastern European countries by Montias (1959) and Balassa (1959).
2. A relatively recent survey of the main lines of development in Western literature on regional economics is given by Meyer (19^3).

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economic regions adapted to the sectoral pattern of development and, consequently, not necessarily coincident with the Republics:
'The economic regionalisation of Yugoslavia would be of great significance for the development of underdeveloped areas. Once
these areas were included, according to the availability and composition of their factors of production, in the appropriate regions, with a suitable specialisation in production established
in one, or several, sectors essential to the further development
of the country as a whole, then the development of these areas
would actually be covered in the development of some of the key
sectors of production'.
Similarly, the two methods of industrialisation which Todorovic (1962, pp.112-114) urges as complementary, through the establishment of large-scale industry linking the regional with the national economy, and through small-scale industry treating the region as an economic complex within itself, can be construed as production for the national and local markets respectively.
The attention paid in Western literature on regional economics to
demand factors has originated in the recognition of inter-regional trade as the corollary of specialisation in production. The most elaborate formal statement of this interdependence is given by Isard (1956), and its leading development has been through the concept of regional exports in the export-base theories of regional growth. In the formulation given by North (1955), the growth of a region derives from the expansion of output, for markets beyond the region, of products in w^ich it has an advantage in f relative costs of production 1, the expansion of local or 'residentiary' activities then following through the operation of the regional income multiplier. While in many of the historical examples which he quotes, the p-nwth of regional e: norts derived directly from favourable natural resource endowments, TTorth is explicit that products from primary, secondary or tertiary activities may constitute the

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regional export-base, A more detailed discussion of the many factors

which may give rise to the 'comparative cost' advantage necessary for the

emergence of regional export sectors is given by Isard (I960, chap. 7). 1 *

Conversely, the firdings of Chenery (I960) on the importance of

import-substitution as a source of industrial growth, baser^ on the

analysis of up to 63 underdeveloped countries in the 1950's, are highly

suggestive for the organisation of development in backward regions. This

evidence is particularly significant in that it substantiates the criticism

commonly made against the export-base theory, for example by Tiebout

(1956) in reply to North (1955) that concentration on exports neglects

the contribution of autonomous internal changes or 'bootstraps'

development.

Klaassen (1"»67, p.31, footnote), in his discussion of methods of

selecting industries for depressed areas in more developed economies,

2
uses the same, rather ambiguous, terminology as Todorovic, * but

redefines a 'basic' industry in order to take account of the symmetry

between the expansion of regional exports and import-substitution:

'A basic industry is defined as an industry that is able to
export outside the area. This definition implies that not only firms exporting to other areas but also firms replacing imports
are considered basic... It follows from this definition that a method which seeks to determine the extent of basic activities
by estimating exports is inappropriate... It mi^ht be that this
work (Isard (I960)) does not give the import substituting
activities the attention they deserve. In the above definition,
which seems to be the most rational one, they are treated
symmetrically with export activities'.

1. T1 e concepts of comparative costs, comparative advantage and relative costs applied by North and Isard refer to an absolute advantage in lower costs of production, including transfer costs, and not to the Ricardian principle of comparative advantage apDlied in international trade theory.
2. Quoted on p.137 above.
3. This distinction betv/een 'tradeable' and 'non-tradeable 1 goo^s is also fundamental to the method of semi-input-output analysis,
currently being developed in the Netherlands, which can be applied
to either the national or the regional economy.

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Three potential sources of demand for increase A regional output thus present themselves: the growth of local demand, regional exports and import substitution. The two most favorable, and by no means mutually exclusive, conditions for individual sectors to offer good growth pros-pects are, therefore, a high income-elasticity of either final or inter-mediate demand, and an advantage in 'comparative costs' which will enable regional products to expand in the national market or to replace former imports in the local market; since local-based industries have the natural locational advantage of proximity in the regional market, import-substitution will commonly require a less pronounced advantage in other respects than the growth of regional exports.
The opportunity for regional exports offers the additional advantage
of allowing greater flexibility in the selection of an industry mix appropriate to the region's factor endowments, when factor-substitution, which can be assumed to be limited for each industry by technical conditions, would otherwise be restricted by the industry mix required by the pattern of local demand. Lutz (1962, p.16) designates this 'indirect' factor substitution, by comparison with direct substitution in the choice of production techniques for an individual industry.
The role of regional imports, on the other hand, is crucial to the total effect of a development programme, in that 'leakages' of demand, through import, for inputs for further production and in final expenditure from incremental incomes, limit the extent of indirect effects and the multiplier process; as Chenery (1962) has founr1 in Southern Italy, an adverse supply position, siving rise to the rapid growth of regional imports may to a considerable extent offset the gains from external assistance.
The relative neglect of demand factors in Yugoslav discussions may

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be attributable to the administrative allocation of investment funds and the prevalence of subsidies and interventions in nricing, all of which tended to blur or distort market criteria; but whatever the cause, the more explicit treatment particularly of the intended market for increased regional production could provide useful guide-lines to the process of development and the mechanism for 'building Yugoslavia as an economic whole 1.

The Functional Classification of Sectors
A major difficulty encountered in regional analysis is that of
assigning individual sectors and products to the various analytical categories. The Yugoslav industrial classifications are particularly ill-adapted to this, being defined largely on a 'product' basis, irrespective of the stage of production or type of market of the product. Even the twenty-seven sector classification used here, much finer than any previously applied to the Yugoslav regions, is often still too highly aggregated to allow accurate assignment, unless supplemented by information derived locally.

1 2 The most labour-intensive sectors * in Yugoslavia in 1964 * were

construction, and the timber, footwear and textile industries- electrical industries, metal manufactures, coal and food-processing were .also
1. The degree of labour-intensity ofan industry can be measured by the ratio of either capital stock or total output to the labour force; labour intensity will be applied only to the former measure, the
latter being described with reference to either labour productivity
or output per worker.
2. Figures on the value of fixed assests r»er worker in the social sector are presented by the Federal Statistical Office in Savezni Zavor1 za "tPtistiku: Statisticki Gr.disnjak 1966, Table 106-3. The method of valuation applied to the capital stock figures renders them unsuitable for detailed analysis, but is adequate to indicate the ranking of the various sectors by relative labour-intensity. The compilation of the capital stock figures is described in Appendix 1.

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relatively labour-intensive, while the chemical, non-ferrous metal, steel and paper industries were relatively capital-intensive; by far the most capital-intensive were petroleum and electricity, the latter with thirty times the amount of capital per worker applied in construction. But, in any region, a varying product mix and different techniques of production were liable to cause variations in the factor proportions, although the possible range of these were limited by the degree of disaggregation and the sectoral definitions in the former case, and the technical possibilities for factor substitution in the latter.
On the side of labour productivity, output per worker was, as was to
be expected from the economic structure of the country, conspicuously low in the private sector of agriculture. Other low-productivity sectors included the timber, food-processing, construction, coal, textile arid footwear industries, along with the social sector of agriculture, while the leading high-productivity sectors were •oetroleum and tobacco (in large part for reasons of taxation), electricity, chemicals and paper.
As is to be found in many countries, the ranking of industries by the
two measures of f labour-intensity', capital ner worker and output per worker, were thus closely correlated. In output t>er worker, as in capital per worker, a degree of regional variation occurred, with the differences in product-mix and level of technology, in addition to less easily quantified differences in the qualitative aspects of productivity.
On the locational characteristics of individual industries, their
degree of resource- or market-orientation, and the type of market which

1. The relative valuations of output per worker by sector were also affected by the price system, with the result that the valuations quoted, although those which the Yugoslavs themselves chose to apnly, are not those which would have been established by the operation of market forces. Detailed figures for output per worker, by sector, are given in Table A-2.

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they typically serve, specifically Yugoslav information is very limited. But the work of, among others, Hoover (1^48), Florence (1943), (1962), Isard (1953), (I960), Moses (1955) and Perloff, Dunn, Lampard and Muth (I960) provides much useful information - althov.g- Vit must be translated with some caution across national frontiers and between economic systems - to supplement interview and commentary material.
»Resource-based 1 industries, a category commonly proposed for the underdeveloped regions, comprise pre-eminently national or traded goods: coal, steel, non-ferrous metals, ship-building, forestry, paper and tobacco-growing: some small-scale production in these sectors is possible, but where, as in the steel and paper industries, economies of scale are important, production only for the regional market may not be economically feasible.

Agriculture, electricity and the building material industry also
require the availability of suitable natural resources, but both the resources and the markets are normally so widely spread across the national territory that these industries are predominantly local in character.

A further group of strongly local industries comprises construction, commerce, transport and printing, the dispersion on this occasion resulting from their close links with demand, which itself is widely dispersed, and their weak dependence on natural resources.
These categories are open to individual exceptions: national
markets for certain agricultural products, national publishing houses, transit transportation, the distribution of electricity across regional boundaries; possibly, indeed, only construction constitutes a 'pure 1 classification. The results of the various researches cited, however,

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clearly confirm the predominant characteristic of the various sectors. An important group of industries - metal manufactures, electrical equipment, chemicals, textiles, footwear and food-processing - are too heterogeneous to classify without a more detailed definition of their product-composition. * Metal manufactures, for example, range from motor vehicle production, where economies of scale are so important th?t the market must be national, through many types of capital go3d and component, more or less closely linked in location with producers' demand or the availability of skilled labour, to small metal wares for the local consumer market. The textile industry includes spinning, normally resource-orientated and a national industry, and the clothing trades, often serving only the immediately local market. Footv/ear may be produced by small-scale or mass-production methods, for village or national market. Isard (1953, p.123), dealing with data for the U.S.A., points out the uselessness of the category 'food-processing industry', comprising as it does the national industries of slaughtering and meat-packing along with the highly local bread and bakery trades, a criticism equally applicable in Yugoslavia, particularly with the growth of a national export trade in meat products.
The concepts of capital- or labour-intensive, high or low productivity resource-based or market-orientated industries, regional exports, import substitutes, and local and national goods can thus do much to clarify regional growth patterns, but they must be applied not only on the basis of the general characteristics of the individual sectors at the national level or in other economies, but also of more detailed information on the industrial structure and development programmes of trie individual regions.
1. The difficulties of assignment, within a 3S-industry classification, from the deat for U.S. industry, are demonstrated by Isard (1953).

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(ii) Loca.tional Strategies
Locational decisions on the siting of new projects were, in principle,
in Yugoslavia based on wider calculations than the cost and revenue considerations motivating the profit-seeking firm in a private enterprise economy. Social review, as part of the process of allocating investment funds, was intended to allow explicit treatment of the full external effects of a new project, its social costs and benefits, in a wider context than could be apnlied by the individual enterprise or even, often, by the commune. Two broad categories of locational policy hac? to be implemented through the decisions on individual projects: policy on the distribution of economic activity across the entire national territory, on which the objective of development of the underdeveloped regions implied a certain prior commitment, and policy concerning the degree of more local concentration or dispersion of development, with its implications for urbanisation.
The policy of development of basic industry, applied in the early years, raised few problems of location under either head; the mining of coal, iron and non-ferrous ores, and the generation of hydro-and thermal electricity, are all strongly resource-orientated industries, their location largely determined by the geographical position of natural resources. Projects sited in the underdeveloped regions as a direct consequence of the implementation of this policy at the national level included the exploitation of the coal and iron-ore fields of central Bosnia, the lead deposits of Kosmet at Trepca, and the rivers of Bosnia-Hercegovina, Montenegro and Macedonia. But, with the broadening of development strategy from 1957, and particularly the new emphasis on manufacturing industries, many of which are market-orientated or 'foot-

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loose', the spatial distribution of new projects had to receive explicit treatment.

The Zoning of Development
The underdeveloped regions were scheduled for development assistance
on the basis of their existing degree of underdevelopment, a criterion which, as many writers came to point out, did not yield the appropriate regionalisation for development policy. Srebric (1964, p.314), for example, criticises the 'weak economic content 1 of the delineation of 'zones of underdevelopment' with reference to past development, when

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regionalisation should be concerned with the future economy. Colanovic, who in one place describes the natural resources of the underdeveloped regions as of 'general national significance', such that they 'imperatively call for intensive development', * is equally critical of the scheduling for ignoring development prospects:
'To apply the regime of intervention to the entire area of the
backward regions in extenso is not the best solution. It is
entirely clear that certain areas lack the more serious conditions
for stronger industrialisation, with the result that their inclusion complicates the whole problem of the emancipation (of the backward regions)'.
(Colanovic (1962, p.159)).
Mladenovic (1962) and Stojanovic (1963a) both urge the advisability
of the 'economic regionalisation' of Yugoslavia, into units appropriate to the organisation of economic development and not necessarily delimited by either the existing political units or the designated underdeveloped regions; both list, in general terms, the factors affecting the suitability of an individual area for development: its natural resources, access to transportation, existing capacity, the quality of its labour

1. Colanovic (1966, pp.39-40); the fuller quotation is given on p.23.

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force and social services, and its gravitational influence on other areas. Mihailovic (1962, pp.35-47) takes the widest perspective, and puts forward the most specific guide-lines for regional policy. He prefers to treat the 'regional aspect of development' at the national level, as the wider problem of which the underdeveloped regions are part, and applies similar criteria in his selection of national priority zones for development: access to transport facilities, the existing degree of concentration of population, particularly in smaller towns, and resource endowments favorable to both agriculture and industry, and recommends, as the national spatial strategy, the concentration of development particularly in the basins of rivers Sava, Danube, Morava and Vardar. This delineation, ignoring the existing level of output per head and giving possibly greatest weight to natural lines of communication, cuts across the official division between the more developed and underdeveloped regions, by including major areas from both.
Elsewhere (?!ilhailovic (1965, pp.568-574)) he reconciles this
selection of priority zones with the objective of equality, itself one of the motivations to the development of the backward regions; when equality is interpreted in its dynamic connotation as 'the process of establishing equal conditions for all social and economic groups' and 'affecting people, not territory', the selection of priority regions, by contributing to maximum growth and thus greater opportunities, can be seen as a means towards equalisation.

Industrial Centres
The progressive evolution of the concept of priority zones for development "'as accompanied b- an increasing realisation of the role of industrial centres as foci for Development; Colanovic (1962, r>

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observes that 'development of itself seeks centres' and 'rational inter-vention concentrates on particular foci for industrialisation, which gain the function of gravitational centres'.
The Plan for 1957-61 (chap, viii, para.l) gave an official lead in
this direction by specifying that
'it is necessary to make possible the full activation of productive forces and their more intensive utilisation in towns a^d industrial centres where there exists a relatively large concentration of
economic enterprises and various social institutions'.
Its successor, however, was severely criticised for impeding this;
the new classification of underdeveloped regions, ertendin^r the coverage to individual districts anr1 communes in Serbia Proper, Bosnia-Hercegovina and Croatia, in addition to the entire regions of Macedonia, -r.Tontene°ro and Kosmet, was based, according to Srebric (1963, pp.686-690) on the principle of 'homogeneity', in their common characteristic of under-development, while the dynamic aspect of development involved the 'gravitational pull' of development centres. He was particularly critical of its adverse effect in Serbia Proper, where the boundary of the underdeveloped areas was drawn to by-pass such town as Titovo Uzice, Pozega, Ca6ak, Kraljevo, Krusevac, Nis and Zaj.ecar; thus
'the existing economic centres, which must bring a large part of
the economic development of the underdeveloped areas in the south
of the Republic of Serbia, are simply excluded. This role has
had to be transferred to small mountain villages which do not
possess the elementary preconditions for the agglomeration of non-agricultural activities and population'.
The concept of industrial centres, or 'poles of growth 1, the term introduced by Perroux (1955) which has passed into general usa^e, has considerable intuitive appeal, but the elements involved prove remarkably difficult to quantify, sour times even to define, with sufficient precision for planning purposes. As Srebric (1963, p.686)

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points out, 'even the smallest town exerts an economic gravitational null,

since it is a centre for its immediate agricultural hinterland 1 , but he

then goes on to criticise the excessive territorial dispersion of the

development efforts in Yugoslavia.

Perroux acknowledges his heavy borrowing, for the concept of poles

of growth, from the elaboration of external economics given by Scitovsky

(1954). Scitovsky distinguishes two kinds of externalities, 'technologi-

cal external economies', which arise from the direct interdependence of

producers, and 'pecuniary external economies', from interdependence

through the market mechanism. Cases of technological interpendence are

relatively rare; one of the few clear instances is mentioned by Srebric

(1963, p.689): f the interpendence of locations in the utilisation of

skilled constructional and organisational personnel finds the strongest

economic justification', and he instances related projects in the

processing of agricultural products. Pecuniary economies, on the other

hand, are described by Scitovsky as f all-pervading 1:

* Investment in an industry leads to an expansion of its
capacity and may thus lower the prices of its products and raise
the prices of the factors used by it. The lowering of product
prices benefits the users of these products; the raising of factor prices benefits the suppliers of the factors. When these benefits accrue to firms in the form of profits, they are pecuniary external economies... According to the theory of industrialisation, these benefits, being genuine benefits, should be explicitly taken into
account when investment decisions are made; and it is usually
suggested that this should be done by taking as the maximpnd not
profits alone but the sum of the profits yielded.and the pecuniary external economies created by the investment'.^ " , (1954 D 147)

1. Scitovsky's further point, that the profitability of an individual investment may not be an accurate indicator of its social desirability, could come from a Yugoslav pen: 'Market prices reflect the economic situation as it is and not 7 as it will be. For this reason, they are
more useful for coordinating current production decisions, which are immediately effective and guided by short-run considerations, than
they are' for coordinating investment decisions and - looking ahead to a long future period - should be governed not by what the present economic situation is but by what the future economic situation is expected to be'.

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While the Yugoslav investment system as a whole was designed to take into account all forms of external effect, the importance of the economies specifically of agglomeration is underlined by Srebric (1963, pp. 688-689) and ?;iihailovi'c (1965, p. 572).
The other principal source of economies from the concentration of development into centres is in the provision of infrastructure, particularly transportation, where the indivisibility of many facilities requires a minimum scale of provision. Miodrag Jelic (1965, pp. 27-28) gives the greatest prominence to this aspect, pointing out that, if ' investment in infrastructure is to yield an adequate return, facilities must be utilised to a sufficient extent and within a short space of time, and thus t: at the efficient use of infrastructure imposes a minimum size for development centres.
*:ihailovic (1965, p. 572) sums ur> the case against the dispersion of development :
'Spreading relatively scarce investment resources widely has tv.-o mutually related consequences. Firstly, the potential of the
priority regions, which demands, for effective mobilisation, the concentration of investment, is inevitably neglected. Secondly,
the opportunity for coordinated investment (in production, infra-structure and the social services) is lost, along with the
benefits of cumulative effects'.
But the planners faced the quantitative problem of ho'.v many
development centres to promote and of what sizes, and on this no general conception emerges in the Yugoslav literature. In particular, no explicit use is made of the considerable volume of empirical evidence on regularities in the size-distribution of cities, associated with the work of Berry (1961) and many others, and recently applied to regional planning in the Netherlands. This could give, at best, only an approximate indication, since the relationship between the number of

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cities and their size is, in general, much less close for less developed than developed countries, and, further, the detailed work of Ivkovic-Ivandekic (1961) shows that, in spite of the rapid rate of urbanisation in the post-war years, Yugoslavia remains under-urbanised by comparison with the normal level for a country at that stage of development. Stojanovic (1962, p.52) however, rejects even the aDt>rot>riateness' of seeking a general treatment of the question:
! 0f course, there does not exist, for all cases, any common
optimum size of city or town. Each town requires its appropriate hinterland, centres of supply and. so forth, w'lich has the direct implication that each region has its optimum size of settlement'.
The very limited extent of the guidance available to planners from urbanisation theory is summed up by the Economic Commission for Europe (1965, p.ll):
'Urbanisation theory should provide a set of principles which
could give some guidance to the optimum pattern of town develop-
ment, but, up to now, these have not been forthcoming, with the
result that the assimilation of urbanisation policy in the frame-
work of regional or national policies and planning is, at the
moment, difficult'.

Migration
The converse of a policy of concentration of development into
priority zones and industrial centres is the migration of population, out of the areas lacking long-run economic nrospects into the priority zones, and from the countryside into the towns. The role of both types of migration in the process of development is well recognised in Yugoslavia. Srebric (1965, p.673) observes that:
'The process of equalising the level of development within the
economy cannot be based on the current territorial distribution
of the population. The existing relations are the result of past economic development. They were appropriate to a relatively underdeveloped economy and a restricted economic structure of
the population, with excessive importance of small-scale production in agriculture. A long-run tendency to base future

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regional development on a stationary population pattern would be economically untenable'.
Mihailovic (1962, p.33) describes the territorial structure of the economy and of the population as 'two aspects of one and the same question, the allocation of economic activity and population', and elsewhere
(Mihailovic (1965, p.573)) he describes population migration as 'the solution to the contradiction' between the objective of equality and the selection of priority zones.
But population migration, and particularly urbanisation, make heavy demands for non-productive investment, in housing and social overhead capital, these demands, moreover, being added to the acute deficiency which Yugoslavia had inherited as a consequence of the War and which
the years of concentration on the build.-ut> of the basic industries had done little to alleviate. The allocation of funds for non-productive investment was, however, part of the pre-allocation by the planners under the first two global proportions, the criteria for the size of allocation, as for the level of total investment, receiving little discussion.
Two partial solutions to the dilemma that investment requirements, particularly for housinsr, tended to offset the economies resulting from agglomeration, did emerge in practice, although neither was explicitly accepted as official policy for economising in non-productive investment. The daily commuting of workers from the countryside, where they continued to live on farms and in villages, to work in the towns allowed industrial agglomeration to proceed ahead of the urbanisation of the population. This daily movement became very substantial in the case of the new
^

industrial centres which grew uo in the Iq 5 r>'s, as is described by Cika and Stevanovic (1957) and in Savazni Zavorn za Statistiku: Statistifcki Bilten 101, and, from the point of view of its imnact on t^e t>eas^nt way

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of life, in Hoffman (1959). This growth of commuting tended to be rather frowned upon by the authorities and by enterprise managements for its adverse effects on worker efficiency, even although, in addition to substituting, in the short-run, for non-productiv^ investment, it also served to facilitate urbanisation in the longer-term, by enabling rural workers to be drawn into industrial employment without having immediately to sever their connections with the countryside.
An alternative, and much less common, development, described by
Macura (1958) in his detailed study of Yugoslav population characteristics, closely resembled the 'putting-out f system of the textile industry in the era before the Industrial Revolution. He cites, as a particularly striking en^^^p^lse
example, 'Obod', the light engineering incl.uatgy based on Cetinje (in Montenegro), which made extensive use of the completion of serai-fabricated parts by workers living at home, in the surrounding villages; this t>rocess of taking the work to the workers, he points out, economised not only in •secondary 1 (non-productive) investment, but even in 'primary' investment in the enterprise itself, although this latter point is largely dependent for its validity on the restriction of the Yugoslav definition of invest-ment to fixed assets only, and the normal exclusion of the stocks md working capital which become an important category of 'investment' under a 'putting-out 1 system.
But population migration, although so readily accented as an
integral part of the process of development, has the major limitation that it is not controllable as an instrument of economic t>olicy comparable to investment. Sponsorship schemes, arranging the transfer of workers
to jobs in new locations, may heln to encourage, and housing shortage to check, migration, but it is essentially a spontaneous process, only

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loosely responsive to economic stimuli, which may precede, or fail to keep pace with, develooment. Although a key variable in development, the migration of population is, to only a very limited extent, a nolicy variable.

Yugoslav planners and economists thus held no single unified
strategy of development which they sought to apply to the underdeveloped regions, but rather a set of guide-lines on the major issues of policy which had to be faced. These issues required complex analysis and detailed local information; the familiar f development* decisions on the sectoral pattern of growth and the choice of technology had to include the regional dimension that production from the underdeveloped regions faced competition, in the national and local markets, from output from the more developed parts of the country; locational questions, a traditional area of regional economics, involved not simply profit-maximisation for the individual enterprise but the maximisation of the social return on investment. Certain of the techniques devised in various countries, for regional analysis, were applied: th^ comparative-cost appraisal of location, the assessment of external effects, and regional input-output analysis (only in an entirely unformalised way), although inter-regional flows received little explicit treatment. But, within these general guide-lines, much detailed decision-making remained for the planners before any individual strategy ras implemented.

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4. GROWTH IN THE UNDERDEVELOPED REGIONS, 1953-64

(i) The Regional Groups; A Widening Gap
Development policy for the underdeveloped regions certainly comprised deeds as well as words. With investment serving as the principal instru-ment of development policy, the many opportunities afforded by the economic system for implementing the planned allocation of investment funds were utilised to secure very high levels of investment in the under-developed regions. Investment in the underdeveloped group, total invest-ment, gross productive and net productive investment, * each represented a much larger proportion of total output than in the more developed group. (Table 4-1).
Not only was this the case for each of the underdeveloped regions individually, but the investment ratios were in closely inverse relation-ship to each region 1 s level of development; the poorer the region, the higher its investment ratio. The only significant exception to this - as to other regional regularities in development - was Montenegro, which received an exceptionally high level of investment, total investment there being equivalent to 84.8 per cent of social product, twice its level in the other underdeveloped regions.
But the size of the development efforts in the underdeveloped
regions was less impressive in terms of the level of investment per head of the population. (Table 4-2). Measured on this basis, investment in the underdeveloped regions tended to be lower than in the more developed regions, although the variation was substantially less than in social product per head. Indeed, the ranking of the regions, which had been almost reversed in terras of the investment ratio, reverted to approximately
1. All investment figures will be <$iven gross, unless specified as net.

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that by level of development. But a notable exception again v/as Montenegro, which received almost the highest level of investment per head of all the regions, 54 per cent above the national average in total and 79 per cent above in productive investment.
Given the regional differences in the level of output per head of
the population, the investment ratio and the index of investment per head inevitably give differing estimates of the size of the development efforts in the underdeveloped regions. Each contributes to the appraisal; the investment ratio is perhaps the more important indicator, being, as one of the global proportions, a strategic variable for planning, but measurement on a per capita basis serves as a salutory reminder of the size of the development task.
But the over-all result of these efforts to eliminate, or even
reduce, the regional disparities in the level of economic development was one of failure. The rates of growth of social product and national income * in the more developed group slightly exceeded those in the underdeveloped group, bringing a widening rather than the planned reduction of the disparities between the richer and poorer parts of the country. (Table 4-3). Of the underdeveloped regions individually, only one, Montenegro, the smallest of the four, achieved a rate of growth of output above that for the more developed group.
This failure in the growth of total output was reinforced by
differences in population growth; all the underdeveloped regions had a higher rate of population increase than any of the more developed regions, and for the group as a whole population growth was more than twice as
1. All growth rates are calculated from least-squares trenr" lines, fitted in semi-logarithmic form; except where otherwise indicated, thev are quoted as annual percentage increases.

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rapid. This converted a deficiency of 0.3 per cent in the annual growth of social product in the underdeveloped group into one of 1.2 per cent in the growth of output per head. Figures 2 and 3 illustrate the growth paths of social product per head in the eight regions.
A mitigating consideration was the substantial improvement, in
absolute terms, in the position of the underdeveloped regions; growth rates of 8.1 percent in social product and 7.9 per cent in national income, as averages over a period of twelve years, more than doubled the level of total output in each of the underdeveloped regions, even although their relative positions deteriorated.
Two sectors only, industry and agriculture, from the seven major
sectors of the Yugoslav industrial classification, were of predominant importance for the growth of total output. Not only did these two together contribute 70 per cent or more of social product during the

2. period, " but they, and industry in particular, had to provide the

leading growth sectors, since the other major sectors, transport, commerce,
7

construction and handicrafts, * being essentially local industries, largely depended for their growth on expansion originating in industry and agriculture. The growth rates of these major sectors are shown in Table 4-4.

Industrialisation, the spearhead of Yugoslav development t>olicy, was successful to the extent that the growth of industrial output was higher in the underdeveloped group, at 12.6 per cent, against 11.1 per cent in the other regions; moreover, only Kosmet, of the underdeveloped regions
1. The annual indices of social product per head (Yugoslavia = 100) are given in Table A-l.
2. Sector shares in social product are given in detail in Table H-3.
3. Forestry, the seventh major sector, is here included in industry. The sector classifications are described in Appendix 1.

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individually, failed to exceed the rate of industrial expansion of the more developed group. But in agriculture, which was expanding at a much lower rate than industry across the country as a whole, the under-develoned group, with a growth rate of 3.5 per cent, lagged behind the 4.1 per cent achieved by the richer regions. Transport, commerce and construction each expanded at rates corresponding more closely to industry than to agriculture; transport recorded the same growth rate in the two regional groups, (although its growth in the underdeveloped regions derived heavily from Montenegro), but in commerce and construction the underdeveloped regions again lagged. Handicrafts was the only other sector where the underdeveloped regions surpassed the growth rate of the more developed group, but its small size, 4 and 6 per cent respectively of social product in the regional groups, rendered its contribution to growth scarcely significant. As the level of the major sectors, there-fore, only industry (and handicrafts) made any contribution towards narrowing the disparities between the regional groups.
The success of the underdeveloped, regions in industrial growth was widely based; in thirteen out of twenty industrial sectors they achieved higher growth rates than the more developed regions, and lower rates in only seven. * In many sectors, expanding from small beginnings, their growth rates were extremely high. A national pattern of industrial growth was evident, the same sectors, notably electricity, metal manufac-tures, electrical industries, chemicals and paper, growing rapidly in both regional groups. In addition, several important sectors, steel, textiles and food-processing, expanded rapidly in the underdeveloped regions, while not in the rest of the country. Industrial growth in the
1. The detailed figures on sectoral growth rates, by region, are given in
Table A-6.

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underdeveloped regions thus derived both from higher rates of expansion in the individual sectors and from a greater range of high-growth sectors. The policy of reducing the regional disparities in the level of development thus failed on a wide front. Only Montenegro, with a population of under half a million out of more than six million people living in the poorer regions, achieved a faster growth of total output than the more developed regions. The rapid rate of industrial expansion, the sole success achieved by the underdeveloped regions, was insufficient to offset their lagging growth in agriculture, commerce, construction and, in the majority of cases, transport, compounded by their disadvantage
in population growth. Thus industrialisation, the centre-piece of development policy, of itself implemented Plan intentions, but proved
too weak, alone, to ensure the over-all success of the policy.

Division into Sub-periods
The years 1953-64 however, in snite of their general unity as a
period, covered a sequence of sub-periods in institutional development and planning: annual Planning 1^53-56, the successful Five-Year Plan between 1957 and I960, and the unsettled years 1961-64 under the later medium-term Plan; year-to-year assistance to the underdeveloped regions was followed by the guaranteed investments and then by the 'Fund 1; the early dominance of the basic industries was succeeded by development oii a broader front and the difficulties of sectoral bottlenecks. In the national economy, the major reorientation, within these various changes, occurred around 1957, with the return to longer-term planning and the new emphasis on development on a broader front, following the completion of t:.'e initial buil(^-up of the basic industries. For the underdeveloped regions also 1957 began a new phase; their development regained

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prominence as an objective of national policy, assistance bein^ increased in volume and placed on a more systematic basis.
This change of trend, as it affected the implementation of develop-
ment, is clearly evident from the level and pattern of investment. In both the developed and underdeveloped regions tne investment ratio, which had been tending to decline between 1953 and 1957, after the completion of the Key Investment Programme, then increased from 1958 until almost the end of the period; this increase was particularly pronounced in the underdeveloped regions. (Table 4-5). Agriculture and the consumer industries gained a new importance in the sectoral distribution of investment. (Table A-5). Although the Plan itself was scheduled from 1957 (it was enacted in April of that year), the changes in realised investment, expressing the implementation of the new global proportions, became evident rather from 1958, a tine-lag of one year elapsing during which projects already under way were brought to completion and new projects, in accordance with the revised priorities, organised.
The development efforts in the underdeveloped regions varied with
the policy changes between these two parts of the period. As a group they had higher investment ratios than the more developed regions in both halves of the period, Montenegro in particular receiving an exceptionally high level of investment throughout. (Table 4-6). But Bosnia-Hercegovina, a high-investment region in the earlier years of the build-up of the basic industries, in the latter part of the period had investment ratios below the national average, and only slightly above the more developed ^roup, its level of investment relative to output not only failing to match the national i; crease in thesp years, but actually declining. Kosmet, by contrast, had among the lowest ratios in the

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earlier years, when its development received negligible attention nationally, followed by a sudden acceleration after its scheduling as underdeveloped in 1957, to the highest among all the regions, apart from Montenegro. Thus only Macedonia and Montenegro, the latter in particular, consistently received higher levels of investment than the more developed regions; in Bosnia-Hercegovina the high investment of the early years subsequently declined, against the national trend, while the development of Kosraet was neglected in the first half of the period, but received major investment efforts after 1958.
The intensification and widening of development efforts in the back-
ward regions as a group in the late 1950's, following their relatively high levels of investment in the first half of the period brought a highly significant change in their growth of output. In each year between 1953 and 1957 the increase in social product in the underdeveloped regions was less (or the decline greater) than in the more developed regions, while from I960 the reverse -.-as normally the case. (Table 4-7). This pattern emerges even more clearly when agriculture, with its large year-to-year fluctuations, is omitted from total output (Table 4-8); in each year between 1953 and 1958 the percentage increase in output, excluding agriculture, in the underdeveloped regions was le'ss than in the more developed regions, but in each year between 1959 and 1964 it was greater. The growth positions of the two regional groups were thus reversed between the two halves of the period.
As 1957 introduced a new importance for the development of the underdeveloped regions (apart from Bosnia-Hercegovina) as a t>olicy objective, which found expression in the level and pattern of realised
1. The annual ratios of gross productive investment to social product, by region, are given in Table A-4.

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investment from 1958, 1959 constituted the turnip-point in the rrrov/th results deriving from the policy.
This change in the relative growth rates of the regional groups
modifies the pessimistic conclusion on the results of development policy over the period as a whole. (Table 4-9). Between 1953 ard 1958, the growth of social product in the more developed regions, at 8.0 per cent, was substantially higher than in the underdeveloped regions, at 6.6 per cent; three of the four developed regions exceeded the growth rate of the economy as a whole, while only Macedonia and Montenegro of the under-developed regions did so; the growth of Bosnia-Hercegovina and especially Kosmet lagged well behind that of the other regions. But between 1958 and 1964 the ecnomy as a whole ^rew more rabidly, the increase being due entirely to the acceleration of growth in the underdeveloped regions; their growth rate increased markedly, from 6.6 to 8.9 per cent, while the growth rate of the more developed regions remained virtually unchanged, at 7.9 per cent; only Macedonia, among the underdeveloped regions individually, failed to achieve this acceleration and to exceed the growth of the more developed group.
This pattern of constancy in the growth rate of the more developed
group and acceleration in the underdeveloped regions, from a rate below this to one above it, is confirmed when the growth of social product is considered exclusive of agriculture, where wide year-to-year fluctuations could have distorted a growth trend estimated over a period as short as
1. The growth rate quoted for Macedonia is an estimate only. The growth of actual output 1958-64, 9.3 per cent, is biased upwards by the increased output, particularly of the construction industry, for the rebuilding of Skonje 1963-64; but the growt 1- rate for 1958-62, 5.2
per cent, is also an inadequate representation of the trend, since
the growth of output lagged throughout the country in 1961-62 and
then increased strongly in 1963-64.

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1. six-seven years.

The underdeveloped regions therefore succeeded, between 1958 and
1964 in establishing a favourable differential of 1 per cent per year in the rates of growth between themselves and the more developed regions. But this was cancelled out by their unfavourable differential in population growth, 2.0 per cent against 0.7 in the more developed regions, transforming their growth advantage into a small adverse margin on a per capita basis. In spite, therefore, of the considerable improvement in the growth performance of the underdeveloped regions in the latter part of the period, the divergent movement continued.
A very high rate of expansion in industrial production was charac-teristic of all regions throughout the period (with the single exception of Kosmet in the early years), In the first part of the T»eriod the rate of industrial growth in the underdeveloped regions was 14.1 per cent, compared with 12.2 per cent in the more developed group; in the majority of regions the growth rate declined slightly in the latter half, but at 11.9 per cent against 10.3, the underdevelooed regions still retained a small, although slightly reduced, advantage. (Table 4^10). Many of the extremely high growth rates in individual sectors, charac 4 eristic of
2
'infant industry 1 growth, declined in the later years.
In the growth of agricultural output, however, the underdeveloped regions were much less successful. After fractionally exceeding the growth rate of the more developed regions in the earlier years, at 3.9 against 3.8 per cent, the rate in the underdeveloped group fell even more sharply, to 2.0 against 2.5 per cent. The growth rates of the individual
1. Two notable examples of this are the trend growth rates for social product in Vojvodina and Serbia Proper 1^58-64. biased downwards by
the record output of agriculture in 1959.
2. The contribution of the individual sectors to social product is shown in Table A-3; the growth rates are given in Table A-6.

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regions showed wide variation, but for periods as short as six years, with the large year-to-year fluctuations experienced in Yugoslav agriculture,, any comparison of 'trends' is dubiously meaningful. Transport, commerce and construction each followed a similar
pattern, with growth rates below those of the more developed regions in the first part of the period, but accelerating to exceed them in the later ye^rs.
The improvement in the growth position of the underdeveloped regions
in the latter part of the period was thus widely based, all the major sectors with the exception of agriculture growing more rapidly than in the more developed regions, by contrast with the earlier years when industry alone had achieved a favourable differential.

Employment Patterns
The growth of total output in Yugoslavia over the twelve years
derived predominantly from improved output per worker, while in the majority of regions total employment expanded only slowly, often more slowly than population. (Table 4-11). As employment opportunities were created in non-agricultural activities, labour was drawn away from its previous employment (commonly underemployment) in agriculture; where the new employment was in towns, women who had been employed in agriculture tended to drop out of the labour-force; and as the movement of population into the towns gained independent momentum, proceeding more rabidly than the growth of urban employment opportunities, recorded unemployment rose from 4.8 per cent of the labour-force outside the private sector of agriculture in 1953 to 7.0 per cent in 1964, with much higher figures in Macedonia and Kosmet. The decline in the agricultural population resulting from these various movements largely offset the expansion of

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non-agricultural employment. Even in Slovenia and Vojvodina, where agricultural underemployment was least and the attraction to immigration greatest, the expansion in total employment was small. Only in Kosmet, where a rate of population growth of 2.4 per cent ner year combined with a very late start in industrial development to bring the only increase among the regions in agricultural population (again at 2.4 per cent), was the expansion of total employment, at 3.0 per cent, significant.
The growth of output -oer worker derived from the two aspects of development, the structural shift of employment out of primitive agricul-ture, and higher productivity within individual sectors deriving from investment, worker training and improved organisation. The rapid expansion of employment outside the private sector of agriculture in Macedonia, T!ontenegro and Kosmet, and particularly in industry in the first two regions, indicates that a substantial structural shift was taking place. (Table 4-11).
The break-down of the increase in output per worker in the economy
as a whole into these 'structural 1 and 'productivity 1 components reveals that the underdeveloped regions consistently derived a greater part of their increase in labour productivity from the structural shift than did the more developed regions. (Table 4-12). The increase in average productivity of labour can be expressed as follows:
p (t) _ ^a (it) T) (it) where p = output per worker
p (o) ~ £ a (io) P (io) a(i) = the share of the ith sector
in total employment
0, t refer to base, end years.
= £a (io) T) (it) . 4?a (it) p (it)

2? (io) p (io) 2T.a (io) p (it) >i " /t The first term in this expression is the 'standardised index' in Laspeyres form, where the increase in productivity in each sector f ). \ is

» T * v J-f / /

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weighted by its share in total employment in the base-year (a (io)); the second term is a Paasche form 'structural i^dex' where the change in the relative importance of each sector in total ennloy^nent I- / .—r\ is weighted by its end-year productivity (p (it)). * The productivity increase in the structural index relative to the actual increase can be taken as an approximate measure of the 'structural component', the contribution to increased average productivity from t>>e shift in the pattern of employment. When this method is applied to the six major sectors of the Yugoslav industrial classification (agriculture, industry, transport, commerce, construction, crafts), the structural corrmonent in the productivity increase over the period 1953-64 is 32 oer cent for the economy as whole, the same figure as in Bosnia-Hercegovina, with the other underdeveloped regions all deriving greater proportions from employment changes. *
The growth of labour productivity within industry, however, reveals
no systematic pattern in either regional group; the relative contributions of the structural shift to higher-productivity sectors and of the growth of productivity within the twenty sectors individually varied widely
from region to region with individual development strategies. (Table 4-13).

Non-productive Services
While making no direct contribution to current output, the expansion
1. This method is applied to national data, for European countries, by
the Economic Commission for Eurone (1964).
2. These estimates of the structural component can be only approximate, since their derivation assumes the independence of structural and productivity changes, although, in circumstances of agricultural under-employment, in agriculture at least, they are likely to be complementary in effect. Between regions, however, these effects will be in the
same direction, if not of the same magnitude. The division between
the structural and nroductivity aspects itself defends on the level
of aggregation applied; a 'productivity' change recorded for a sector as a whole may be entirely the result of 'structural' changes within the sector.

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of the non-productive services was recognised as an essential part of development, education and health for their effects, in the longer term, on the quality of labour and management, housing for its influence on population migration, particularly into the towns. But the underdeveloped regions found themselves in the same unhappy position in regard to non-productive as to productive investment; intensive investment efforts, equivalent to a much higher proportion of regional outfit than in the more developed regions, yielded a lower level of investment per head of the population. (Table 4-14). Moreover, in spite of the investment efforts, population growth brought a relative deterioration in their position in the latter half of the period; in both regional groups non-productive investment almost doubled, as a proportion of social product, following the new emphasis on improving the standard of living after 1957, but in the underdeveloped regions its per capita level fell from 84 per cent of the national figure in the earlier years to 76 per cent, while in the more developed regions it improved from 107 to 112.
These investment efforts, however, combined with substantial
budgetary assistance for current expenditure, enabled the underdeveloped regions to achieve greater success than in t>roductiin in eliminating their inherited backwardness, although even in the middle 1960's important disparities remained.
In 1953, when only four years of schooling were compulsory under federal law, 60,2 ner cent of Yugoslav children attended school, the enrolment rate in each of the more developed regions exceeding this, and in each of the underdeveloped regions, with the exception of Montenegro, falling short of it. (Table 4-15). Moreover, between then and I960, years of rapid expansion of the education system as a whole, including

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the introduction of commilsory eight-year schooling in 1958, total enrolments increased less ranir'ly in the underdeveloped regions, to
138.6 per cent of their 1953 level, against 145.6 in the more developed regions. The enrolment rates in the more developed regions in 1^60, as calculated by the Organisation for Economic Cooperation and Development (1965), 87 per cent in Serbia Proper and 94 r>er cent in the other three regions, were coming close to full inrolementation of universal eight-year schooling, while each of the underdeveloped regions had a lower rate, and. in Bosnia-Hercegovina and Kosmet only tv/o children out of three were attending school. The remaining four years, however, 1960-64 brought a marked improvement in the underdeveloped regions; by 1964, their enrol-ments had increased by 24.9 per cent over their level of 1°60, against
an increase of only 10.0 per cent in the more developed regions, an improvement sufficient to offset their adverse margin in the earlier years.and give the underdeveloped regions a higher increase o^er the period as a whole. Enrolment rates are not available for 1964. but the rapid increase in enrolments, far exceeding any increase in the population of school age, between I960 and 1964 would begin,for the first time, in narrow the disparities in the provision of basic schooling.
Not only did the underdeveloped regions provide schooling for a
smaller, although increasing, proportion of their children, but its equality, as far as can be gauged from simple indices, was also inferior. In 1953 the underdeveloped regions had. an average of 46.6 r>ui)ils per teacher, against 36.3 in the more developed regions; teacher surely, however, which more than doubled in the country as a whole over the twelve years, grew even more rapidly in the underdeveloped regions, o^f-setting the increase in puDil enro 1rtents and allowing the pur>il-teacher

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ratio to fall to 35.3, below its level in the more developed regions in 1953 but still above their current 28.8. (Table 4-16). A survev of school buildings in 1964 reveller* an pver^'e of 68 Duoils per classroom, against 63 in the more developed regions, both figures showing the prevalence of over-crowding and two-shift schooling. The record for Bosnia-Hercegovina was conspicuously poor.
The deficiencies in educational provision in t v e underdeveloued
regions, as measured by enrolment rates, were even more pronounced at
the higher levels, upper elementary schooling (ages 11-15), secondary schooling (aces 16-19) and higher education. (Table 4-17).
The level of illiteracy declined at closely similar rates in the two regional groups, the relatively slow decline in Bosnia-Hercegovina preventing the underdeveloped regions as a group from improving their position. (Table 4-18). Adult education also made a smaller contribution to reducing illiteracy in the underdeveloped regions, where two out of three of those who had received no schooling remained il 1 iterate, against only one in two in the more developed regions. To eliminate the deficiencies evident in the educational standards of the population at
all levels could be only a long-term process, but already between 1953
and 1961, according to the information recorded in the population censuses, the underdeveloped regions had made a substantial beginning, in reducing the proportion of the population who had received no schooling and increasing particularly those with elementary schooling, while relatively large increases also occurred at the levels of secondary schooling and higher education.
As in education, the Years 1953-64 brought major improvement in
health standards a-:d facilities throurf- out Yugoslavia, r>ro~ress which

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the underdeveloped regions often surpassed without fully eliminating their inherited disadvantages.
The rapid decline in the death rate conrnon in underdeveloped
countries when the techniques and products of modern medicine are first introducer on a large scale occurred in Yugoslavia, and particularly strongly in the underdeveloped regions. (Table 4-19). Certain endemic diseases, notably malaria, diphtheria and syphilis, were largely eliminated, and a major drive against tuberculosis begun: by 1963-64 infant mortality in the underdeveloped regions had fallen by one-quarter from its level of a decade before, although the developed regions achieved an even more rapid reduction; improved medical care and a higher standard of living served to raise the general health standards of the population.
The birth rate also showed a marked decline, but in the under-
developed regions, unlike the more developed grout), it fell more slowly than the death rate, giving rise to an acceleration of the rate of population increase. The underdeveloped regions thus faced a situation familiar in developing countries, the introduction of medical improve-ments, by destroying the previous equilibrium at high birth and death rates, giving rise to a ranid growth of population, which exacerbated the difficulties of development.
Two measures of the standard of medical facilities by region are
the average copulation to be served by each doctor and by each hospital bed. (Table 4-20). The patient-load t)er doctor fell markedly throughout Yugoslavia, but uaticularly in the underdeveloped regions, where it declined by almost half over ten years; even with this improvement, however, it remained at almost twice its level in the more developer!

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regions. Similarly, in provision of hospital beds, a more rardd inrorove-ment in the underdeveloped regions still left a marker1 inferiority in the facilities available.

This statistical summary gives the outline, in quantitative terms,
of the development efforts in the underdeveloped regions over the twelve years, and their results. The individual regions, however, adopted widely differing routes to development, with their individual circumstances, routes which yielded varying degress of success.

175.

Table 4-1 Average Investment Ratios, by Region. 1953-64

Total Gross
Investment
as % of SP

Yugoslavia

Developed Regions

Underdeveloped
Regions

Slovenia

Croatia

Vojvodina

Serbia Proper

Bosnia-Hercegovina

Macedonia

Montenegro

Kosmet

33.3

30.5

43.3*

27.9

29-1

32.0

33.2

36.1*

42.8*

84.8*

46.0*

Gross Productive
Investment
as % of SP

22.9

20.7

31.0*

18.8

20.0

22.9

21.9

25.9*

31.1*

69.1*

33.0*

Net Productive
Investment
as 3 of NI

16.8

14.5

24.9*

12.1

13.4

17.3*

16.2

18.7*

26.6*

65.5*

26.9*

* denotes a figure above the national average.

Each ratio is the average of the ratio for each of the twelve years, except in Macedonia where it covers the years 1953-62 only, to exclude the effects of the rebuilding of Skopje, 1963-64.

176,

Table 4-2 Investment per Head of Population, by Region. 1953-64

Yugoslavia
Developed Regions
Underdeveloped
Regions
Slovenia
Croatia
Vojvodina
Serbia Proper
Bosnia-Hercegovina
Macedonia
Montenegro
Kosmet

Total
Investment

100
106

87
158
104
102
92
83
86
154
51

Productive
Investment

100
105

90
154
104
108
88
85
89
179
52

Net Productive
Investment

100
101

98
134
96
114
89
82
103
227
60

Each figure is the average of the index for each of the twelve years, except in Macedonia where it covers the years 1953-62 only, to exclude the effects of the rebuilding of Skopje, 1963-64.

177.

Table 4-3 Growth of Social Product. National Income and Population by Region. 1953-64

Annual Percentage Growth of

Yugoslavia
Developer! Regions
Underdeveloped
Regions
Slovenia
Croatia
Vojvodina
Serbia Proper
Bosnia-Hercegovina
Macedonia
Montenegro
Kosmet

Social
Product

8.3
8.4*

8.1
8.5*
8.0
8.2
8.9*
8.0
3.1
10.4*
6.8

National
Income

8.2
3.3*

7.9
8.5*

7.9
3.2
8.7*

7.9
7.9
9.8*
6.8

Population

1.1
0.8

1.7*

0.7
0.7
0.9
0.9
1.8*
1.0
1.6*
2.4*

Social Product
per Head

7.2
7.6*

6.4
7.8*
7.3*
7.3*
8.0*
6.2
7.2
8.9*

4.4

* denotes a figure above the national average.
The growth rates in Macedonia derive a fractional upward bias from the rebuilding of Skopje 1963-64.

ISO.

Table 4-4 Growth 6f the Manor Sectors, by Region,

Yugoslavia
Developed Regions
Underdeveloped
Regions
Slovenia
Croatia
Vojvodina
Serbia Proper
Bosnia-Hercegovina
Macedonia
Montenegro
Kosmet

Industry

11.4
11.1

12.6*
9.5
10.5
12.7*
13.2*
12.4*
12.9*
20.5*
8.7

Annual

Agric-
ulture

3.9
4.1*

3.5
3.9
3.9
4.9*
3.8
3.5
3.5
3.2
4.1*

Percenta
Trans-
port

9.7
9.7

9.8*
10.5*
9.0
11.7*
9.7
8.7
9.2
20.8*
8.0

^e Growth

Commerce

9.9
10.1

8.8
11.0*
9.7
11.2*
9.6
9.3
7.7
3.3
10.2*

of
Cons-
truction

7.9

9.3*

4.8
10.2*
8.0*
12.1*
9.4*
2.3
2.8
0.1
10.6*

Handi-
crafts

4.1
3.6

6.7*

3.9
3.4
2.8
4.0
7.9*
5.Q*
8.7*

0.9

* denotes a figure above the national average.
The growth rate for construction in Macedonia covers the .years 1953-62 only, to avoid the effects of the rebuilding of Skopje 1963-64.

182,

Table 4-6 Average Investment Ratios, by Region and Sub-period

Total
Investment
as % of SP

Yugoslavia

Developed
Regions

Underdeveloped
Regions

Slovenia

Croatia

Vojvodina

Serbia Proper

Bosnia-
Hercegovina

Macedonia

Montenegro

Kosmet

1953-57

29.9

27.1

40.2*

27.1

25.6

21.2

31.4*

33.2*

37.6*

97.5*

23.4

1953-64

35.6

32.9

45.6*

28.4

31.6

39.7*

34.5

34.7

47.9*

75.8*

62.2*

Productive
Investment
as % of SP

1953-57

22.9

20.4

31.9*

20.1

in. 4

15.7

23.6*

30.9*

28.5*

81.3*

15.3

1958-64

22.9

20. 9

30.4*

17.8

20.3

28.0*

20.6

22.3

33.8*

60.5*

43.9*

Net Productive
Investment
as V of NI

1953-57

17.2

14.6

26.6*

13.5

13.1

10.5

18.6*

24.6*

24.7*

79.9*

10.3

1958-64

16.4

14.5

23.6*

11.0

13.7

22.1*

14.5

14.5

28.5*

55.2*

38.8*

* denotes a figure above the national average.

The averages for Macedonia refer to 1958-62 only, to exclude the effects of the rebuilding of Skopje, 1963-64.

184.

Table 4-9 Growth of Social Product. Social Product per Head and Social Product outside Agriculture . by Region and Sub-period

Social Product

Yugoslavia
Developed
Regions
Underdeveloped
Regions
Slovenia
Croatia

Vojvodina
Serbia Proper
Bosnia-
Hercegovina
Macedonia

Montenegro
Kosmet

1953-58

7.7

3.0*

6.6
3.4*
8.3*

7.2
7.9*

6.2
8.2*
8.0*

3.3

1958-64

3.1

7.9

3.9*

8.4*

7.7
7.7
8.0

3.0
7.2
14.2*
9.4*

Social Product
outside Agriculture
1953-58

9.5

10.0*

8.0
8.4
T.O
12.0*
11.8*

8.0
8.4
8.8
3.4

1958-64

10.5

10.1

11.9*
10.3
9.7
11.3*
10.0

10.3
10.5
19.9*
13.3*

Social
per
1953-53

6.6

7.1*

5.0
7.8*
7.5*

6.0
6.8*

4.4
7.4*

6.5
1.5

Product
Head
1958-64

7.0

7.2*

6.9
7.6*
7.1*

6.9
7.3*

6.0
5.8
12.5*
6.6

* denotes a figure above the national average.
The growth rates in Macedonia 1953-64 have been adjusted to take account of the rebuilding of Skopje 1963-64.

185, 
Table 4-10 Growth of Industry. Agriculture and Transport, by Region and
Sub-t»eriod
Annual rei'.:entage Growth or
Industry
Yugoslavia
Developed 
Regions
Underdeveloped 
Regions
Slovenia
Croatia
Vojvodina
Serbia Proper
Bosnia-Hercegovina
Macedonia
Montenegro
Kosmet
IP 53-53
12.5
12.2
14.1*
9.6
10.6
11.9
16.9*
14.8*
16.8*
18.5*
3.6
1958-64
10.6
10.3
11.9*
9.5
10.2
13.4*
10.0
10.8*
10.3
24.6*
13.9*
Agriculture
1953-58
3.8
3.8
3.9*
9.1*
6.7*
2.8
-0.5
1.6
8.0*
6.6*
2.8
1953-64
2.3
2.5*
2.0
-0.2
2.0
3.6*
3.5*
1.7
1.9
1.1
3.7*
Transport
1953-58
10.2
10.7*
8.2
10.1
11.9*
12.6*
8.5
7.0
7.8
25.1*
5.5
1958-64
8.4
8.2
9.2*
10.3*
7.1
11.0*
7.6
8.1
7.6
16.9*
11.9*
* denotes a figure above the national average,

136.

Table 4-11 Employment and Unemployment, by . 1933-64

% Growth of Employment 1953-64

Yugoslavia
Developed
Regions
Underdeveloped
Regions
Slovenia
Croatia
Vo.lvodina
Serbia Prooer
Bosnia-
Hereegovina
Macedonia
Montenegro
Kosmet

Total

0.7

0.6

0.9*
1.3*
0.4
1.0*
0.4

0.5
0.5
0.7
3.0*

Agric- Non-agri-
ulture culture

- 1.2

- 1.5*

- 0.5
- 2.7*
- 2.1*
- 1.4*
- 0.9

- 0.9
- 1.2
- 1.8*
2.4

5.4

5.5*

5.0
5.1
5.2
8.0*
5.0

4.1
6.0*
6.6*
7.0*

Indus-
try

6.5

6.5

6.6*

5.5
5.6
8.2*
7.7*

5.5
3.9*

12.6*
6.2

Rate of Unemployment
1953

4.3

5.0*

4.3
4.1
5.8*
6.0*

4.5

2.3
9.5*

3.6
4.0

1964

7.0

6.4

3.6*
1.6
6.4
5.8
9.9*

5.7
11.8*
7.3*
13.3*

* denotes a figure above the national average.
Non-agricultural employment covers all productive activities excluding the private sector of agriculture.
Unemployment is expressed as a percentage of employment outside the private sector of agriculture.

187.

Table 4-12 The Contribution to Structural Shift to Increase^ Labour Productivity, by

Actual Standardised
Index Index

Yugoslavia

Slovenia

Croatia

Vojvodina

Serbia Proper

Bosnia-Hercegovina

Macedonia

Montenegro

Kosmet

231.6

225.5

236.1

218.4

237.2

220.7

176.8

299.2

159.3

163.2

164.1

167.5

171.6

160.8

159.9

136.5

164.7

129.6

Region. 1951-64

Structural
Index

141.8

137.4

141.1

127.2

147i 4

13°'. 1

129.6

181.8

123.5

Structural
Component (^)

32

30

30

23

35

32

39

41

40

The figures for Macedonia cover the years 1953-62 only to avoid the increase in construction associated with the rebuilding of Skopje 1963-
64. The 'actual index' of increase, in particular, is not comparable with the indices for other regions.

188.

Table 4-13 The Contribution of Structural Shift to Increase Labour Productivity in Industry, by Region, 19 5^-64

Actual Standardised
Index Index

Yugoslavia
Slovenia
Croatia
Vojvodina
Serbia Proper
Bosnia-Hercegovina
Macedonia
Montenegro
Kosmet

167.6
150.4
161.3
159.0
182.8
202.3
167.5
213.5
142.2

161.4
152.4
150.9
143.3
182.9
199.3
165.3
180.6
153.2

Structural
Index

103.8
93.5
107.1
110.0
100.0
106.9
101.3
118.1
92.7

Structural
Component (%}

6
- 3
12
19
0
7
2
16
- 17

Table 4-14 Non-Productive Investment, by Region and Sub-period

189.

Non-Product ive
Investment
as % of SP

Yugoslavia
Developed Regions
Underdeveloped
Regions
Slovenia
Croatia
Vojvodina
Serbia Proper
Besnia-Herce ?ovina
Macedonia
Montenegro
Kosmet

1953-57

7.0
6.7

3.3*
7.0
6.1
5.6
7.7*
7.3*
9.1*
16.2*
8.1*

1953-64

12.7
12.0

15.2*
10.6
11.3
11.7
14.0*
12.3
14.1*
15.3*
13.3*

Non- Pro duct ive
Investment

per Head

1953-57

100
107

84
184
102
81
96
82
93
132
53

1958-64

100
112

76
161
107
99
105
71
73
76
50

* denotes a figure above the national average.
The figures for Macedonia refer to 195^-62 only, to exclude the effects of the rebuilding of Skopje, 1963-64.

192.

Table 4-17 Enrolment Rg.tes, by Gra^e of Education and Region. 1953 and I960

Upper Elementary
1^53

Yugoslavia
Slovenia
Croatia

Vojvodina
Serbia Proper
Bosnia-Hercegovina
Macedonia
Montenegro
Kosmet

37.
60.
42.
60.
33.
18.
31.
46.
30.

8
9*
1*
6*
5*
1
9
0*
9

1960

71.
90.
91.
92.
74.
44.
63.
74.
41.

5
2*
2*
4*
1*
3
1
0*
2

Secondary
1953

17.
25.
22.
22.
18.
8.
11.
15.
8.

1
1*
8*
0*
6*
5
9
5
4

I960

27.
42.
36.
30.
27.
17,
25.
25.
11.

9
3*
5*
5*
8
9
5
1
9

Higher Education
1953

2.7
3.Q*
3i.l*
0.3
4.6*
0.9
2.4
0.2

-

1960

5.
6.
5.
2.
8.
1.
6.
0.
0.

0
0*
9*
1
9*
9
1*

4
1

* denotes a figure above the national average.
Each figure is shown as a percentage of the appropriate age-group.

196.
(ii) Bosnia-Herce.gf ovina; A Failure of Take-Off
Successful development in Bosnia-Hercegovina was of crucial
importance for the elimination of regional disparities. Not only was
it dominant amon^ the poorer regions by virtue o~r its size, exceedin^ that of the other three combined, but, as the richest of the poorer group, the convergence of its level of per capita output towards that of the more developed group was essential if further polarisation into 'two nations' was to be prevented. But Bosnia-Hercegovina proved to be the biggest source of disappointment in regional policy.
It apneared, in 1953, to have the best <5evelor>ment prospects among
the underdeveloped regions; it was the richest in natural resources; its development had already been decisively launched during the build-up of the basic industries under the early Five-Year Plan, when little effort could be spared for the other regions; a number of -nrolects under construction guaranteed the continued expansion of its industrial capacity for several years. But in s-oite of t^is apparent 'take-off, the relative position of Bosnia-Hercegovina deteriorated throughout the period; in the earlier years its growth of total output la°:-~ed behind that of the more developed regions, and then accelerated to just equal it in the second, while its rate of population growth was exceeded only by Kosmet. The consequent deterioration in its level of social product per head, relative to Vojvodina and Serbia Proper was the major factor causing a wider gulf in the regional groups in n64 than before the twelve years of regional policy, in 1953. (Table A-l). The region where the development problem had been regarded as virtually solved in the early 1950's came to be partially rescheduled between 1961 and 1964, and rescheduled in its entirety, as underdeveloped, in 1965.
The emphasis on industrialisation as the nrinri^l ^ans to develop-

197.

ment, prevalent in all the Yugoslav regions, was pre-eminently' so in Bosnia-TIercegovina; industry there consistently absorbed a larger propor-tion of productive investment than in any other region (Table A-5) and, by providing around half of total output throughout the Deriod, placed Bosnia-Hercegovina second only to Slovenia among all the regions in its dependence on industrial production. * (Table A-3) •
This policy of industrialisation proved part success, part failure.
In the first half of the period industrial growth was rapid, output increasing at 14.8 per cent against 12.2 in the more developed regions. But this successful industrial expansion was nullified by the poor growth rates of the other sectors, contributing the remaining half of regional output; agriculture, transport, commerce and construction each lagged behind, sometimes substantially behind, its rate of expansion in the more developed regions. Thus while the policy of industrialisation was itself successful in these earlier years, it was concentrated on too narrow a front, with the growth deficiencies of the other major sectors, to give over-all success in development.
In the latter part of the period the growth deficiency in Bosnia-Hercegovina applied across the entire range of economic activity. The growth rates in the major sectors, excluding industry, tended to increase with the national emphasis on development on a broader front, but they still remained below their level in the more developed group. But the rate of industrial expansion declined sharply, from 14.3 to 10.8 per cent, only fractionally exceeding the 10.3 per cent of the more developed ~roup, and giving a quite inadequate margin, in vie"r of the growth deficiencies
1. The sector shares in total output are partly a fiction of the
system, although a considerable validity for intea?-regional comparisons, The prevalence of agricultural underemployment introduces a larger distortion into the estimation of sector shares on the basis of employment.

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of the other sectors and the high rate of population growth, for industrialisation to serve as the spearhea^ of development.
In the early part of the period, therefore, industrialisation was
itself successful, but nullified by very poor growth in all other sectors of economic activity, while in the latter part, when the =rowth of the other sectors improved somewhat, the rate of industrial expansion itself became inadequate for its role in the development strategy.

Industrial Development
The initial industrial development of Bosnia-Hercegovina was
dominated, as a result of national priorities and its own natural resources, by the build-up of heavy industry. Not only did t^ese industries absorb meet of the region's industrial investment, but they provided a very lar^e part of industrial output; in spite of the prevalence of artificially lor/ prices, coal, steel and metal manufactures together constituted over 40 per cent of total industrial production, with electricity and chemicals contributing a further 10 ner cent. These sectors dominated industrial growth rates amon^ individual sectors -
24.0 per cent in steel, 13.3 in coal, 19.1 in metal manufactures, 27.1
in electricity and 26.2 in chemicals, as many ne1 */ projects, sometimes
even begun underthe 1947-52 Plan, were comple^er' anr1 the new capacity brought into production.
•I-his builr'-up of heavy industry made such a major impact on
industrial development in Bosnia-Hercegovina because it was national development concentrated into the region as a result of the suitability
of its resources of coal, iron-ore and water-power. It was, in consequence, genuine large-scale development; the steel-mill at Zenica, for example,
had a capacity, largely installed by 1^54-55, of 800,000 tons, later

199.
extended to 1.1 mvllion tons. As under the ?ive-vear Plan of 1347-52,
the objective of regional development, in Bosnia-Hercegovina, was promoted largely incidentally, as a consequence of the national sectoral priorities. This highly specialised pattern of development, based on a small
number of related industries, was extended in one further direction.
The forestry and timber industries, again based on the region's exceptional natural resources, had been considerably expanded in the early post-war years, to provide no less than 26 per cent of the industrial output of Bosnia-Hercegovina in 1953-54; they continued to be one of the region's largest industrial sectors, although t^eir output stagnated completely between 1953 and 1953. The paper industry, however, initially very small, expanded rapidl^,
The consumer industries, a low priority nationally, scarcely
featured in the development strategy of Bosnia-Hercegovina at this time; the textile, footwear, food processing an^ tobacco industries, although each expanding at over 12 per cent annually remained of little importance, contributing together only some 10 per cent of industrial outmit.
This concentrated development of the resource-based heavy industries, which served Bosnia-Hercegovina so well that by 1958 the region could claim to be the industrial heart of Yugoslavia (Slovenia and Croatia had higher levels of industrial output but these were less strongly concen-trated into the basic industries) proved almost a disadvantage in the later years. With their initial intensive build-up accomplished, the rate of expansion in the basic industries decline?5: °lectricity, coal, steel and chemicals, while all maintaining growth rates in the range 6-10 per cent, could no longer serve as engines of ^ro"/th, as in the previous decade. The over-all rate of industrial growth declined as new in 0- sectors were slow to emerge.

200.

After 1956 productive investment in Bosnia-TIercegovina was allowed
to decline to a level scarcely exceeding that in the more developed regions. (Table A-4). At the national level, t^e problem of the under-development of Bosnia-Herce^ovifla tended to be regarded as already 'solved' by the establishment of this base in heavy industry, irresnective of the existence of the manufacturing sectors which these basic industries were designed to serve, and the region was not scheduled for special assistance through the system of guaranteed investments. Moreover, with the new emphasis on development on a broader front, particularly in the consumer industries, Bosnia-Hercegovina no longer enjoyed the great advantage of its natural resources for the location of new industries.
Not only was the region's need for further development unrecognised by the central authorities, but the opportunities for regional self-help, always limited by the investment system, were particularly restricted by the dominance of the heavy industries, where controlled r>rices depressed the rate of profit and thus l^cal accumulation of investment resources. The major orientation in development in the latter Dart of the
period was the reduced importance of resource-based industries relative to manufacturing, as leading growth sectors. One new resource-based industry which emerged, at this time was bauxite-mining; following several years of rapid expansion, by 1963-64 over 600,000 tons annually, half of Yugoslavia's output, were being produced within the Republic,
principally in the vicinity of ^ostar. Cellulose and paper, -^recessing industries again with a strong resource-dependence, sustained their ranid expansion of the earlier part of the period to become important new growth industries. Their growth also helper" the renewed expansion of the forestry and. timber industries.
The engineering industries (metal manufactures and electrical

201.

industries) occupied a central place in the strategy of diversifying industrial output away from its extreme dependence on heavy industry; while not themselves dependent on the availability of natural resources, the engineering industries derived locational advantages from the proximity of the steel and power industries. Metal manufacturing was already established as one of the region's leading industrial sectors, but its range of output was greatly extended in the later years of the period; the traditional heavy engineering products, castings, steel tubes and pipes, were increasingly supplemented by finished products, capital and consumer goods: tractors and other agricultural equipment, freight wagons, vehicle parts, motor-cycles and bicycles, typewriters and cameras. This diversification took time to effect and much of the expansion in the newer products took place only between 1961 and 1964: the output of tractors first begun in 1961, reached 1,000 in 1964, to make Bosnia-Hercegovina, along with Serbia Proper, one of the two important regional producers in Yugoslavia; with an output of almost 10,000 motor-cycles in 1964, Bosnia-Hercegovina was again one of the only two regions (the other being Slovenia) producing these. The production of electrical equipment was an entirely new industry to the region; its first output was produced in 1957, but two years elapsed before the industry attained significant size. Although the local importance of hydro and thermal electricity projects might have tempted competition in the production of turbines
and venerators with the established giants, Hade KO^.CPT (Zagreb) and Elektro-Srbija, development was concentrated at the lighter end of the industry, electrical installations and commercial communications equipment, and radios, television sets, electrical heaters and boilers for the consumer market.

The industrial development of Bosnia-Hercegovina thus continued to

202.

be strongly orientated towards markets throughout Yugoslavia, as the initial core of resource-baser? industries was extended to this ran°;e of the

related processing industries, again serving! national market, but where the income elasticities of both intermediate and final demand ; vere
The comparative weakness of industrial growth in the latter part of the period, due to the delay in establishing these industries, was essentially a planning failure, a failure to recognise the need for an active policy of diversification and the heavy investment requirements of a programme of diversification with entirely new types of product.
But this pattern of industrial development afforded relatively
restricted opportunities for employment creation. Several of the leading industries, electricity, steel and paper, coulr5, for technological reasons, employ only very little labour relative to the value of their output. Moreover, in the coal and steel industries in particular, the trend of technical change was so strongly towards mechanisation that the level of employment actually declined in the latter part of the period, in spite of the sustained expansion of output - employment in the coal industry declined by 0.6 per cent while output increased at 6.7 per cent, and in the steel industry, even more strikingly, by 1.3 per cent although output was growing at 9-5 per cent. And in general, production for the national market, often in competition with products from Slovenia, Croatia, and the more developed parts of Serbia, severely limited the range of production techniques which were commercially feasible and thus the volume of employment which could be generated, even without the rigidities of a national wage structure.
In an attempt to overcome these limitations to the creptio of industrial employment and to brin^: further diversification into the

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industrial structure, special efforts were made in the later years to expand the labour-intensive industries, textiles, footwear and food-processing. This, however, was designed essentially as a subsidiary part of regional development strategy; it was, in the main, dispersed and small-scale development, serving only a local market. The textile industry, for example, comprised the production of cotton, wool l©nand rayon fabrics, and a wide ran^e of clothing, but with no enterprises of national importance. While inter-regional trade was not recorded, the physical volume of production in these sectors strongly suggests that Bosnia-Hercegovina remained a net importer of many products.
But even with these deliberate efforts, the rate of expansion of industrial emDloyment was only 5.5 t>er cent annually, over the period as a whole, the lowest rate achieved among the regions, although Bosnia-Hercegovina was more heavily dependent than any other on industrial development.

Agriculture
The strong emphasis on industrialisation in Bosnia-Hercegovina was
based not only on the region's exceptional natural resources, but on the recognition of its limited potential for agricultural development. The low level of investment in agriculture and the slow growth of production did not, however, result from a 'neglect of agriculture', or a failure to take measures to promote its development. They were, on the contrary, an 'unplanned' development, essentially the consequence of the actions of the private sector which, producting around 97 Der cent of output during the 1950's and below 90 per cent only after 1961, predominated in Bosnia-Hercegovina to an even greater extent than in the more developed regions. A considerable part of the private sector was ] ^nr? ca^ed by the

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lack of both the means and the incentive to expand production. J T?anvo holdings were dwarf-size, and particularly in the extensive mountainous areas where the soil is thin and cultivation possible only with difficulty, yields scarcely exceeded the consumption needs of the household; and although the private sector was formally made eligible for loans from
the Bank for Agriculture after 1954, the physical Difficulties of the terrain, combiner1 with the adverse terms of trade for agricultural relative to industrial products, discouraged investment, especially through borrowing. The private farmer was thus often trapped in a vicious circle of poverty, but one from which the only escape was not agricultural improvement but a movement into non-agricultural employment, Bosnia-Hercegovina die3, however, possess two goor? agricultural
prospects, on which development efforts were concentrated after t'^e Plan for 1957-61 had affirmed the essential role for agriculture in national development. As in the country as a whole, the centrepiece of policy
was the extension of the social sector, by the purchase of land where the private peasant was willing to sell, ? nd through co-operative culti-vation and extension services where he would accent c'lan^e, but without parting with his land. The valley of Sava with its various tributaries, in the north, was well suited to arable farming, but its efficient cultivation required larger units than were possible with the maximum land-holding and fragmentation in the private sector, and equipment and methods beyond the attainment of the peasant.- Increasingly in the 1960's, as greater prosperity and the growth of employment opportunities outside agriculture made the peasant more receptive to change, efforts "'ere made to build up arable farms in the social sector by the consolidation of private holdings in this zone.

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The increased demand for meat with the growth of consumer incomes
made stock-raising, for which the lower hills were well suited, a very profitable line of agricultural development. The expansion of cooperatives and their extension services were again the principal means of improving livestock strains and converting land to pasture from inefficient arable cultivation. The efforts devoted to agricultural development along these lines were considerable, and yielded good results; the level of investment relative to output in the social sector was often twice as high in Bosnia-Hercegovina as in the more developed regions, and the growth of production around 7-8 per cent annually. *
The poor growth performance of agriculture in Bosnia-Hercegovina was
thus not a failure of the efforts at planned development through the social sector, but of their small scale and of the difficulties of the predominant private sector. The social sector represented no more than 2-4 per cent of agricultural output during the 1950's, principally because few large estates had existed to be expropriated for the original state farms; the strong independence of the Bosnian peasant, which made him cling to his small holding, and the slow growth of non-agricultural employment both impeded its expansion, with the result that even in 1964 it represented only 13 per cent of output. Thus while the small size of the social sector left considerable agricultural potential in certain zones underutilised in private holdings, the growth of agricultural output as a whole was restricted by the natural poverty of substantial areas of the region.

1. Production in the social sector increased at I 7.5 per cent, slightly over one-half of which can be attribute^ to the extension of its land area and the remainder to improved output per hectare.

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Transport and Commerce
Transport and commerce, being essentially 'loc-1 1 activities, could serve only indirectly as leading sectors: by reducing costs and bottle-necks, their expansion could improve the conditions for the development of other sectors. <7hile recognising this, the planners tended to under-estimate the converse restriction to the growth of totr-il outnut presented by inadequate facilities. The emphasis on the growth of production, and in particular industrial production, as the means to development, often brought the insufficient allocation of investment funds, at the national level, to transport (especially apart from the national networks) and commerce. The more developed regions, with their greater existing capacity and lower dependence on federal funds, were able to plan and finance these developments on a more local basis, but the underdeveloped regions were often adversely affected.
Transport services had expanded, in Bosnia-Hercegovina, at 20 per
cent annually, between 1947 and 1952, in support of the build-up of the basic industries. The roads and railways constructed at that time compared favourably with their primitive standard in the other under-developed regions. But during the 1950's, in accordance with the prevalent view that the efforts of these early years had 'solvec 1 the problem of development, investment in transport was allowed to lag until, by the early 1960's, the facilities were proving increasingly inadequate, impeding the general exrcansion of production throu,5v the difficulty and expense of moving goods.
The services associated with the distribution of goods (wholesale
and retail trade, and commercial services), li^e transport and for the same reasons, grew less rapidly than in the more developer* regions.

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Only tourism, within the Yugoslav definition of commerce, was a potential leading sector. But in spite of the charm of the olr1 Turkish to^n of Sarajevo and T lostar, the grandeur of the "Hrina gorges, the waterfalls at Jajce and the Perucica national park, and the expansion of winter-sports, potential for tourism was regarded by the planners as only a very local resource, insufficiently important to form nart of the development strategy of a region with three million inhabitants.

Education and Health

In the non-productive services, even more markedly than in the productive areas of the economy, the development of Bosnia-Hercegovina suffered as a result of its early start and its position as the richest of the poorer regions. Although the intensive development efforts of 1947-52 had brought a large increase in the level of output per head, the social services, a low priority at the time, had not kept pace; in 1953 Bosnia-Hercegovina was in the paradoxical position of bein^ the most developed of the poorer regions, in level of output, but providing the lowest standard of social services. Yet Macedonia and Montenegro through-out, and latterly Kosmet, where the standards of provision were often higher, received budgetary assistance for these services, which was not extended to Bosnia-Hercegovina (except for an isolated special provision in 1954), although the region proved insufficiently developed to remedy the deficiencies from its own resources.
Non-productive investment in Bosnia-Hercegovina consistently
represented only a fractionally higher proportion of total output than in the more developed regions, and a much lower level t>er head of the population, Moreover, it was consistently lower, relative to output, than in each of the other underdeveloped regions, and lever per head than

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in Macedonia and Montenegro. (Table 4-14). As a result, while substantial improvements were made in many areas, the standard of service in Bosnia-Hercegovina often remained seriously deficient.
In 1953 only 46.3 per cent of the children of school age were
enrolled in schools, the lowest regional proportion in Yugoslavia, but over the next twelve years Bosnia-Hercegovina achiever3 the largest regional increase, raising its total of pupil enrolments b,y 90 per cent. By I960 the enrolment rAte had been raised to 66.0 per cent, still the lowest proportion in Yugoslavia but an improvement of no less than 20 per cent of the age-group, over seven years. * In s pite of a similarly rapid improvement in teacher supply, the pupil-teacher ratio and the number of pupils per classroom remained much the worst in Yugoslavia,
A similar deficiency in educational provision applied at all levels, enrolment rates being much lower than in the more developed regions, and often lower also than in Macedonia and Montenegro, in spite of their very considerable improvement between 1953 and I960. (Table 4-17). The enrolment rates in higher education are less informative than the others, since universities and specialised colleges did not operate on the strictly territorial basis of the school system. In the case of Bosnia-Hercegovina, the enrolment rate undrstates the acquisition of higher education by residents of the Republic as many students, in spite of the rapid expansion of the University of Sarajevo, also studied in Belgrade, Zagreb and Ljubljana.
As a result of the low enrolment rates and severe overcrowding i:i
the schools, the rapid expansion of educational provision brought ris-appointing results in the reduction of illiteracy and the improvement in
1. Part of the reason for the low enrolment rate was the dif iculty in securin^ the enrolment of girls from the Republic's substantial "loslem population.

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the educational standards of the population. With 40.2 per cent of the population aged over ten unable to read or write in 1953, Bosnia-Hercegovina had the worst rate of illiteracy of any region except Kosmet, and by 1961 had managed to reduce this to 32.5 per cent, a relatively smaller reduction than was achieved by any other region except Vo.lvodina, where the illiteracy problem was of a different order of magnitude, and leaving Bosnia-Hercegovina facing the largest problem of illiteracy out-side Kosmet.
In the provision of health services the position of Bosnia-Hercegovina
was very similar to that in education, achieving ranid improvements over the twleve years, but lagging well behind the more developed regions, and often behind Macedonia and Montenegro as well. With the highest birth rate outside Kosmet, and the death rate declining more ra.->idly than the birth rate, Bosnia-Hercegovina experienced a rate of population increase of 1.8 per cent a year, exceeded only by Kosmet and twice as high as in the more developed regions. In spite of the very rapid increase in the numbers of doctors and hospital beds relative to the population Bosnia-Hercegovina still provided a standard of service inferior only to that of Kosmet, and far inferior to the standards of the more developed regions. The failure to provide assistance to Bosnia-Hercegovina, unlike the other underdeveloped regions, to remedy these inadequacies in the standards of the social services represented a serious deficiency in regional policy, which will have an adverse effect on future development there.

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(iii) Montenegro; The Single Success
In Montenegro alone of the underdeveloped regions ™?s success
achieved in imnlementing the objective of regional policy, the attainment of a higher rate of growth of total output than in the more developed regions, to promote convergence in the level of output t>er head of the population. Success was handsomely achieved: Montenegro's .^ro^h rates were 10.4 ^er cent in social product and 9.B per cent in national income (veil above the 8.4 and 8.3 per cent of the more developed grour»), and the the highest rates a.chieved by any region. In the earlier ye?.rs of the period the growth of social product, at 9.0 per cent, exactly matched the growth of the more developed regions, but in the later years it accelerated to the very high rate of 14#2 per cent, -hile all the other regions had individual growth rates between 7.7 and 9.4 ^er cent, and
the more developed regions as a group 7.9 oer cent.
But the develonment of Llontenegro was not only Yugoslavia's smallest regional problem, but of itself an essentially small-scale problem; the population of the Republic, less than half a million neople, xvas equivalent to that of a single industrial to"rn or smaller county. When related to this population and the small volume of regional output, any sizeable project made a significant impact on the level of investment per head
and on the investment ratio; the output of many sectors derived from a very small number of enterprises, not uncommonly only a single enterprise, and any extension of capacity could result in the ranid increase of production in the industry as a whole. The development r>r^blem in Montenegro was thus entirely different in size from that in Bosil?- Hercegovina, and development strategy involved decisions not so much on its sectoral orientation as on irdividual -projects.

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At the beginning of the neriod, the economic ^osition of ^l
apart from the great advantage in size, appeared much less ^remising than that of Bosnia-Hercegovina, with which it shared certain characteristics of geography and natural resources. The only development project which had been completed in the years 1947-52 was the construction, largely by volunteer brigades, of the short, standard-guage railway fr~>ra Titograd to the Adriatic coast at Bar. Its natural resources could not make a comparable claim for the location within the region of projects of national priority. Industrial output represented 25 per cent of social product, the lowest proportion in any region; even the largest sectors, the timber industry and the mining of lead and zinc ores, were of little consequence, and the remainder of production was on a very small-scale, often handicraft, basis. Agriculture, the largest sector, was carried on with primitive methods on often barren soil.
But although the level of development obtained was low, several projects were under construction which, through the scale effect from the low level of social product, resulted in total gross investment in Montenegro in 1953-54 even exceeding the value of regional output. The recently designated capital of the Republic, Titograd was rising as virtually a new city: the steel mill under construction at Niksic absorbed. 36 per cent of productive investment, rail, road and harbour extensions 21 Der cent and electricity supply ( trredominantly the Gornja Zeta hydro scheme) a further 13 per cent. These investment projects
gave rise to a large volume of construction activity; i*n the country as a whole the construction industry represented 7.0 r>o r cent of t<->tal output, but in T Tontenegro no less than 23.0 ner cent, a nro^ortion almost as high as that for the whole of industry. In 1953-54. therefore,

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Montenegro was very much an underdeveloped region, but because of its small size the few projects already under construction were making a substantial impact on regional output, even before being brought into production.
With this very low initial level of output, particularly in industry,
the beginnings of development yielded many extremeIv high rates for production in Montenegro. Industrial output as a whole expanded at 20.5 per cent annually, and only one of the twenty industrial sectors failed to expand at over 10 tier cent a year; transport grew equally rapidly, at 20.8 per cent; in agriculture, commerce and construction, on the ot^er hand, Montenegro had among the lowest regional growth rates. Its very successful growth of total output thus derived almost exclusively from industry and transport.

Industrialisation
It is possible to interprete the industrial development of Montenegro
in the first half of the period as following the concentration of the country as a whole on the build-up of the basic industries, as the two sectors, electricity and steel, jointly absorbed between 70 and 80 per cent of the region's industrial investment in the years 1953-57. But
this build-up of the basic industries in fact conrorised only two projects, the Gornja Zeta hydroelectric scheme and the Niksic steel-mill; the Gornja Zeta project had been launched under the 1947-52 Plan, as part
of its drive for the electrification of the country, but the steel-mill was not planned or locate^ primarily to promote the development of Montenegro.
In 1949 when military invasion from Eastern Europe was '^ared, the country's steel capacity, in Slovenia and Bosnia, was felt to be

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vulnerable to air attack, and ^ik'sic selectee1 as the site for a steel-mill on the strategic grounds of its distance from potential attackers and the opportunities for anti-aircraft defence afforded by the surrounding circle of mountains. It was designed as a small-scale project, with a capacity of 135,000 tons, for the ^reduction of snecial steals, particularly for armaments. Much of the equipment was obsolete even before it was installed, being pre-war German equipment obtained as reparations. Prom the economic point of view, the nature of the project, its location and its equipment were all open to strong criticism: the Montenegrins themselves were op^osec' to the project, but strategic considerations prevailed.
Although investment begain in 1951, the mill came into production
only in 1957. Its contribution to industrial output rose from 10 per cent at that time to over 20 per cent in 19^3-64, making it the most important enterprise in the region in the latter half of the period. Worked at full capacity the mill was claimed to be able to cover its costs, but its specialised output and high costs of production made capacity-working difficult to ensure; its persistent losses gained it
a nation-wide reputation as an example of a badly-located and inefficient project in an underdeveloped region, a reputation scarcely justified, as the steel-mill was initially a strategic rather than a development project, although subsequent extensions to its capacity have been made, While these two projects continued under construction, other
industrial sectors were expanding rapidly, but started from such a small base in 1953 that even by 195B they did not renresent any substantial volume of industrial production. Timber and non-ferrous ores still provided almost half of Montenegro's industrial output anr1 the only

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regional exports of any note. Of the rest, the coal industry was tyoical; its output increased six-fold over the six years to represent 6.1 per cent of industrial output in 1958, but only one small mine, at Plevlja, ?/as involved, and its output barely met regional requirements.
The second half of the period, however, brought a further accelera-
tion of industrial growth, to 24.6 per cent annually, and industrial production became significant in both volume and range. Its sectoral pattern closely resembled that of Bosnia-Hercegovina, as a consequence of the regions 1 similar resources. With the activation of the investment of the previous years the electricity and steel industries both made major contributions; the bauxite mines opened up near Niksic became one of the principal sources of national output of this material in the later years; a large cellulose and paper mill, using local timber, was brought into production, at Ivangrad, in 1964.
These resource-based industries were supplemented by a range of manufacturing activities in the engineering and chemical industries.
But lacking the extensive heavy-industry base of Bosnia-TTercegovina and facing greater transportation difficulties, * the •oror'ucts of Montenegro tended to be of small size and from the lighter end of the sectoral range: small items of machinery and machine parts, metal containers, electric lamps, domestic refridgerators, plastics and soap. Particularly between 1962 and 1964 the traditional consumer industries, textiles, footwear and food-processing, were also strongly expanded.
Much of this manufacturing production served the local market only, replacing former household or handicraft production a-d meeting the new demands resulting from higher incomes. Two enterprises in particular
1. Chapter 5 (ii).

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were, however, notable exporters; 'Obod' of Cetinje which, with an output of 66,600 domestic refridgerators in 1964 made Montenegro the largest regional producer in Yugoslavia, sold a substantial part of its output in the national market, and 'Oro', the footwear enterprise, marketed its products throughout Yugoslavia and also abroad.
Without information on inter-regional trade, it is not possible to
make a firm comparison of the ^egree of export-orientation in the fairly similar development patterns of Bosnia-Hercegovina and Montenegro. A smaller region can, in general, be expected to have a greater dependence on trade, but the natural isolation of Montenegro encouraged self-sufficiency; the rather lower importance of the resource-based and heavy industries relative to the consumer industries, and the greater diversity of manufacturing output suggest that the development of "lontenegro may have had a larger 'local 1 element, while in Bosnia-Hercegovina it was more 'national 1 in orientation.
But this successful expansion of industrial production in Llontenegro
was achieved at considerable cost. Investment was sustained throughout the period at a much higher level than would have been possible from local accumulation without very substantial external assistance. In
ex

part, the level of investment wasjaggerated by the scale effect, as would occur in a county where major transport improvements were being made simultaneously with the building of a number of new factories. But in spite of the region's small size, its industrial development -vas extremely diversified; by 1964 every sector, except r>etroleu7i, was represented, a position exactly comparable to that of Serbia Proper, while t^e larger and more developed region of Vo^vodina har1 a less complete industrial structure. Trie evidence against such diversification, the subsidies paid

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to unprofitable enterprises, is given only in hints and inferences from officials anri economists, but as the locational pattern will also suggest, a strategy involving greater concentration mi^ht well h«ve achieved at least comparable results at lower investment cost.

Tourism

While industrialisation remained the centrepiece of development
strategy, the tourist industry came to prominence in the early 1960's.
An essential condition for the exploitation of Montenegro's exceptional natural potential, the provision of easy access, was progressively realised at that time, with the construction of the Magistrala, the highway running the length of the Yugoslav Adriatic coast. The growth of consumer incomes and the improved standard of living with the success of the 1957-60 Plan brought an upsurge of domestic demand at the same time that balance of payments difficulties were prompting national support for measures to attract foreign visitors.
This combination of favourable circumstances encouraged the
allocation of an increasing volume of investment for hotels, restaurants, petrol stations and facilities for transport and entertainment to develop a number of resorts, among which Sveti Stefan and Budva, in particular, gained international reputations. In 1964 331,000 tourists (over three for each five members of the local population) spent over t^o and a half million nights in Llontenegro: 65,000 of these were visitors from abroad, where only 19,000 had come in I960. • While figures are not available, tourism almost certainly became IVtontene^ro 1 s largest source of 'export 1 earnings.

1. Savezni Zavod za Statistiku: Statisticki Godisnjak 1965, Table 213-1.

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Agriculture
The agricultural potential of Montenegro was poor and agricultural improvement only in a minor way an objective of the Republican planners. The small area of arable land available lay in the central plain of the i.loraca, and to extend and improve it would have required heavy investment. In the early years of the 1947-52 Plan it had been proposed, as a joint project with Albania, to reclaim 20,000 hectares around Lake Scutari
for cotton-growing, but the Cominform troubles terminated this plan and the necessary political cooperation was not subsequently feasible.
The central plain was suitable for the growing of fruits and
vegetables, notably figs, olives and vines, and the less barren parts of the mountains for stock-raising. The social sector consistently received generous allocations of investment fun^s to promote more efficient production, but its activities were limited essentially by the nature of the terrain, and even in the 1960's it was contributing just over 10 per cent of agricultural output. For many of the private peasants, with
tiny holdings perched on barren mountainsides, only the abandonment of the holding for employment outside agriculture offered any prospect of
an improved livlihood.
As in Bosnia-Hercegovina, therefore, agriculture was not 'neglecter" ; efforts were made, in sr>ite of the handicap of the small size of the social sector, to exploit the limited potential available^ But a large part of the region's 'agriculture' represented a subsistence way of life, for which development had to be promoted through other activities.

1. This lake lies two-thirds in Yugoslavia and one-third in Albania.

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Employment
In the growth of output Montenegro thus succeeded where Bos^ia-Hercegovina failed. Neither region matched the growth rates achieved by the more developed group in every sector; in agriculture, commerce and construction, representing approximately half of total output, they lagged behind. But industry in particular, and also transport, expanded sufficiently rapidly in I'lontenegro to more than offset the deficit on the other sectors and on population growth, and begin to narrow the gap in income per head.
Montenegro was also markedly more successful than Bosnia-Hercegovina
in implementing the employment objective of development policy. Employ-ment outside the private sector of agriculture expanded at 6.6 Der cent annually, and in industr- at 12.6 per cent, the latter being much the highest rate among the regions. (Table 4-l~0 • The more rar>id growth of industrial employment in Montenegro did not derive only from its higher growth of industrial production, at 20.5 per cent against 12.4 in Bosnia-Hercegovina; the coal industry, which was small, and the relatively new and specialised steel industry were both major sources of new employment until the end of the period, escaping the contraction of the labour force which was such a handicap to the growth of industrial employment in Bosnia-Hercegovina, and the greater importance of light engineering and. the traditional consumer goods in the industrial structure also furthered the expansion of employment. But the planners in Montenegro, like those in Bosnia-Hercegovina, laid little emphasis on labour-intensity in industrial development as an objective in itself, and whe v i they c'id, it was through the choice of sector rather than of technology; in general, they relied on the high rate of industrial expansion to bring a r-pid

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growth of employment, only occasionally usinr; smaller nro.jects in the consumer industries specifically to create employment in more remote localities.
Output per worker in Montenegro improved, by 1964, to three times
its level of 1953, much the highest improvement among the regions. The decline in employment in agriculture and its very rapid increase in industry resulted in the structural shift contributing 41 ^er cent of this, a substantially larger proportion than in Bosnia-Hercegovina or the more developed regions. (Table 4.12).
Within industry also, Montenegro achieved not only the highest
growth of employment but the highest increase in output per worker. (Table 4-13). The smaller disparities in output per worker between industrial sectors than between agriculture and industry reduced the opportunity for a productivity gain from a shift in the sectoral pattern of employment, but Montenegro nevertheless derived 16 per cent of its increased productivity, one of the highest regional proportions, from a structural shift. The expansion of other industrial activities reduced its early dependence on the low-productivity timber industry, while the standardised index indicates that its sector-by-sector improvement in productivity, of itself substantial, was rather less than that achieved by Bosnia-Hercegovina.

Education and Health
The Montenegrins have long enjoyed a high reputation for their abilities and achievements; many people in "ugoslavia indeed will claim that Montenegro has benefitted from exceptional Development efforts partly as a result of the qualities of its planners an? the number of Montenegrins in positions of importance in Belgrade. The early develop-

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ment of widespread schooling, independent of economic development, was a sociological characteristic which the "Montenegrins shared with a number of Europe's small nationalities. In 1953, when economic development had scarcely be^uu, 68.4 per cent of children were enrolled in schools, a level not only more tynical of the developed than the backward regions,
more

but exceeding that for economically, advanced Croatia and Serbia Proper; the position in teacher supply was also one of the most favourable in Yugoslavia. The enrolment rate in higher education appeared very low (Table 4-17) but this reflected the lack of institutions rather than the lack of education. Although several faculties were established in Titograd by the middle 1960 f s, a laro:e proportion of the most able Montenegrin students continued their studies in other parts of Yugoslavia. In higher education, no less than in literacy and other levels of educational attainment Montenegro was notably the most advancer5 of the underdeveloped regions. (Table 4-18).
These educational attainments were not, however, paralleled by
health standards. The death and infant mortality rates compared well with those for the more developed regions, but the birth rate, while the lowest among the underdeveloped, regions, was still, without doubt, typical of a backward rather than an advanced region. Montenegro was poorly supplied with doctors in 1955, a position which had only slightly improved by 1964. The suppl" of hospital beds, however, was considerably better, comparing favourably with the other underdeveloped regions and with all but the best-equipped of the richer regions. The deficiency in medical provision was thus one of qualified nersonnel rather than of facilities, a difficulty closer/ related to the p-eogranhical remoteness of Montenegro at a time when the national shortage of medical personnel

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was tending to produce a concentration of doctors in urban centres to the detriment of more remote or rural areas.

222.
(iv) Macedonia; Search for an Industrial Structure
Macedonia, intermediate in both size and level of development between Bosnia-Hercegovina and Monteneiro, followed a development strategy very different in orientation from their almost exclusive errmhasis on industrialisation. Its centrepiece was integrated agricultural and industrial development, with industrial Development concentrated on light industry, particular!^ textiles aid food-processin^, rather than heavy industry and engineering. This was, again, resource-baser* development, but, lacking the mineral and timber resources of the other regions, the planners recognised as Macedonia's principal resources its fertile soil and Mediterranean climate of hot summers and mild, wet winters. Wide areas of the Republic, especially the plain of the Vardar, offered opportunities for arable farming and the growing of cotton, fruits and tobacco, far superior to those of the Toraca plain or evea. in many respects, the Sava valley in Bosnia. Development was therefore organised around irrigation and agricultural improvements, the cultivation of food and industrial crops and a range of textile and food-processing activities. The consumer industries, as leading sectors serving the national market, played an essentially different role from that of expanding and dispersing industrial employment as a subsidiary part of the industrialisation programmes of Bosnia-Hercegovina and Montenegro. Over the twelve years 1953-64 social product in Macedonia increased
at 8.1 per cent, and national income at ' 7. 9 per cent, ra+es virtually identical with those of Bosnia-Hercegovina and only fictionally below the more developed regions; since the rate of population increase in "ace^onia, the lowest among the underdeveloped regions, barely exceeded that for the more developed t^roun, the adverse margin in the growth of

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output per head, at 0.4 per cent per year, was slight, but nevertheless represented a failure of the policy of convergence.

Agriculture
Macedonia was second only to the great agricultural region of the Vojvodina in the proportion of its investment which it directed into agriculture, a proportion often half as large again as in the country as a whole. Much of this was *infrastructural 1 rather than direct invest-ment; control of the highly variable water-flow on the Vardar, together with irrigation and land reclamation, improved over 100,000 hectares of agricultural land throughout the Republic, most notably in the plain of the Vardar and its tributaries, around Lake Prespa, in the south-west, and in the north, in the vicinity of Kumanovo. The irrigation projects, with their requirements for dams and reservoirs were on occasion, as at Lipkovo (near Kumanovo) integrated with hydro-electric schemes.
The social sector, as always, was regarded as the principal vehicle
for agricultural improvements, the state farms by the example of their organisation and mechanisation, and the cooperatives by encouraging joint production and the acceptance of better methods. While the private sector still predominated, t-e social sector increased its share of agricultural output from 6 ^er cent in 1953-54 to 23 per cent in 1963-ro-Jf, a figure still well below the 43 per cent of Vojvodina but twice as high as in Bosnia-Hercegovina or Montenegro: and in production for the market and of many of the major agricultural products its importance was much greater.
The acreage devoted to asble farming remained approximately constant,
at 40 per cent of the agricultural area, throughout the period, but the crop pattern changer1: the production of wheat, often on the state farms,,

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was considerably expanded, mainly at the expense of rye, as the familiar preference for wheat flour, associated with rising incomes, became evident in Yugoslavia.
Fruits were a major speciality; apples, pears, peaches, apricots
and grapes of excellent quality were r:rown in large queintities in the orchards and vineyards of Macedonia; ifecedonian peaches and the apnles
of Tetovo, in particular, enjoyed national reputations. This quality
was achieved, moreover, with a higher yield per tree than in any other region. * Over 80 per cent of the orchards and vineyards were in the social sector, where pest control and the improvement of strains made an important contribution to quality.
The traditional staple industrial crop of -iacedonia was tobacco, of
which it continued to be Yugoslavia's major producer: about ^alf of the national output was grown in Macedonia, and the remainder, in minor quantities, in each of the other regions. The private sector provided much of the output, which required relatively little land but considerable labour, and could be grown on small plots of poorish soil.
The newly irrigated areas, with their abundant and controlled water supply, were particularly suitable for the growing of cotton and rice, both products in which Macedonia produced virtually the entire national output. Over 11,000 hectares were devoted to cotton-growing, and, although the yields were not high by world standards, Macedonia did produce sufficient for the requirements of its o7/n industry, but with little surplus for exnort to the rest of Yugoslavia.
This programme of agricultural development yielded mixed results.
Over the period as a whole the trend rate of increase of agricultural
1. Savezni Zavod za Statistiku: Statisti6ki Godisnjak 1966, Table 205-9.

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production was 3.5 per cent, lower than in each of the more developed regions, notably lower than the 4.9 per cent achieved in Vojvodina which offered the closest comparison, and only equal to the rate of grov/th in Bosnia-Hercegovina where agriculture was a low priority in development strategy. (Table 4-4). In the earlier years, its rate of expansion, helped by the irrigation improvements, wss consistently good. But this early success was followed by a sequence of lean years, the harvest of 1959, of itself good, but without attaining the record levels of most of Yugoslavia, was followed by three successive disappointing years in 1960- 62, and not until 1964 did output clearly surpass its levels of 1957 and 1959. Grain and tobacco were the most affected, while fruit harvests continued to improve. In the case of grain, the expansion of wheat production was not adequately offsetting the decline in other cror>s, partly simply as a result of poor harvests, possibly also through
to

temporary difficulties arising from the switch, particularly^hard wheat. In retrospect, this lagging of agricultural expansion appears to have been only temporary, and in 1964-66, with a sequence of good harvests, Macedonia firmly re-established its position as a leading agricultural region; in the interim, however, it had important effects. It resulted in a decline in the rate of growth of total output in Macedonia in the latter half of the period when the other underdeveloped regions were improving their growth rates (Table 4-9), and helped to prompt a major reorientation of development strategy at the end of the period.

Industry
These nroducts of Macedonian agriculture were made the basis for
the development of a wide range of processing and manufacturing industries, an industrial orientation strikingly different from that for the country

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as a whole. The textile, footwear, food-orocessing and tobacco industries absorbed 22.7 per cent of industrial investment in Macedonia in 1953-54, by contrast with 7.4 per cent in the country as a whole, and 1.7 per cent in both Bosnia-Hercegovina and T Tontenegro; textiles alone took 16.8 per cent, against 3.4 nationally, 0.8 in Bosnia-Hercegovina and virtually nothing in Montenegro; a similar differential persisted until the last two years of the period, even with the increased emphasis in other regions on the expansion of these consumer industries. (Table A-5).
The textile industry, based on local raw materials, was developed
on a broad front. Among the various cotton spinning and weaving enter-
V

prises established, the large combine Makedonka (at 3tit>) became one of the show-pieces of r.lacedonian development for its large-scale production and up-to-date equipment. The production of woollen fabrics, although remaining much smaller in volume than cotton textiles, expanded rabidly in later years, when the cross-breeding of Macedonian sheep with merinos increased the volume anc* quality of local supplies of raw wool. Silk fabrics too were produced, from the thread of silk-worms reared in the south of the Republic. A considerable part of this textile production was sold in other parts of Yugoslavia.
The leather and footwear industries, although locally prominent,
were of much less importance, the deficiency of the Republic as a whole in c'airy-farming and stock-raising providing on"1?/ limited sullies of hides.
An extensive food-processing industry was built ur>, based on the region's agricultural produce. Fruit-canning and preserving, and the preparation of fruit syrups and juices beca.ire a n^rticular speciality, with Macedonia supplying sometimes one-quarter of the natiore. 1 output

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and brand-names such as 'Jagoda* becoming household words throughout Yugoslavia. A later development, but one which Tio.de a most promising start, was sugar-re finirv. (and the production of confectionery) from locally err own sugar beet. Less successful, however, was the specialisation in the production of bulk, low-quality wines, for which the slow expansion of demand contrasted unfavourably with that for the export-quality table wines of Slovenia.

The old staple, tobacco-processing, which had contributed no less
than 57 per cent of the value of industrial output (with tax) in Macedonia in 1953-54, continued to be of great importance, although expanding only sl'v/ly; its rate of growth, at 3.8 per cent per year over the period as a whole, was the lowest of all the industrial sectors (apart from the tiny and declining coal industry). In 1963-64, however, it still represented 22 per cent of industrial output, and a major regional export.
But this dominance of the consumer industries did not leave the raw material and engineering industries unrepresented. As in the other underdeveloped regions, electricity absorbed large amounts of investment, particularly in the early years, but was an essentially local industry. The mining of non-ferrous ores had begu^, on a small scale, even before the War, and, following the subsequent discovery of new deposits, the mining of lead, zinc, chrome and antimony, and the preparation of alloys and related chemicals, became of some importance. The exploitation of good deposits of feldspar and other non-metallic ores gave rise to the production of ceramics, china and glass-ware as a futher regional export. The engineering industry advanced from small begin:-in ?;s with simple agricultural tools to vra.ter pumps and sprinklers, industrial freezing plant, domestic refrigerators, and v/? shins; machines, for local industry

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and agriculture and the consumer market. In addition Macedonia became Yugoslavia's sole producer of railway brakes and largest of metal furniture.

As in agriculture, this programme of industrial develoDraent made a promising start, output increasing at 16.8 per cent ner year between 1953 and 1958, the textiles and food-processing industries in particular achieving notable growth rates. In later years, however, the dominant industries, textiles, food-processing and tobacco all expanded much more slowly and, although the newer industries, engineering and chemicals, improved their growth rates, the growth of industrial production as a whole declined sharply; at 10.3 per cent it was the lowest among the underdeveloped regions, and just equal to that of the more developed regions,
Macedonia, which failed by only a small margin to match the growth
of total output achieved in the more developed regions, "ailec' essentially as a result of the handicap imposed by its structure of output. The Macedonian economy was heavily dependent on two sectors, agriculture and the tobacco industry, which contributed 57 per cent of its total output in 1953-54 and 41 per cent even in 1961-62; these were the two sectors which recorded the lowest growth rates in the country as a whole, and in no region did they compare with the rates of 10-20 per cent achieved in many other sectors. The handicap of this dependence on the national low-growth sectors was ^ade worse by the failure of Macedonia to equal the sectoral growth rates achieved in the more oevelo^ed regions, recording 3.5 per cent against 4.1 r>er cent in a riculture, and 3.8 against 4.3 in the tobacco industry. The Macedonians thus only just fell short of the growth of total output attained in the morp developed regions, against

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the handicap of an output structure dominated by the two sectors with the lowest growth rates nationally.

A New Orientation

Faced by the slackening of industrial expansion in the later years
of the period and the disappointing results in agriculture in 1960-62, the Macedonian planners began to doubt the effectiveness of their policy of integrated agricultural and industrial development. The gains from agricultural improvement appeared slow and unreliable; the incom<= elasticity of demand for their principal products was liable to be low,
as was already evident in the case of tobacco (although part of its slow growth derived from the poor crops of 1961-62); as other regions, following the reorientation of national development towards the consumer industries built up particularly their own textile industries, an adequate share of the national market could prove difficult to retain - advantages in the supply of raw materials anr1 experience in the industry would not necessarily ensure success against subsidised competitors. To these rational arguments was added the consciousness that a development strategy based on agriculture and light industry was rather lacking in glamour.
In the early 1960's, therefore, a new industrial orientation was adopted, towards the steel and chemical industries, to introduce a more substantial 'industrial base 1 and advanced technology. A large new enterprise 'Acetilenka' was organised to produce chemicals and synthetic fibres, to be a 'giant' of Macedonian industry. An even larger project was the new Skopje steel-mill, with a planned capacity of one million

tons.

With Acetilenkajfirst coming into production in 196^-64 a^ r" the

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steel-mill still under construction, * neither made much imnact on the growth of output by 1964, but their implications for the future develon-ment of Macedonia are profound. Acetilenka vas established as a representative of technologically modern industry, to break away from the traditional pattern of consumer industries. Considerable controversy surrounded the decision to establish the steel-mill, both the choice of industry and its location; precise appraisal is impossible without detailed estimates of expected costs an^ sales, but a number of Yugoslav economists are known to have been opposed to the scheme in view of the expansion simultaneously planned at Zenica and the location of the project some 80 miles from its source of iron-ore at Kicevo, in western "lacedonia, and some 60 miles from the coke supplied from Kosmet. Both projects require workers with technical expertise very different from that required in the traditional light industries. Thus while some reorientation of Macedonian industry into new lines of expansion was becoming necessary, the best choices may not have been made.

The Skopje Earthquake
The earthquake of 26 July 1963 which wrecked Skopje, the capital
and largest city of the Republic, killing over 1,000 people and damaging 90 per cent of its houses and jiost factories, gave the immediate impression of a major set-back to the development of Macedonia, when criticisms had been made, even before the disaster, of excessive concen-tration of the region's industrial development into the city. But although damage to factories in Skopje reduced output in the textile, chemical and printing industries for some months, the replacement of industrial and domestic equipment and of stocks of all sorts which had
1. An initial capacity of 300,000 tons came into production in the autumn
of 1967.

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been lost caller1 for a major expansion of production in many sectors. By far the greatest demand was for construction, and for more than three years a greatly expanded industry was kept fully extended in rebuilding the city. The extremely courageous and determined local efforts, combined with assistance from all parts of Yugoslavia and abroad, enabled much of the damage to be overcame in a remarkably short time, with little evident adverse effect on the development of the Republic. '

Employment
This strategy of combined agricultural and industrial development
was particularly favourable to the expansion of errmloyment. In the development of agriculture, the emphasis on fruits av -d industrial crops gave a marked bias towards more labour-intensive farming; outnut in the social sector increased at 13.0 per cent and employment at 10.9 per cent, while in the more developed regions a similar growth of output, 13.3 per cent, was accompanied by a growth of employment of only 8.1 per cent. Textiles, food-processing and the glass and porcelain industries were developer5 as 'national* sectors, where efficient production was more important than employment-creation, but were nevertheless sufficiently labour-intensive intrinsically to be major sources of new industrial employment; the rate of expansion of industrial emDloyment in Macedonia, at 8.9 per cent annually, was the highest regional rate outside lontenegro, A farther consequence of this pattern of development was that the
increase in output per worker -/as lower in Macedonia than in a-ry other

2 region except Kosmet. * Of this, the structural shift in employment with

1. The recovery of Skopje was so successful that the anecdote could later circulate that the .Montenegrins, who had acquired a refutation for wanting anything of advantage obtained by another re~ioi, were wanting
2. Th^SnSSS^SSSrl^se in Macedonia is based on the years 115^2, in other regions on 1953-64.

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the increase in industry and other non-agricultural activities and the decline in agriculture, contributed 39 r) 6 r cent, virtually the same proportion as in Montenegro.
The growth of output per worker in industry in Macedonia was also relatively low, and the sustained bias towards the low-productivity sectors, combined with the relative decline in tobacco, resulted in a negligible productivity gain from the change in the industrial distribu-tion of employment.

Education and Health
The expansion of education made rapid progress in Macedonia through-
out the period, with the federal government, as in ".lon&enegro, providing around half of the budget. As part of the establishment of political equality among the nationalities, at the end of the vVar, the "lacedonian language had been made the official language of the Republic, and most of the teaching in Macedonian schools has since been given in Macedonian, with Serbo-Croat taught as a second language. This did not create any difficulty in teacher supply, allowing Macedonia to achieve one of the largest regional reductions in the pupil-teacher rstio. The reduction in the rate of illiteracy was also one of the largest achieved.
The most notable educational develor>ment in Macedonia was the
expansion of higher education. The several small faculties which had existed in Skopje before the v;ar, attached to the University of Belgrade were rapidly strengthened in the immediate post-war years, and in 1949 the University of Skopje was constituted as an autonomous body. By the early 1960's it had become t^e thirr1 largest University in Yugoslavia, with notable schools of medicine, agriculture and forestry. In I960 the rate of enrolment in higher education in Macedonia, at 6.1 t>er cent of

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the appropriate age-group, was second only to that of Serbia Proper, strongly favoured by the concentration of specialised institutes into the city of Belgrade, in addition to the size of the University of Belgrade. In this dynamism of university education, Macedonia far exceeded the other underdeveloped regions, in snite of IPS; ing behind "lontenegro in the provision of basic schooling. (Table 4-17).
This expansion of higher education had a direct effect on the
standard of medical services through the output of qualified doctors from the Skopje medical school. The average population serived by each doctor in Macedonia was reduced by over one--alf between 1955 and 1964, the largest regional reduction, to already the most favourable ratio among the underdeveloped regions.

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(v) Kosmet; The Neglected Region
Kos'net was, and remained, undoubtedly the most difficu.lt regional development problem in Yugoslavia. Although Bosnia-Flercegovina and l.Iacedonia were considerably larger in population, and Montenegro faced exceptional geographical difficulties, the extremely low level of develop-ment in Kosmet, and its unfavourable population characteristics, " made the development problem particularly acute.
But the difficulties, in their fullest extent, were of relatively
late origin. In 1947 Kosmet had not been much poorer than Montenegro; even in 1953, its output per head of the population was 53 n er cent of the national level against 58 per cent in ^onteie^ro. But the relative positions then diverged markedly, as total output in Kosmet increased much less rapidly, an^ population more rapidly, than in Llontenegro, until in 1963-64 social product per head in Kosmet represented only one-half of its level in Montenegro. (Table A-l).
Economically, Kosmet was, to some extent, the better placed in the
early years. Slightly smaller in land area, it produced twice the volume of agricultural production in 1953, even although the wooden plough was the characteristic agricultural implement; while ".l^ntenegro had virtually no industry, Kosmet supplied over one-quarter of the national output of non-ferrous ores and was the country's major producer of lead. But these advantages in production were outweighed by the fact that Kosraet was supporting a population of twice the size. The population problem, both in size and its characteristics, lay at the heart of the economic, as well as the political, difficulties to the development of Kosmet.
As early as 1947, the First Five-v ear Plan o-f thr Republic of Serbia
had declared its intention 'to make strenuous and determined efforts
1. Chester 1 (i), T>T>.?i-?3.

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towards the full elimination of backwardness in our Republic, particularly in the autonomous region of Kosmet', but, under the inroact of th^ rupture with the Cominform, the implementation of t v ds came to be left aside for a number of years. Until the later 1950' s, develoDraent efforts for Kosmet
- /ere minimal; its level of productive investment, whether measurer' relative to social product or per head of the population, was the lowest among all the regions, and, in particular, substantially lower than in the other underdeveloped regions. No developments of any consequence were made. The mining of non-ferrous metals (notably at the lead-mines at Trepca) continued to be the dominant, almost the only, industry, providing no less than two-thirds of industrial output throu^out the earlier part of the period, in spite of the low prices prevailing for metal ores, but the negligible secondary and local multiplier effects from the exploitation of this rich natural resource prevented any i^nact on the development of the region as a whole. Output per head increased by 1.5 per cent annually between 1953 and 1958, an improvement on its decline of 1947-52, but hardly 'the elimination of regional backwardness 1, and, as alternative employment opportunities were not created for the growing population, the problems of the sub-division of holdings and agricultural overpopulation became even more acute.
But this position was transformed in the later half of the period. Following the improvement of relations with Eastern Europe from 1955 onwards, * the development of Kosmet was accepted by the federation as
a national responsibility:, and the region scheduled for special assistance in the new Plan for 1957-61. The effect on investment was very marked; 1959 its level had been more than doubled, and regained one the
1. This improvement, involving specifically renewed cordialit\r with Albania, is documented in Kaser (1967, r^. 69-77).

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highest among the regions for the rest of the period. (Table A-4). A remarkable acceleration of the growth of output follower); social product almost trebled its growth rate of the first half of the period, to 9.4 per cent, the highest rate of any region except Montenegro. A major improvement in the growth rate was achieved in every sector except agriculture, and even there some improvement was recorded.
But in a region where over 80 per cent of the active population
were engaged in agriculture, a period as short as six years (1959-64) could allow only the very beginnings of a development policy to be put into effect. 'Development strategy 1 is perhaps too large a concept for the limited programme which could be initiated in circumstances where the problem was, essentially, where to begin.

Industry
The overpopulation in agriculture and the high rate of Do-oulation growth made it imperative to try to create new employment outside agriculture, particularly in industry. Two very different lines of approach were adopted. Like Bosnia-Hercegovina in particular, Kosmet possessed mineral resources, lignite and non-ferrous ores, on which competitive 'national' industries could be based. But the mining and processing of these, in spite of their very favourable prospects, could not bring a major expansion of employment in the short-run. The promotion of the consumer industries was therefore adopted as a second line of attack, its products for export if possible, but essentially to replace handicraft and household production, and to both increase local incomes and serve the demands arising from them. Industrial expansion was thus sought at the two levels of 'national' and 'local' industries. Deposits of lignite had been known for some time to exist in

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several parts of the region, and a very limited amount of mining had been carried on in the vicinity of Pristina, partly for export to Macedonia, which was deficient in sources of fuel. A detailed survey revealed some 6,500 million tons in the vicinity of Pristina, and a further 4,000 million in Metohija, making, in total, almost half of the national reserves. Being suitable for open-cast as well as deep mining, extensive exploitation of the lignite could be quickly begun. Moreover, the lignite, although of low thermal output by comparison with hard coals, proved very suitable for both coking and gasification.
The first phase of the Pristina project was completed between I960
and 1962. The production of lignite was expanded to almost one million tons annually, and a large thermal electricity generating station constructed; the coking -process was studied by the operation a nilot plant. The second phase was then launched, and was approaching completion by the end of 1964, trebling the output of lignite and electric power,
and introducing a full-scale coking plant. The two processing projects, involving substantial weight-reduction on the unprocessed lignite with
its high ash content, were located adjacently, to minimise transport costs. The projects from the second phase of this giant undertaking
were just coming into production by the end of 1964, and their impact
on the level of regional output, already substantial, was even more marked in the following years. Among others, the Skopje steel-works
was later to become an important purchaser of the coke and the industrial gas produced in the coking process. For the longer-term, a chemicals complex based on the industrial gas, ammonia and other by-products was envisaged.
1. The Pristina lignite project was partly finaced by credits from U.S. and Soriet sources and received technical assistance under the auspices of O.E.C.D., described in O.E.C.D. (1968).

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The famous lead-mines at Trepca had been opened ur>, with British
capital, as early as 1926, and further deposits of lead and zinc (at Kisnica) and chrome (at Deva) were later discovered. The new developments in these industries were organised around the extension of processing activities in place of the export of unprocessed ores. The expansion of smelting and zinc electrolysis also afforded opportunities for develop-ments in metallurgy and the production of chemicals, the latter first exploited through the establishment of a factory for artificial fertilisers at Kosovska 'Titrovica. The chemical industry, planned as a leading sector in the industrial development of Kosmet, recorder1 its first output in 1964.
The main limitation to the rate at which these industries coul<? be
brought into production lay in the large amounts of capital equipment to be installed. The restriction to the expansion of the consumer industries, on the other hand, lay largely on the side of demand. While confined to familiar products, cotton fabrics and clothing, simpler styles of footwear and food products, these sectors experienced some difficulty in super-seding handicraft products and securing a local market for their output. An example quoted in Pristina was that of selling factory-made shoes,
when the peasants had no wish to wear them; it was even claimed that a significant proportion of the new output was sold outside Kosmet, while the peasants hoarded any increase in income against the day they would be able to buy more land, still the favourite item of purchase. These difficulties were, however, expected to be only temporary, to be followed very soon by a rapid growth of demand from higher incomes and a national 'demonstration effect 1.

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Agriculture
The natural conditions of soil and climate wer^ suitable for the development of an efficient agriculture in Kosmet, but tbe difficulties to securing the necessary technological transformation in the face of fragmented holdings, overpopulation and primitive methods were immense. The size distribution of the land holdings of agricultural households, recorded in the 1961 Census of Population revealed that Kosmet had a larger proportion of its households in each farm-size under three hectares than had Yugoslavia as a whole, while in each size over three hectares the proportion was lower. (Table 4-21). Not only were the holdings generally smaller, b ;t the average household contained more members, 6.3 against
4.0 in Yugoslavia as a whole. Kosmet consequently had the highest regional density of population relative to its cultivated land; according to the calculations of the Statistical Office of the ^epublic of Serbia (Srbija, Zavod za Statistiku (1962, Table 2)) for I960, Kosmet had 256 persons per 100 hectares, against 171 in neighbouring Serbia Proper and only 110 in Vojvodina. But in spite of the manpower applied, yields per hectare were low.

A beginning was, however, made on what was acknowledged to be the
long and difficult process of improving agricultural methods. The reclamation of 27,000 hectares of uncultivated la^d for agricultural use and the establishment of irrigation systems for a further 15,000 hectares made the first contributions towards reducing the difficulties of land shortage and inadequate water supplies.
The principal obstacle limiting the extension of the social sector
was not lack of social funds for land purchase, or even peasant reluctance to sell, but tbe lack of alternative employment opportunities for those who lived anr1 'worked' on the holding; with the prevalence of over-

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Table 4-21 Size Distribution of Private Agricultural Yugoslavia and Kosmet.

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Size ^f Holrling (hectares)

Yugoslavia
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0.01- 0.06- 0.5- 1.0- 2.0- 3.0- 5.0- 3.0- 0.05 0.5 1.0 2.0 3.0 5.0 8.0 10.0

0.4 3.4 6.2 15.

i

( Kosmet 0.7 3.6 ,8.2 19.

0 15.5 23.0 18.

5 17.5 22.1 14.

1 6.7

7 4.7

10.0

6.7

5.5

Each figure is a percentage of the total number of holdings.

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population, many of these could not feasibly be taken into the labour force in a cooperative. In the interim, the peasants were encouraged to use the services offered by the cooperatives to acquire higher-quality inputs a: d better methods. Stock-raising and the growing of vegetables and industrial crops, such as sugar-beet, were especially encouraged, being more labour-intensive than arable farming, and contributing to the food-processing industry and thus to the expansion of industrial employment.
But the large number of small peasant producers and their low levels
of education made the Dissemination of improvements in this way a slow and difficult process; the peasants, for example, who har" beer persuaded to invest in better quality livestock still required continual guidance on correct feeding, while even irrigation was impeded by the number of individual holdings and the interspersion of cro^s requiring watering at different times.
These many difficulties made the transformation of agriculture a long-term process, and partly dependent on the success of development policy in other sectors. But at least over the first few years the expansion of agricultural outtn.it was improved, and ^eintained at a rate more rapid than the increase in population.

Employment
In Kosmet, to an even greater extent than in the other underdeveloped regions, the expansion of non-agricultural employment and the reduction of overpopulation in agriculture was an urgent objective. The two neior lines of industrial development v.ad, however, conflicting implications for this.
The coal and non-ferrous metal industries, in exactly the sa^.e way

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as the coal and steel i idustr'es in BosirL"--Herce£Ovi?ia, for technological reasons expanded their production with relatively little expansion of employment; the coal industry, in the latter Dert of t^e period, increased its output at 36 -->er cent per year, but employment at only 7 per cent; the situation was even more extreme in the non-ferrous metal industry (mining and smelting) where output increased at 5.0 per cent while employment declined at 1.1 per cent. These industries coul<" make a major contribution to the expansion of regional employment in the longer-term only indirectly, through their multiplier effects and the stimulus to ancillary activities. The textile, food-processing and tobacco industries, on the other
hand, were not only labour-intensive, but the growth of employment in them in Kosmet was more rapid than the growth of output: the resulting decline in average output per worker derived not from reduced efficiency in established liies of -oroduction, but from a deliberate bias towards expansion in the more labour-intensive products. Even in a region as backward as Kosmet, at no point was a deliberate choice made of obsolete technology, as has been done in the Indian textile industry in similar circumstances; as a member of the staff of the Planning Office of Serbia commented, 'we don't dare*.
This expansion of employment in the consumer industries, which had
been negligibly represented in 1953 when industrial employment was concentrated into the non-ferrous metal industry, not only gave Kosmet the lowest growth of output per worker in industry, but resulted in a negative contribution to average industrial productivity from the structural shift in employment; this negative structural component was equivalent to 17 per cent of the increase achieved. Wen with the low level of industrial productivity, however, the difference in output per worker between agriculture and industry was sufficiently large for the

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structural shift in total employment to contribute 40 t»er cent of the growth of labour productivity in the economy as a whole.
3ut the many high rates of increase of employment in individual
sectors were not sufficient to prevent a substantial increase in the numbers 'employed' in agriculture. In this respect, absolute numbers give a better impression than rates of increase; in 1964 industrial employment reached 56,000, while 250,000 workers were still engaged ifi agriculture, 4-5 for every one in industry. In that year also 6,100 new jobs were created outside the nrivate sector of agriculture, when the natural increase of the population was around 30,000. Development t>olicy was thus playing only a mitigating role, while agricultural overpopulation became still more acute; in this respect, the development of Kosmet had scarcely begun.

Education and Health
The development of the social services in Kosmet, like that of the productive sectors, massed through two phases. In the early years, standards were extremely low, help from outside very small, and local resources inadequate to make a serious attack on the t»roblem. After 1957, with federal assistance, larp;e-scale efforts were made, but the period until 1964 was too short for many improvements to be registered.
Between 1953 and 1956 non-productive investment represented, less
than 8 per cent of social product, a figure approximately equal to that in the more developed regions, but only half of that in ".lontene^ro, all regions where the problems were much less acute. (Table 4-14). The educational levels of the i^oDulation in 1^53 were extremely low; 54.8 r>er cent were illiterate, 71.3 per cent had received no schooling, only 4.3 per cent had proceeded beyond four-year elementary schooling less t/>sn

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half of the children of school a^e were enrolled, and at an average of
42 mmils Tier teacher. Most of these figures were the 'vorst in "tr.'oslavia, The rapid increase in non-productive investment after 1957 did,
however, enable considerable progress to be made. The number of schools, teachers and pupils all improved, with the result that, already by I960, two children out of three were enrolled in schools, and by 1964 the pu^il-teacher ratio had been reduced to 33.5. The extension of basic schooling was, however, still hampered by the continuing resistance, as in Bosnia-Hercegovina, among the substantial .Moslem population to the attendance of girls at school, and by the difficulties of providing schools, teachers and transportation for the scattered population in the more remote areas, where schooling had sometimes to be confined to the summer months. The size of the educational task remaining in Kosmet was strikingly illustrated in the report by O.E.C.D. (1968, p.IB), which Doints out that the region's rate of illiteracy in 1961 among the age-~rour> 10-19 years was higher than in the age-group over 65 in Slovenia.
As in Macedonia, schooling was largely conducted in the language
of the appropriate national minority, mainly Albanian, occasionally Turkish. This language difference, added to the social and cultural differences, was a further barrier to the recruitment of teachers from other parts of Yugoslavia to alleviate the shortage of qualified local teachers.

This scarcity of highly qualified people served both as an incentive
and a constraint to the development of higher education within the region. The newly established University of Pristina was progressively expanded in the 1960 f s by the addition of further individual faculties, and new Research Institutes accepted the training of technical t>ersonnel as nart

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of their function, but in both cases the difficulties of recruiting teaching staff limited the rate of expansion, with the result that the region continued to rely heavily on obtaining qualified people from other regions and on sending its own students and trainees to other parts of Yugoslavia to gain qualifications. To probably a greater extent than the other underdeveloped regions, Kosmet sought to retain its local people after they had gained higher qualifications, by making the student grants, for study in other parts of Yugoslavia, conditional on an undertaking to return to Kosmet. But even with this provision, many of the region's qualified workers had to be recruited from outside.
The region's standards of health were, equally, the worst in
Yugoslavia. In 1955 one doctor had to serve an average of 6,000 people, and only one hospital bed was available for the same number. Both figures, however, were very substantially improved over the following

decade.

Biith and death rates in 1953-54 were nearly twice as high as in
the more developed regions; the death rate, however, was reduced by one-third over the next ten years, mainly through the limitation of infectious and endemic diseases, but the birth rate showed very littl^ response, with much the lowest index of decline among the regions. This resulted not only in a high rate of population increase, 2.4 t>er cent ner year, three times as high as in the more developed regions, but in a. very unfavourable age-structure of the population; in 1961 42.2 per cent of the total population of Kosmet were under 15 years of age, by comparison with 31.1 per cent in Yugoslavia as a whole. * This, in turn, reouired the continual excision of schooling, to maintain, before improving, the enrolment rate.
1. Savezni Zavod za Statistiku: Statisticki Bilten 250, Table 4-1.

246.

The difficulties involved in promoting the development of Kosraet as
a result of the region's backwardness in production were t v> us exacerbated by very low standards of education and health, and the ra^id increase and unfavourable age-structure of the population.

247.
5. REGIONAL LOCATION POLICIES

(i) Bpsnia-Herce-Tovina
Planning in Yugoslavia as a whole tender1 to be concentrated on the sectoral pattern of development, with its spatial organisation treated as a subsidiary issue, to be determined largely through decisions on individual projects. In Bosnia-Hercegovina in particular, the opportuni-ties for an active locational policy were severely restricted in the early years by the dominance of the extractive and other resource-based industries in its development strategy; even subsequently, when diversi-fication of the industrial structure became a policy objective, the scheduling of individual areas, but not of the whole Republic, for federal assistance impeded a unified treatment. Thus, partly following a national tendency, and partly as a consequence of its specific position, the territorial distribution of development in Bosnia-Hercegovina emerged somewhat incidentally over much of the period, and only towards the middle 1960's was an explicit and detailed policy elaborated, covering both the zoning of the Republic and its urbanisation.

The Distribution of Industry
In the earlier 1950's, Bosnia—Iercegovina had a highly concentrated pattern of industrial development; its five large towns, * Sarajevo, Zenica, Tuzla, Banja Luka and Mostar, contained 52.8 r>er cent of the
2
Republic's industrial employment, * a markedly larger proportion than in the more developed regions. (Table 5-1). This high ^ro-oortion derived from the prominence of the ^eavy industrv centres, Zenica arc! Tuzla, in
1. Following international convention, a large town is defined as one with more than 20,000 inhabitants.
2. Forestry is excluded from industrial employment.

248,

Table 5-1 Industrial Employment in Lar.^e Towns, by Region. 19*?4.
1958 and 1964

.. ... .

1954 1958

Slovenia ! 34.6 32.9
i
j

Croatia 43.8 44.2

Vojvodina 40.6 51.5

Serbia Proper 39.6 47.1

Bosnia-Hercegovina 52.8 41.0

Macedonia (27.6) 54.1

Montenegro

Kosmet i (7.1) 14.0 ii i

1964

37.6

61.9

45.9

54.8

37.9

65.0

45.7

33.3

Each figure is a percentage of total industrial employment in the region. Large towns are those which recorded over 20,000 inhabitants in the proceeding Population Census, for 1954 and 1953 the Census of 1953, for 1964 the Census of 1961.

The figures for industrial employment in Macedonia and Kosmet in are incomplete, comprising only Skopje and Pristina respectively.

249.

addition to the normal pattern of concentration into the capital and a small number of relatively distant and more loc?l centres. (Table r^-2). But the degree of concentration then declined steeply to 41.0 per cent in 1958, while in the more developed re°;i^ns it vas tending to increase; only Zenica, the steel centre, expander1 its industrial labour-force to any extent, and even its share in the regional total declined. I.Tuch of this dispersion originated with the resource-base^ industries. The largest source of new industrial employment was the coal industry, which increased its labour-force by 7,000 between 1954 and 1958; the location of coal deposits in many parts of the Republic gave rise to a number of smaller mining centres, Kaka \j, Lukavac, Banovi6i, Travnik and others. The iron-ore mines at Vares, the hydro-electric schemes at Zvornik and Jablanica and the thermal generating stations near the coal-fields all expanded employment outside the established nopulation centres, while the engineering, paper, textile and food-processing industries created new industrial employment in the smaller centres, Doboj, Biha6, TJrc'ko and Prijedor.
While the manor centres were no longer so dominant by the late
1958's, the proximity of a number of the smaller centres to the large towns (Vares, Kakanj and even Travnik to Zenica, Lukavac to Tuzla) maintained the strong geographical concentration of industrial employment, particularly into central Bosnia, while sizeable areas of the Republic remained largely unaffected by the process of industrialisation. These disparities in the level of development were one of the sources of t^e controversy, intermittent between 1953 and 1965, as to whether or not Bosnia-Hercegovina should be scheduled as an underdeveloped region. V/hen it was becoming obvious, by the e^d of t>>e I n 50's, tl^at the

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pattern of industrialisation was not eliminating economic backwardness in Bosnia-^ercegovi-a, t^e compromise solution was adopter1 of scheduling the poorer communes only, under the Plan for 1961-65. federal assistance was supplemented by the Republic itself, which established a fund, financed from taxes on enterprises, to provide participations for new projects in the designated areas; this fund exactly paralleled, within the Republic, the action of the federation, in channelling resources from richer to poorer regions in the country as a whole. Neither this fund nor the federal programme controlled a large volume of investment funds; the Planning Office in Sarajevo estimated that special federal assistance amounted to around 6 per cent of total investment in the Republic during the four years, * althought this represented a much larger proportion of investment in these poorer areas and, for a Republic which was itself receiving low investment allocations, sufficient to be a strong influence on locational policy.
The Republic's own emphasis, supported by the federation, on the
greater dispersion of development helped to bring a further reduction in the relative concentration of industrial employment in the major centres, from 41.0 per cent in 195" to 37.9 per cent in 1964, only Sarajevo and Banja Luka increasing their shares. Half of the decline resulted from a

2 rapid expansion in the smaller towns, ' the reminder in non-urban

communities. This further dispersion was in marked contrast to the increased concentration into large centres in the more developed regions. The sectors principally promoting the dispersion of industrial employment in the latter half of the period were timber, paper, textiles
1. Interview, 26 Se^te^ber 1964.
2. Towns were designated as administrative units, Ipr^ely, but not rigorously, on the basis of their population si^e.

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and food-processing. The timber industry underwent a period of renewed expansion after its relative stagnation of the preceeding years; with forestry, this highly dispersed industry remained by far t^e largest source of industrial employment in Bosnia-Hercegovina, its 67,000 workers in 1964 considerably exceeding the numbers in the coal and steel industries combined and representing more than twice the number in all branches of engineering.
During this phase, the textile and footwear industries, with their opportunities for the establishment of small and labour-intensive factories, were greatly favoured as a means not only of diversifying the structure of industrial employment but of spreading it to more remote or impoverished localities. As Srebric (1964, p.319) says of the under-developed regions as a whole, with no less applicability to Bosnia-Hercegovina,'It is quite impossible to fiid a small underdeveloped area which, during the years 1957-63 did not acquire a textile enterprise of some sort, or a shoe factory'. These industries are often described as 'footloose' for their weak locational dependence on proximity to sources of materials or to markets, but in Yugoslavia, and particularly in the underdeveloped regions where they were beino: used specifically for the creation and dispersion of industrial employment, their 'locational neutrality', as it was commonly described, was often invoked to suppress consideration of the cost and revenue implications of locational decisions. Many of these projects 'vere in practice badly conceived and poorly located, and after several years of consistent losses incurred on them the planners were becoming convinced, by t^e end of the period, of the inadequacy of a policy of dispersion along these lines.
Prompted by the continuing disparities in the level of development

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within the Republic, and by the failure of the policy of dispersion through the f locationally neutral 1 industries, the planners of Bosnia-Hercegovina undertook a full-scale appraisal of development prospects with specific emphasis on locational aspects. The detailed study prepared by the Ekonomski Institut of the University of Sarajevo, (Hadziomerovic (1964) and Taubman (1964)) came too late to influence policy before 1964, except to the extent that some of its major recommendations had already been gaining currency in planning circles. This study is, however, designed as the basis for future spatial planning.
Its basic proposal is the division of the Republic into priority
and complementary zones, the priority zone comprising the Posavina (the valley of the Sava and its tributaries in the nort^) and t^e central areas of both Bosnia and Hercegovina, in the valleys of the Bosna and Neretvs, and the complementary zone the remaining mountainous areas in the east and west. The T-shaned priority zone contains half of the Republic's territority, including almost al.1 its lowlands, anr1 three-quarters of the population. The areas included were selectee1 on the basis of proximity to national lines of communication, existing infrastructure, and access to raw materials and power; this designation by 'access 1 and development prospects rather than by existing level of output was a major new departure in development strategy, the priority zone cutting across the previous division of the Republic, by including the developer1 parts and two important areas, the valleys of Una and Neretva, formerly scheduled as underdeveloped. The communes in the complementary zone were no longer to receive preferential assistance, except for the provision of adequate social services, and were expected, in the long-run, to lose ^onulation. This change of emphasis to 'access 1 ratber t^an the presence of raw

254.

materials or population as the most important locational factor in the longer-run was accompanied by the launching of a belate'1 nrogramme of of improvements in the major transport networks, the reconstruction to standard guage and the electrification of the old narrow-guage railway line from Sarajevo to Ploce (on the coast) and the rebuilding of sections of the road links with Croatia and Serbia, which would be completed only

in the later 1960's. 1 *

Urbanisation

In spite of its early concentration of industrial employment into
major centres, Bosnia-Hercegovina was, and remained, much less urbanised than any of the more developed regions, only 9.9 per cent of its population living in towns with over 20,000 inhabitants in 1953, and 12.1 per cent in 1961. (Table 5-3). The relative increase in the concentration of population into the large towns between these two dates was, moreover, the lowest among all the regions.
The initial low degree of urbanisation was associate^3 wit 1 ' the rar>id
rise of the new centres of heavy industry, particularly Zenica and Tuzla, at a time when the allocation of funds for non-pro^uctiv^ investment,
most notably in housing, was severely restricted. The survey investi^a-
v

tions of Cika and Stevanovic (1957), covering 1° major towns in Yugoslavia in 1956, and of the Pederal Statistical Office (Savezni Zavod za Statistiku: Statisticki Bilten 101) covering 75 towns in 1957 both revealed a very high rate of daily commuting of workers into new urban industrial centres throughout the country; Zenica and. Tuzla had anong the hig'-est rates, one worker in three, or even in two, travelling daily from the countryside, from a distance often of 30, sometines even of more than 50, kilometres.
** The new railway was opened in October 19t-b«

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Table 5-3 Degree of Urbanisation., by .ItegioA. ant3 1961

Yugoslavia
Slovenia
Croatia
Vojvodina
Serbia Proper
Bosnia-He rcegovina

ITo. of Towns -
1953

34
3
3
5
5

^

Macedonia , 5 Montenegro
Kosmet

-

3

/y Urban Population
1961 1953 1961
———————————————————————

53 13.3 , 19.1
4 14.9 j 18.3
14 17.5
5 15.0
12 13.3
5 3.9
7 18.1
2
4

-

3.4

24.2
17.6
20.5
12.1
26.0
10.8
12.6

a With over 20,000 inhabitants.

256.

The relatively slow increase in the nroDortion of the populations resident in large towns in the later 1950's, when the housing shortage was becoming less acute, was the consequence of tbe tendency already observed (Table 5-1) for the degree of concentration of industrial (and therefore ancillary) employment into the major centres to decline in Bosnia-Hercegovina against the national trend towards an increase. The dispersion of industrial employment to smaller towns and non-urban communities resulted in a remarkably uniform pattern of expansion of the metropolis, the other large cities and the smaller towns, around an average increase in the urban population of 4.2 per cent per year. (Table 5-4).
A major difficulty to quantifying migration from its other side, of
the movement out of rural areas, is the continual changing of boundaries with the progressive enlargement of the commune; in Bosnia-ITercegovina their number was almost halved by consolidation from 191 in the years 1955-58 to 106 in 1963-64.
In connection with the study of long-term locational prospects
within the Republic, however, the Republican Statistical Office conroiled copulation figures for the census years of 1953 and 1961, standardised on the basis of the communes as of 1 January 1963. This study (Bosna i Hercegovina, Republicki Zrvod za Ste.tistiku (1964)) shows that while the urbanised communes gained substantially in nopulation, some of the poorer and more remote areas suffered actual depoDulation, in spite of the Republic's high rate of natural increase of the population. Of the 106 communes, eleven lost population, five in the north-west of Bosnia and six in the extreme south of Hercegovina. On the ot^er hand, a large group of adjacent conraunes expander3 their tote.l nornj.lati-m by more than

257.

Table 5-4 Growth of Population in Towns in Bosnia-Herce^ovina. 1953-61

Population
1953 1961

Sarajevo 144 328 198 914
Tuzla 34 282 53 008
Banja Luka 36 794 51 158
Mostar 35 898 48 738

Zenica 31 298 44 184, i

Brcko 12 937 IB 866

Annual Increase
Nos.

6 823
2 341
1 796
1 605
1 611

741

Bijeljina 15 038 18 423 423
Bihac 11 909 16 674 596
Doboj 3 997 13 4X5 (552)
Prijedor 8 237 11 847 451
Jajce 5 557 6 853 162

All Towns 345 275 482 080 17 100

Bosnia-Hercegovina 2847 459 3274 836 53 428

' *

4.1
5.5
4.2
3.9
4.3

4.8
2.6
4.3
(5.1)
4.7
2.7

4.2

1.7 ;

The figures for Doboj are affected by a boundary change.

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20 per cent over the eight years; these were strongly concentrated into the industrialised belt of central Bosnia (mainly in the districts of Sarajevo and Tuzla) or else in the vicinity of other major or new minor centres, such as Banja Luka, TJostar and Fo'ca, one of the smaller commercial and manufacturing centres. Thus, even over a period as short as eight years, a decisive migratory movement from the more remote rural areas into the vicinity of the urban industrial centres, as well as into the towns themselves, had become established, as the economic forces of attraction arising from development itself outweighed the effects of the policy of industrial dispersion.

External .Migration
In spite of the strong political inhibitions to massive inter-
Republic migration as the long-run solution to the regional problem, the contribution of population movement within the shorter term was accented by the planners, perhaps even more actively at the regional than the federal level. Information on inter-regional migration is not compiled directly by the Yugoslav authorities, but can be deduced from the Population Censuses. Between the Censuses of 1953 and 1961 net emigration from Bosnia-Hercegovina totalled over 164,000 people, an average of 21,000 per year. This was the largest total to leave any of the under-developed regions, but a smaller proportions 27.8 oer cent, of the population increase than in Macedonia or Montenegro. (Table 5-5). The Republican planning authorities believed that migration WPS tending to increase in later years, with the spread of education within the Republic and the sustained exnansion of employment opportunities and the reduction of agricultural over-populatinn in the more develoned regions; f ~>r the years 1^61-64 the Planning Office in Sarajevo estimated net -T.^ration at

259.

Table 5-5 Net Emigration of Population from the Lhr1 err!eyeleted Regions. 1953-61

1 Net Emigration

Bosnia-Hercegovina ;

i

Macedonia

Montenegro i
1
Kosmet ;

% of Population
Increase

164 576 27.8

146 806

26 520

59.4

34.0 ,

39 030 20.9

260.

some 25,000 per year, one-third of the natural increase of t^e ponulation. If the active population is assumed to be one in three of the
migrants, a proportion similar to that for the resident population, migration relieved the development problem from the provision of some 55,000 new jobs, or of 82,000 jobs if the potential activity rate among the migrants is assumed to be as high as one in two. Over the same period, 120,000 new jobs were created in the Republic, outside the private sector of agriculture, suggesting that the contribution of external migration to the reduction of underemployment was to equivalent to one-half or even more of the contribution from the development policies.
The method of compilation of the census data does not allow the
tracing of the migrants 1 destinations, but sizeable numbers are known to have moved into adjacent Croatia and Serbia, while Slovenia offerer the strong attraction of high wages. Hercegovina is noter^ for its long tradition of mi-:;rrtion abroad, but this is probably more conspicuous than quantitatively important. The regional origins of the many Yugoslav migrants to West Germany in the first half of the 1960 f s are impossible to trace, * although the Croats and Slovenes are believed to hpve been the groups chiefly involved. But even if the numbers migrating directly from Bosnia-Hercegovina to .Vest Germany were small, the national movement itself helped to stimulate further internal migratory flows, emigration from Croatia and Slovenia in its turn accomodating immigration into t>ese regions from other narts of Yugoslavia, thus strengthening the geographical mobility of the population as a whole.
Vk'hile migration had to be largely spontaneous, the planners of Bosnia-IIercegovina made efforts to assist it in an active way through the
1. The number of Yugoslavs working in West Germany between 1961 and 1965- 66 has been variously estimated between 150,000 an^ 250,^00.

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establishment of a number of training centres to prepare v/orkers for jobs outside the region and, if possible, to arrange with enterprises for their employment. In 19&4 about ten such centres were being operated in the Republic, and although the number of workers who could be trained in them was counted in hundreds rather than in thousands, the planners felt that their role as an example for labour mobility was an important one.

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(ii) Montenegro
The geographical position of .-Tontene^ro is one of natural isolation,
cut off from the rest of Yugoslavia by the ranges of the Dinaric Alps. While the build-up of the heavy industry complex had remiired the early provision of arterial communications in Bosnia-Hercegovina, transportation links in Montenegro were still in very poor condition in the early 1950's, and major improvements an essential pre-condition if development was to
be orientated beyond the very small local market. The provision of a transport network remained one of the dominant objectives of the Republic's development strategy, absorbing very large amounts of investment through-out the period (Table A-5); the difficulties of the terrain, however, made construction a lengthy and expensive process, and even by the mid 1960's Montenegro still did not possess adequate arterial communications.
The first, and as yet only, major link to be completed was the
'Magistrala 1, the highway which ru s the entire length of the Adriatic coast in Yugoslavia, with an extension inland to Titograd: the access which it provided made a crucial contribution to the develonment of tourism on the coast of Montenegro. The two principal road links across the mountains, northwards with Belgrade and Serbia, and sout^-east with Skopje, were considerably improved, particularly by the construction of
a section of modern road from Titograd to Kolasin, a^d later to Bijelo Polje, well into the interior of the Republic, but even by the Irte 1960 f s neither of these was surfaced over its entire length.
The railway system of Montenegro provided essentially internal transportation only. It consists of two lines, a standard-guage track from Titograd to Bar, and a narrow-guage one between Titograd and Niksic; the latter was extended, through Biledk, to link with the Dubrovnik-

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Sarajevo line, also at that time narrow-guage, but carried only a small volume of traffic.
A very large project, only now being launched after at least ten
years of discussion, is the railway from Belgrade to Bar. The economic significance of this for Montenegro - and for Macedonia and Kosmet as
well - will be extremely great, since it will provide the first efficient transport link between the interior of the country and the southern end
of the Adriatic coast; not only will it provide much improver1 communica-tions between Montenegro and the rest of Yugoslavia, but, as many of Yugoslavia's exports from Serbia and Macedonia are expects to be diverted from Rijeka to Bar, the latter should become a major trans-shipment centre. However, originally scheduled for completion in 1970, this project is already 'several years' behind, and its contribution to the development
of Yugoslavia, and of Montenegro in particular, remains entirely 'perspective'.
By the mid 1960'-s, therefore, after years of heavy investment and construction activity, Montenegro's direct links with the interior of
the country (other than by air from Titograd) comprised t-vo roads, surfaced over narts of their length, a : d the ^romise of a railway; since half a roa^ and a part of a railway are far from equivalent to a completed version of either, the impression is inescapable that concentration on
one or other would have yielded more effective results.

The_^istributio" of Industry
The spatial Distribution of industry in Montenegro revealed the same tendency as its structural n?ttern to inadequate selection and concentration. The growth of industrial employment and the accompanying urbanisation
began almost a decade later than in Bosnia-Hercegovina: in the early years

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construction held pride of place, preparing the infrastructure of transport and power supplies, and not until 1957 did the number of workers in industry first exceed t^e numbers engaged in construction.
Little of this small volume of industrial employment in the early
years was concentrated into urban centres. In 1954 the timber trades and the mining of non-ferrous ores were the principal sources of industrial employment, and their locational dependence on the siting of their r?.w materials brought the territorial dispersion of employment. The two largest industrial centres, Titograd and TT-\kfcic, with their ranges of clothing, food-processing and small metal industries, together contained only 18.5 per cent of the Republic's industrial employment, while Sarajevo alone contained 15.6 per cent in Bosnia-Hercegovina, (Table 5-6).
By 1958, however, this situation had undergone a major change, as
the completion of the steel-mill suddenly made Niksic the Republic's principal industrial centre, containing 28.5 r»er cent of total industrial employment; of the town's 3,500 industrial workers, 2,500 were employed directly in the steel project. The progressive extension of light industry allowed Titograd. to double its level of industrial employment over four years, although no single project made an impact at all comparable to that of the steel-mill at Niksic. The two minor centres, Cetinje and Kotor, * were, like Niksic, largely one-industry towns, Cetinje with 'Obod 1, the producers of domestic electrical appliances, and Kotor heavily dependent on small-scale shi^-buildin^ and its related, trades.

By 1964 the rapid expansion of industrial employment in Titograd
had raised it to almost comparable importance with Niksic, those two far
1. These had been the two largest towns of independent Montenegro (pre-1918).

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surpassing the minor centres of Cetinje and Kotor, and gaining the status of 'large towns 1. The share of the large centres in industrial employment, 45.7 per cent, was within the ran.^e found in the more developed regions. As in Bosnia-Hercegovina, the need for an over-all locational policy
for the Republic came to be recognised, as development became more complex and less dependent on the location of natural resources. The planners therefore adopted the sub-division of the region into three areas, not,
as in Bosnia-Hercegovina, scheduled as priority and non-priority zones, but each p;iven a different development orientation. The central area, comprising the T toraca valley and the three largest towns, Titograd,
Niksic and Cetinje, was envisaged as the nrincipal location for industrial development, with heavy industry (steel and the heavier engineering products) at Niksic, and lighter industry (textiles, light engineering, electrical appliances) at Titograd and Cetinje. Titograt1 was also the administrative and commercial centre. The rapidly growing contribution of tourism and its further potential prompted the designation of the coastal strip as the second development zone; while the conservation and equipping of this area for tourism were to be the main priorit:r, * small amounts of industrial activity in shin-building and repairing, and engineering, "/ere envisaged for t^e leading ports, Kotor ard ^ar. The third zone comprised all the surrounding mountains; to supplement its limited development prospects based on the mining of small deposits of

;

lead, zinc and coal, the timber trades and the familiar 'dispersal' projects in the consumer industries, a large cellulose and na^er factory was constructed at Ivangrad, which came into production in 1964.
1. In 1966 a regional planning project was announced, to d^velon the southern Adriatic, from T^ubrovnik to the Albanian frontier, for
The United Nations are to prive considerable expert help.

267.
For the smallest region in Yugoslavia, this strategy included no
less than eight foci of development, four large (Titograd, Niksic, Cetinje and Bar) and four small (Kotor and the three centres in the hinterland, Ivangrad, Bi.jelo Polje a^d Plj«vlja), in addition to the coastal resorts. Many of the transport links among these were inadequate; Cetinje could be reached from Niksic only circuitously, by way of Titograd; the differing railway guages disrupted the connection Bar-Titograd-Niksic; Pljevlja in particular, but also Ivangrad, were remote, without good road access. Part of this tendency to the dispersion of development into centres across the entire territory of the Republic can be attributed to the lack of a clear orientation from the national lines of communication owing to the deficiencies of provision there, but in addition locationally, as sectorally, the development of Montenegro tended to include something of everything. *

Urbanisation
Like industrialisation, urbanisation had small beginnings, but
built up rapidly with the region's economic progress in the later years. In 1953 Montenegro had four towns, all of under 20,000 inhabitants, but the two largest, Titograd and Niksic, each almost doubled their
population over t^e next eight years, to gain the status of ' lar,p;e towns 1 by 1961. (Table 5-7). Their rates of expansio-, 3.1 and 8.7 per cent t>er year, were much higher than those of any other urban centres in the underdeveloped regions. But in spite of the very rapid growth of these
1. An extreme position on this is taken by Colanovi6, at one time Director of the Institut 7,a Ekono-iiku Industrie (Institute for Re?se-rch in Industrial Economics) one of the Yugoslav economists most interested
in the regional problem. He has suggested (in interviews, 3 September 1964 and 24 September 1966) that the development of Montenegro would
have been most effectively conducted on the basis of one centre only,

at Bar, with investment concentrated on the completion of.one arterial link plus the harbour at Bar, and the build-up of incustrirl activity

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two new cities, "lontene^ro re iainecl t>ie least urbanise^ of all the regions of Yugoslavia. (Table 5-3).
The frequent changes in commune boundaries make it impossible to
ascertain whether this rapid process of urbanisation was accompanied by depopulation in other areas. Such a decline appears highly probable, since Titograd and Niksic together recorded a net increase of 24,000 inhabitants (out of 52,000 in the Republic as a whole) although the tendency to the geographical concentration of population, apart from the movement into
the major centres, was a less pronounced feature of the process of industrialisation in T.Iontenegro than in Bosnia-Herce^ovina,

External Migration
The quantitative importance of migration from Montenegro was
considerably less than intuitive impressions of the numbers and influential position of Montenegrins in other parts of Yugoslavia might suggest. Between 1953 and 1961, net migration from the Republic amounted to 26,500 persons, or only 3,600 Der year, on average. (Table 5-5). This however was the equivalent of 34.0 per cent of the copulation increase over the ei£ht years, a rather larger proportion than ini Bosnia-Hercegovina.
The success of development policy itself, however, was making a much larger contribution to the solution of the problem of underemployment. Over the eight yecirs 24,900 new jobs were created outside the private sector o:<° agriculture, representing between two and thre-% depending on the assumption about the activity rate among the migrants, for each potential employee who felt impelled, or attracted, to seek his fortune elsewhere.

270.

(iii) Macedonia
Macedonia is largely spared the formidable geographical difficulties
faced by Montenegro; while extensive areas of the region are mountainous, the plain of the Vardar links with the plain of the "/lorava to provide
good natural access northwards into Serbia. By virtue of its strategic location on natural lines of communication, Skopje has many centuries of history as a commercial and trading centre, ' in contrast to the isolation of Montenegro, where the geographical difficulties of access were accentuated by political independence from, and resistance to, the
Ottoman Empire, which embraced the rest of the Balkans. By 1953 it was already a city of over 122,000 inhabitants.
Skopje, moreover, although the largest, was by no means the only
urban centre in Macedonia; already in 1953 the Republic ranked as the most highly urbanised not only of the underdeveloped regions, but of all the regions in Yugoslavia. Five towns, the same number as in the much more populous and more developed regions of Vojvodiria, Serbia Proner and Bosnia-Hercegovina, had populations exceeding 20,000: these five - Skopje, Bitola, Prilep, Kumanovo and Tetovo - contained 18.1 per cent of the population, although the Republic was still overwhelmingly agricultural and rural. (Table 5-3).

- _ of
The concentration of industrial employment into the large centres
was equally marked. In 1954 Skop.ie alone (the only town for which figures are available) contained 27.6 per cent of industrial employment, a figure matched, among the regional capitals, only by Belgrade relative to Serbia

1. It was already, in pre-Roman times, the chief city of Illyria, and later of the Roman province of Toesia Superior.

271.

Proper. * This concentration was not a phenomenon of the very early years of development or of a special position of Skopje; Skopje itself maintained its share of industrial employment virtually unaltered until 1964, and the other large centres all contained sizeable, although lesser, shares. (Table 5-8). In 1958 the five towns which had gained urban status in 1953 contained 54.1 per cent of industrial employment, and by 1964 their number had risen to seven and their share to 65.0 per cent, both proportions considerably exceeding those for the more developed regions. (Table 5-1).
Both characteristics, the dominance of the metropolis and the
exceptional degree of urbanisation, had historical origins, pre-dating the contemporary industrial development of Macedonia. They were, however, maintained and even furthered by the sectoral pattern of development, with its orientation towards light industry and the smaller importance
of raining and the timber trades. The textile, food-processing and tobacco industries were built up in Macedonia as export rather than local indus-' tries, with a supply rather than a market orientation. Being dependent on agriculturally produced raw materials, their processing sectors tended to locate in urban centres, drawing supplies from surrounding areas.
This gave rise to a network of urban centres, each baser5 on a local agricultural area.
Each of the major centres had a similar industrial structure,
although the relative importance of the individual branches varied. The textile and food-processing industries were ubiquitous: cotton textiles at ^tip and Skopje, woollens at Tetovo, silk fabrics at Titov Veles,
1. 27.6 per cent of the industrial employment in Serbia Proper was also located in Belgrade; the proportions for the other regional capitals were: Ljubljana 13.8 per cent, Zagreb 23.1, Novi Sad 16.5, Sarajevo 15.6, Titograd 10.1 and Pris'tina 7.1.

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cotton and silk fabrics at Bitola were among the largest textile projects, while sugar refining and vegetable processing at Bitola, meat-canning and packing at Struraica, fruit-processing pt Tetovo and Kumanovo arr* tobacco processing at Prilet) were among notable local specialities inthe food-processing industry.
The dominance of Skopje derived, partly from the historical situation already noted, and partly from the concentration there of many of the major projects from other industrial sectors, in addition to the strong representation of these consumer industries. The cement factory in Skopje, for example, was the only large one in the Republic; the porcelain and glass industry was divided betweren glass products at Skopje and ceramics and china at Titov Veles; the chemical industry was centred on Skopje and Tetovo, engineering at Skopje and "Bitola. Skopje thus had a much more complete industrial structure than the smaller centres, tending to parallel the individual specialisations of each of them.
As a location for new industrial projects within Macedonia, Skopje possessed two outstanding advantages. Its position on the national road and rail arteries made it the natural point of shipment for regional exports northwards to Serbia and other parts of Yugoslavia, and southwards to Greece and the Middle East. While only Bitola was relatively remote (despite which it developed a successful export trade in refrid^erators), all the lesser centres tended to face an additional transport haul in
the shipment of their products. In addition, Skopje also certainly benefitted from economies of agglomeration deriving from its early develop-ment as a commercial centre.

Since, from the beginning, t 1 e high r'e^ree of concentration of
industrial activity into major centres had been accompanied by an

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exceptional level of urbanisation, the daily commuting of workers from the countryside, characteristic particularly of Bosnia-Hercegovina among the under developer* regions, in the mi^-1950 f s, was not a feature of the early industrial development of Macedonia. The mi-ration studies for 1956-57 already cited (nika and Stevanovic (1957), Savezni Zavod za Statistiku: Statisticki Bilten 101) found an exceptionally low r~te of c'pily migration into the principal towns, and only short distances involved.

Urbanisation
The high level of urbanisation of the population, already so marked
in 1953, was maintained during the following years, ly 1961 the populations of Titov Veles and Stip had passed 20,000, to s;ive "lacedonia seven large towns, a number exceeded only by Croatia with fourteen, and Serbia Proper, with twelve. 26.0 per cent of the Republic's population lived in large towns, again the highest proportion among all the regions. (Table 5-3). But the rate of increase of the urban popu^ati^n was only moderate; at 3.9 per cent per year, it was fractionally below the 4.2 of Bosnia-Hercegovina and well below the 6.0 per cent of Montenegro. .Vhile the rates of expansion of the individual centres lay within a relatively narrow range, the 4.3 per cent growth rate in Skopje was exceeded only by

V

the new textile and engineering centre at Stip. (Table 5-9).
By 1963-64 this exceptionally high level of urbanisation and the
related question of the concentration of industrial activity anr* employ-ment in SkoD.je were beginning to cause concern. As with Belgrade at the national level, the process of urbanisation was running ahead of the development of non-farm activities; the movement of population from the countryside into particularly the very large urban centres was taking on

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the character not only of a response to employment opportunities and higher incomes, but of a semi-autonomous movement out of agriculture, giving rise to the twin problems o:> agricultural depopulation and urban unemployment.
The agricultural population in "Tacedonia declined at 1.2 per cent
per year between 1953 and 1961, the same rate as in the country as a whole, in spite of the Republic's emphasis on agricultural development, and this rate was believed to be accelerating in the 1960's. Sufficient reserves of underutilised manpower were still present in the countryside for agriculture not to be handicapped by a labour shortage, but concern was beginning to be expressed about the longer-term prospects for agricultural manpower, with the departure of younger people into the towns.
This fear, based on impressionistic judgements, does not yet find confirmation in the statistics of the age-structure of the •copulation.
The Yugoslav population censuses reveal that peak migration occurs in the age-groups between 20 and 35. But in Macedonia the proportion of young people, aged under 35, among those actively employed in agriculture was greater than in Yugoslavia as a whole, according to t r~e censuses of both 1953 and 1961. Equally, the proportion aged over 50 was lower in Macedonia, in both years. (Table 5-10). Moreover, in the country as a whole the agricultural population was ageing, the proportion in the age-groups under 35 declining and that in the groups aged over 50 increasing, as younger people formed the largest part of the migratory movement out of agriculture. But this ageing of the agricultural lormlation was less pronounced in Macedonia, where the proportion of young workers fell from 61.9 to 56.1 per cent between the census years, by comparison with a decline from 58.3 to 49.5 per cent in YuposTavia as a whole. Contrary,

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Table 3-10 A^e-structure of the Agricultural Pormlation in Macedonia, 1933 and 1961

Numbers (thousands)

Yugoslavia

Macedonia

Under

1953 i

3 103 2

225

35

Percentage

Over 50 Under 35

1961 1953
i_

321

182

1 087

62

1961 1953

1 348 58.3

73 61.9

1961

49.5

56.1

Over 50

1953

20.4

17.0

1961

28.7

22.6

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therefore, to the fears expressed, on the evidence available up to 1951 the agricultural population in Macedonia was not only younger than in Yugoslavia as a whole but 'vas ageing less markedly.
The comparison of the age-structure of the agricultural population
of Macedonia with that of Yugoslavia as a whole is affected by the over-all yo'jthfulness of the Republic's population, the consequence of its higher birth and death rates and shorter life-expectancy. But comparisons internal to the Republic equally fail to confirm any imminent threat of agricultural depopulation. Of the sixty-one communes at the ti^e of the 1961 Census, twenty-five could be classified as strongly agricultural, having 70 per cent or more of their active population engaged in agriculture; in these, young people under 35 years of age comDrisec1 71.2 per cent of the population against 69.9 ^er cent in the remainder of the communes. Thus even in the most strongly rural areas the migration of young people into the towns was not resulting in an age-structure of the population adverse to the future surely of agricultural manpower.
Urban unemployment, however, was becoming a very real problem. As early as 1962 the numbers seeking employment represented 22.2 per cent of the entire labour-force outside agriculture, against 9.4 r>er cent in Yugoslavia as a whole. '•'•'he numbers in 1963-64 were affected by the construction work at Skopje, but in 1965 unemployment increased again sharply, until at the end of that year it stood at 47,000, 5,700 above 2
its previous peak of 1962. * The proportion of women a-ion~ the unemployed, 31 ner cent in 1962, was markedly lower in Macedonia than the 45 per cent in Yugoslavia as a whole, as -vas the proportion in the labour-force in employment: har7 social factors not kept dovra the fenale
1. Savezni Zavod za Statistiku: Statisticki Bilten 250, Table 6.
2. Savezni Zavod za Statistiku: Statisticki Godisnjak 1966, Table 202-13-

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participation rate, the unemployment position in Macedonia would have 1 been considerably worse. The relative proportions of skilled and unskilled workers were approximately the same as in the country as a whole.
Why the movement of population into the towns ahead of the
availability of employment should take place so much more rapidly in Macedonia than in T lontenegro or Bosnia-Hercegovina, like the early build-up of urbanisation ahead of economic development, is probably explained by sociological rather than economic factors. The pressures of agricultural poverty and population growth, which would drive people from the countryside were certainly no worse than in th^se other regions, and alternative employment opportunities were expanding more rapidly than in Bosnia-Hercegovina. As in the case of Belgrade at the national level, migration, particularly into the metropolis, was taking the form of a social movement proceeding ahead of economic change.
Moreover, the willingness to seek employment opportunities outside
the Republic was greater among the "lacedonians than among the population of any other of the underdeveloped regions. Between 1953 and 1961 a net total of almost 147,000 people emigrated from Macedonia. At 5 n -4 per cent of the recorded increase in the population over that period, this was much the highest rate of emigration and. made the largest contribution to the reduction of the regional employment problem. Over the corres-ponding period. 67,800 new jobs were created outside the private sector of agriculture in Macedonia, by comparison with a reduction in the potential labour-force of between 43,000 &.-L d 73,000 through migration. Migration might thus have made as lar~e a contribution to the reduction of under-employment over these eight years as did regional ^evelo^nent policy.

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(iv) Kosmet
Relatively little can be said on the subject of locational policies
in Kosmet, as even by the middle 1960 f s development policies for the region were still in an early stage of implementation.
The position of the region in natural communications compared more closely with the accessibility of Macedonia than with the isolation of Montenegro, although lacking the exceptional advantages of the former.
The mountain barrier in the north-west, between Kosmet and Montenegro, and the poor communications across it forced an orientation eastwards towards the rest of Serbia. The national transport arteries, following the valleys of the Morava and Vardar, passed close to the region, but outside its eastern boundary, thus requiring local links, where Macedonia gained from their routes directly across the Republic.
Transport policy in Kosmet, effective in only the second half of the period considered here, concentrated on the improvement of the region*s internal communications rather than the reconstruction of its external links. The existing rail connections with Belgrade and Skopje were accepted as adequate, at least for the immediate future, and no major rail projects were undertaken. But from 1958 considerable investment was devoted to road-building within the region, particularly the building of modern routes connecting Pristina with Kosovska Mitrovica in the east of the region, and Pec wit^ Prizren in the west. By the nid 19^0's these roads were markedly better than the links, principally from Pristina, with the Belgrade-Skopje (Podkoren-Gev^elija) highway.

The Distribution of Industry
With industry very much in the early stages of development, there
was little concentration of industrial employment into urban centres.

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In 1C1 54 and 1958 exactly half of Kosmet's i-dustrial employment derived from the mining of non-ferrous ores, which employed between 7,000 and 8,000 workers, many of them at Trep£a (near Kosovska "litrovica). The timber trades, coal-mining (not included in employment in Pristina) and stone-quarrying, all predominantly non-urban in location, provided the major part of other industrial employment. In 1954 only 1,000 workers were employed at PriStina, in small-scale, almost handicraft, production principally of consumer goods; representing 7.1 per cent of the region's industrial labour-force, this was the lowest degree of concentration in any of the regional capitals, and a marked contrast with the 27.6 per cent in Skopje. In 1958, for which more complete figures are available, essentially the same employment pattern prevailed, both by sector and location. The region's three large towns, Pristina, Pec and Prizren, contained only 14.0 per cent of industrial employment, against 54.1 per cent in large towns in Macedonia, and mostly between 40 and 50 per cent in the more developed regions. (Table 5-1). The degree of concentration into all designate^ towns in 1958 moreover, is strongly biassed upwards "by the inclusion of employment at Trepca in the total for Kosovska Mitrovica, but is otherwise extremely low. (Table 5-11).
Even in 1964, when industrial employment had increased very sub-stantially over its level of 1058 as new development project came into operation, the degree of concentration into urban centres remained very low, as the non-ferrous metal, coal and timber industries still provided 47 per cent of industrial employment,
Pristina and Kosovska Mitrovica were already emerging as the
principal foci of industrial development, with Pec and Prizren in lesser and more local roles. Pristina. and Kosovska T i^rovica each had located

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in their vicinity one of the manor groups of projects planned as the region's industrial and export base, the lignite, coke and chemicals scheme at Pris'tina, and the industries based on the non-ferrous ores at Kosovska r.Iitrovica. The industrial developments at Pec and Prizren, on the other hand, were on an altogether smaller scale, and aimed much more at the local market; of these the perlon factory under construction at Prizren in 1964-65 was the most important.
The urgency of the employment problem brought the expansion of the consumer industries in all the urban centres, the food-processing industries being particularly encouraged in "letohija, with its more prosperous and socialised agriculture; the leading projects included the textile and clothing industries at Pristina and Prizren, leather goods and footwear at Pec, the production of flour, jam, meat and tobacco products at Prizren, and sugar-refining and vegetable-processing at Pec,

Urbanisation

In spite of its three large towns in 1953, the same number as
Slovenia, Kosmet was less urbanised than any region except Montenegro; urbanisation, however, proceeded fairly rapidly and by 1961, when Kosovska Mitrovica had also gained urban status, the proportion of the population living in large towns had increased by one-half to a level higher than Montenegro and Bosnia-Hercegovina, but well short of Macedonia and the more developed regions. (Table 5-3). The populations in Pristina and Kosovska litrovica had expanded particularly rapidly, at 6.0 and 5.6 per cent respective 1,7, less rapidly than the new towns of Titosrrad and Nik'sic in Montenegro, but more rapidly than urban centres in Bosnia-Hercegovina and Macedonia. (Table 5-12).
T/Iost of this movement into the towns v/as a response not primarily

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to new employment opportunities but to the pressure of the worsening over-population in agriculture; every commune anr! village in Kosmet gained population between 1953 and 1961, and 'employment 1 in agriculture in the region as a whole increased at 2.4 per cent per year, in contrast to its decline in every other region of Yugoslavia. As in Macedonia, the movement of population into the towns ahead of the availability of urban employment was accelerating in the early 1960's, making unemployment a social and economic problem of major proportions; in 1964 registered unemployed, chiefly unskilled male workers, represented 21.8 per cent of t^e total labour force outside the private sector of agriculture, even that figure being considerably depressed by the low participation of women, for social reasons, in the labour force.

Migration
To Kosmet, burdened with the most ranid natural increase of the population and the most acute problem of overpopulation among the regions, external migration offered no easy solution. Unlike t^e Macedonians, the Shiptars (Albanians) faced very real difficulties of social acceptance in 2
other parts of Yugoslavia, * in addition to the differences of language and culture and their deficiencies in standards of health, education and industrial training. Between 1953 and 1961 a net total of only 39,000 people, less than 5,000 per year, left Kosmet, out of a natural increase of over 20,000 annually. This was equivalent to 20.9 per cent of the recorded increase in the resident population over these years, the lowest level among the underdeveloped regions and just over one-third of the level in Macedonia.
1. Savezni Zavod *a Statistiku: Statisticki GodiSnjsk 1366, Table 202-13.
2. To which was adder1 political discrimination until the dismissal of Rankovic in 1966.

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External migration was, however, believed to be increasing in the
later ye?rs, and was estimated by the regional authorities at between 7,000 and 10,000 annually in the mid 1960's. Several factors probably contributed to this acceleration: t^e growing pressure of agricultural overpopulation and urban unemployment within the regions, the efforts of the authorities to improve industrial training by the establishment of short-stay centres catering for both local and potential migrant workers, and the gradual reduction of social barriers with the trend towards greater mobility throughout Yugoslavia. But even at this higher level migration was making only a small contribution to the reduction of over-population in Kosmet.

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6. THE RECKONING

(i) The Achievements
The period 1953-64 under the system of decentralised planning in Yugoslavia thus spanned twelve years of a sustained 'drive to development 1 for the country as a whole, specifically including, for the most part,
its underdeveloped regions. Since the objective of development was formulated principally in terms of the rate of expansion of production arid investment regarded as the primary means of realising it, the growth of output attained must be anplied as the first criterion for appraising the achievements of the twelve years, and investment as the measure of their cost.

The inescapable verdict on the twelve years of regional policy is
that t v> e Yugoslav authorities failed in their global objective of promoting a convergent trend in the level of development between tbe group of
regions in the northern crescent of the country and those in the south.
In SDite of the efforts of an active regional policy, and with the single exception of Montenegro, the smallest of all the regions, total output
and, more markedly, output per head of the population grew less rapidly in the underdeveloped regions, thus widening the disparities in the level of development.
This disappointing conclusion is, however, soraewha.t modified by the division of the period into its two appropriate sub-periods, 1953 until 1957 or 1958, the years of a limited regional policy, dominated by annual planning and the build-un of the basic industries, and the period 1958-64 of more intensive efforts for the underdeveloped regions and a much wider 3ectoral strategy. The rate of growth of total output improved in the latter half of the period in each of the underdeveloped regions, with the

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probable exception of Macedonia where a trend rate of growth for these years is difficult to determine as a result of the impact of the Skopje earthquake of July 1963; these improved growth rates exceeded that of the more developer! group of regions, although only in Montenegro by a sufficient margin to offset the unfavourable population growth of the underdeveloped regions. While in over-all terras, therefore, the movement towards convergence was not achieved, the results in the latter half of
the period were markedly better, only the high rates of population increase in Bosnia-Hercegovina and Kosmet preventing the beginning of a movement towards the objective in at least three of the underdeveloped regions.
But development is a complex process and the growth of total output
is only a summary measure of assessment which conceals a number of important successes. Growth rates which averaged 8.1 per cent annually over a period of twelve years were in themselves a very real achievement, even although bel">w those of the more developed regions. Not only were the growth rates high in absolute terms, but for regions which had a negligible prior record of economic progress, and even in 1^53 were starting from a very low level of attained development (with the exception, to some extent, of Bosnia-Hercegovina), it can be claimed as a greater achievement for them to have recorded a rate of growth of social Droduct of 8.1 per cent than for the more developed regions to have achieved 8.4 per cent.
The relative failure of the underdeveloped regions in the growth of
total output, moreover, did not apply across the entire range of economic activity. They achieved a major success with a rate of industrial expansion which consistently exceeded that of the more developed regions. While insufficient to give the underdeveloped regions a faster growth of

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social product as a whole, this was a highly significant achievement, since industry had the highest level of output per worker, and the highest growth rates for output and employment, a.rnoa 0- t^e major sectors. In the second half of the period the underdeveloped regions also achieved a higher growth rate than the more developed regions in each of the major sectors except agriculture, in contrast with the earlier years when
their growth rates lagged.
In spite of their relative failure in the growth of social product, therefore, the underdeveloped regions did achieve a number of high growth rates for individual sectors, particularly in the latter half of the period.

'Structural' and 'Growth f _Effects
( The growth achievement of the underdeveloped regions emerges more explicitly when the growth of social product, as the weighted average of the growth rates of the individual sectors, is separated into its two contributing aspects, the 'growth effect' of the relative rrowth rates
of the individual sectors, and the 'structural effect 1 of the weighting given to each growth rate by the importance of that sector in the structure of output. Table 6-1 presents three growth rates for social product, the trend rate (as already used), and two hypothetical growth rates, 'structure-adjusted 1 and ' ~rowth-adjusted'.
The structure-adjusted rates show the growth of social product which
would have occurred in each of the underdeveloped regions '-ad it had the output structure, at the level of the six major sectors, prevailing in the ~roup of more developed regions, while maintaining its own sectoral ^rov-'th rates; the structure-ad jus ted rate for the j-th underdeveloped region t-us Derives from

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Table 6-1 Hypothetical Growth Rates f.rt 1 Social Product. 1953-64

Developed Regions
Bosnia-Hercegovina
i.Iacedonia
Montenegro
Kosmet

Trend Rate

8.4
8.0
8.1
10.4
6.8

Structure

Adjusted

8.4
8.7
9.1
14.4
7.3

Growth
Adjusted

8.4
8.7
7.9
8.2
8.1

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a* (i) e r
±

where r(i) represents the growth rate of the i-th sector (i=1....6), t the number of years in the period covered, a(i) the share of the i-th sector in social product in 1953-54 (^a(i) = 1.0) and superscripted * an attribute of the more developed group of regions. In each of the under-developed regions, without exception, the structure-adjusted rate is higher than the trend rate revealing that the output structure of the more developed regions constituted a more favourable weighting system for the growth of social product than did the structure of any of the under-developed regions.
The Trowth-adjusted rates apnly the trend growth rates of the
individual sectors achieved in the group of more developed regions to the output structure which actually prevailed in each of the underdeveloped regions; in terms of the notation used above, the growth-adjusted rate
for the j-th underdeveloped region is derived from
r*(i) t
__ a 13 e
To a noticeable extent in Montenegro, and als?- marginally in Macedonia,
the growth-adjusted rate is below the trend rate, showing that t he sectoral growth rates achieved there were more favourable to the growth of social product than were those of the more developed regions. In Bosnia-Hercegovina and, particularly, Kosmet, on the other hand, the growth-adjusted rates exceed the trend rates, revealing a deficiency in the sectoral growth rates achieved by these regions.
These hypothetical rates thus serve to indicate the differing
importance of the two components of the growth of total output among the individual underdeveloped regions. The 'growth' success of Montenegro in paritcular, but also of Macedonia, against an unfavourable structure of

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output, was considerable, their structure-adjusted rates being above, and their growth-adjusted rates below, the trend rates achieved. In Bosnia-Hercegovina and Kosmet, on the other hand, both hypothetical rates are above the trend rate, indicating both a growth deficiency and a structural handicap; in Bosnia-Hercegovina these effects were approximately equal, while in Kosmet the 'growth 1 deficiency was particularly marked, and of greater consequence than the structural handicap.
Hypothetical growth rates for the two sub-periods confirm these tendencies. In the earlier half of the period the structural handicap of all the underdeveloped regions is again evident, and the 'growth' deficiency of Kosmet during these lean years in its development, emerges particularly strongly. A major change in the latter half, however, is
the elimination of this growth deficiency in Kosmet as a result of the acceleration of the region's sectoral growth rates, and in addition, while the structural effect continued to be adverse in each of the underdeveloped regions, the extent of the disadvantage was narrowed somewhat as the expansion of industry between 1953-54 and 1957-58 increases the weighting latterly given to that, the fastest growing sector.
Hypothetical growth rates for industry, based on the twenty
industrial sectors reveal even more pronounced 'growth* success for the underdeveloped regions, again in face of a structural handicap. (Table 6-2). The growth-adjusted rates for the individual underdeveloped regions all fall within a relatively narrow range, and each, excent that for Kosmet, is below the trend rate, indicating a favourable f ^rowth* effect in three of the underdeveloped regions, and a 'growth' deficiency only in Kosmet. The structure-adjusted rate, on the ot^er hand, is considerably higher for each underdeveloped region than the trend rate,

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Table 6-2 Growth Rates for Industry, 1^53-64

Developed Regions
Bosnia-He rcegovina
Macedonia
Montenegro
Kosmet

Trend Rate

11.1
12.4
12.9
20.5
8.7

Structure

Adjusted

11.1
14.7
19.1
52.5
43.4

Growth
Adjusted

11.1
8.7
9.0
9.9
9.9

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and than the rate of industrial expansion in the more developed groun, revealing that each underdeveloped region faced a further structural handicap within industry; the dominance of the slow-growing tobacro industry in Macedonia and the deficiency of the underdeveloped regions as a group in the major national growth sectors of petroleum, chemicals and electrical equipment can be cited as leading instances of this handicap. The precise figures for the hypothetical growth rates have validity
only if it can be assumed that the 'growth' and 'structural' effects are independent, that is, that the individual growth rates are not affected by the relative importance of the sector in the structure of output.
This assumption is of questionable applicability in the underdeveloped regions, particularly in the derivation of the structure-adjusted rates for industry. The very high growth rates recorded in the underdeveloped regions most often referred to the initial years of a new industry and were much less feasible for a sector already well established in the industrial structure; part of the tendency for the underdeveloped regions to record extremely high growth rates has been avoided by the use of trend rates based on only the second and subsequent years of recorded output, but the tendency to exaggeration in the structure-adjusted rates for industry in Montenegro and Kosmet regains evident.
The growth achievement of the underdeveloped regions was not only
to record the growth rates of social product and industrial output which they did in the face of their structural disadvantage, but, by reducing these disadvantages, to create more favourable conditions for future growth. The more rapid growth of industry relative to the other major sectors, and particularly to agriculture, and the build-in of metallurgy, engineering and food-products in place of the older staples of mining,

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timber and tobacco, was recorder1 to only a limited extent in the growth rates for the period, but, by giving ^reater weighting to these higher-growth sectors, was promoting a structural modification favourable to more rapid growth in subsequent years.
The importance of the structure of output for the over-all growth
rate revealed by the separation of the 'growth' and 'structural 1 effects serves further to emphasise that where, as in Yugoslavia, the sectoral level is extensively used in development planning, the target growth rates for the individual sectors must be set such that, when aggregated with the weighting effect deriving from the structure of output, they will yield the target rate for total output. This apparently simple matter of arithmetic consistency has profound implications for a development strategy based primarily on industrialisation; the smaller the proportion of total output represented by industry, the higher the r~te of growth required for industry to make a contribution to total growth comparable to that in more developed regions. Yugoslav experience demonstrates that in more backward regions industrialisation without intensive supplementary efforts in other sectors may be insufficient to achieve the global growth objective.

Price "lovernents
The inter-regional comparison of rates of growth of output, based
on constant prices, eliminates the effect of price changes on the valuation of output and thus on the level of output per head. In Yugoslavia Between 1953 and 1964 not only was the general level of prices rising but, ^prtly as a result of market forces and partly of government policy, the rates
of change varied markedly between sectors, with, as a result of differences in the composition of output, a strong regional impact.

The comparison of the index of social product per bead among the regions at current and constant prices reveals that the over-all effect of the price changes was adverse to the underdeveloped regions. (Table 6-3). At current prices, social product per head in the -tore developed regions improved from 110 in 1953 (Yugoslavia = 100) to 11°) in 1964, an index of improvement of 108 (1953 £ 100), while t^e improvement on a valuation at I960 prices was only from 113 to 11°>, an index of 104. In the underdeveloped, regions, on the other hand, at current prices the index of change in their relative position was 39 (a decline from 71 to 63) which I960 prices present as an index of 93 (71 to 66). In their actual positions, therefore, at current prices, the relative improvement of the more developed regions and the deterioration of the underdeveloped regions was greater than is shown by the constant orice valuation of output and, consequently, by the comparison of growth rates based on it.
The effect of the price changes, however, varied widely from region
to region. The greatest beneficiary was Vorjvodina, with an index of actual improvement of 118 while the constant price valuation indicated a relative deterioration. As the region most strongly specialised in agricultural production, Vojvodina derived the greatest °-ain from the very strong upward movement in agricultural prices, which increased by some tv;o and a half times over the twelve years, double the increase in industrial prices.
Only Bosnia-T Iercegovina among the underdeveloped regions was not adversely affected by the price changes. Several of its major industrial sectors, the timber trades, coal and steel, were among those where prices were increasing most rapidly, but, as a consequence of the small share of agriculture in total output, it was one of the regions to gain least from

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Table 6-3 Social Product per Head, at Current. I960 and 1965 Prices

Yugoslav! a

Developed Regions

Underdeveloped
Regions

Slovenia

Croatia

Vojvodina

Serbia Proper

Bosnia-Hercegovina

Macedonia

Montenegro

Kosmet

SP per Head
at Current
Prices

1953

100

110

71

182

111

96

91

79

69

58

53

1964

100

119

63

190

119

113

98

68

69^

68

35

SP per Hearl
at I960
Prices

1953

100

113

71

177

115

108

93

84

61

61

49

1964

100

118

66

195

119

105

95

72

6^

75

37

SP per Head :
at 1965
Prices

1953

100

110

78

148

109

115

97

84

74

67

67

1964

100

119

63

187

117

119

98

68

69^

68

38

Index

Current

prices

100

108

89

104

107

113

103

86

100^

117

66

I960
prices

100

104

93

110

103

97

102

86

113s

123

76

rj

- The level of output per head in Macedonia in 1964 is raised above its trend level by the activity connected with the rebuilding of Skarge.

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the increase in agricultural prices. These effects proved to be exactly

offsetting, giving an index of change identical in current and constant

prices.

Montenegro, with an output structure similar to that of Bosnia-

Hercegovina, was affected by the price changes in much the same li; ay, but

the stronger adverse component in the changes between I960 and 1964

resulted in the index of improvement at current prices (117) being lower

than that at I960 prices (123). Thus part of Montenegro's ^ain from its

rapid growth of'social product between 1953 and 1Q64 was offset by price

changes which were, on balance, unfavourable to the region 1 s relative

position.

Macedonia and Kosmet lost even more heavily than Montenegro as a

consequence of the relative rates of price change among different sectors,

and in both cases the adverse effect occurred from the movements between

1953 and I960. In Macedonia the deterioration was attributable pre-

2 dominantly to the lower valuation of tobacco at I960 prices, * although

1. The I960 structure of relative prices was in fact more favourable to the positions of both Bosnia-Hercegovina and Montenegro than the current prices of either 1953 or 1964. In the revaluation of their 1953 output
at I960 prices they gain particularly from the higher valuation of forestry and timber products, while the further sharp increase in agri-cultural prices between I960 and 19^4 benefitted most of the other
regions to a greater extent than Bosnia-Hercegovina or "lontenegro.
2. This emerges clearly from the difference in its share in industrial output, 57.1 per cent in 1953-54 at current prices, but only 37.5 per cent at I960 prices, but is contrary to the change indicated by the indices of producer prices, 80 for tobacco in 1963 (I960 = 100) against 91 for industrial products in general. The ^er'eral Statistical Office warn that, because of the different weights used, these price ibices may not be suitable for the deflation of the current price valuation of output by sector, and moreover price indices co'iniled with national weights are liable to be only approximately accurate for smaller regions. Both of these considerations, however, appear to be of limited applicability and importance in the case of tobacco in Macedonia.

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the fall in textile prices, one of the few nrice reductions to occur during the 1950's, also served to offset the favourable effect of rising agricul-tural and food prices.
Many distortions were present in the price structure during these
i

years as a result of government intervention in price formation, but it is not possible systematically to assess the regional incidence of thp various elements. However, the new prices established1 as part of the reforms of mid-1965 were designed to eliminate the majority of the distortions which had built up over the preceeding years, and although some of the intended adjustments have not yet been fully implemented, increased prices such as those for agricultural and food products, coal, steel and other metals, timber and construction materials have, at least in part, corrected previous artificial prices. But the revaluation of regional output at the post-reform Prices of November 1965 suggests that, particularly by 1°64, the price distortions did not introduce a systematic regional bias of more than minor importance. (Table 6-3). V/hen output per head in 1964 is valued at the new prices, Vojvodina and Kosmet, the two regions where agriculture contributed the largest proportion of total output, improved their relative positions, while the positions of Slovenia and Croatia deteriorated slightly. But the general impact of the revaluation for 1964 is small. The revaluation,1953 must be regarded with caution, as ^rice

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indices can be of only limited accuracy over thirteen years in a rapidly changing economy, bu^ a noticeable improvement in the positions of Vojvodina and each of the underdevelor>ed regions at the expense principally of Slovenia, is evident. The major factor giving rise to these altered regional positions is the much higher valuation of agricul-tural output at 1965 than 1953 prices. The regional incidence of the

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price distortions, however, may well have been rrester than emerges on this analysis, since, for lack of more detailed information, national sectoral price indices have been ap-nlier^ to each region, although the interventions in price between 1953 and 1964 were commonly made on a 'product 1 rather than a 'sector' basis, their incidence thus varying with the product composition of output in each region. Only a much more detailed revaluation would reveal whether or not, at that level, the price system had introduced a more marked regional bias.
The revaluation of output per head in 1953 at the post-reform trices reveals that the bias in the pricing system, particularly TDronounced in the earlier years of the period 1953-64, towards the undervaluation of agricultural relative to industrial output (which incidentally gives a small upward bias to all Yugoslav growth rates through its greater weighting of industry, the fastest-growing sector) also tended to exaggerate the domestic nroblem of regional disparities during the 1950's.

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(ii) The Costs
The scarcity of, and competing demands for, investment resources in Yugoslavia during these years impose on regional policy, from the economic point of view, the criterion of effecient use of investment resources. V/hile direct evidence is not available on the inter-regional flow of investment funds, the high investment ratios in the underdeveloped regions (Table A-4) and the large proportion of investment in the three under-developed Republics financed from federal sources (Table 2-3, r>.127) indicate that a substantial volume of investment funds available to the economy as a whole were channelled to the underdeveloped regions.
The return on the investment in a project is measured by the relation-ship between its present value and investment cost, where the present
value (PV) is the lump sum represented by the flow of net earnings over the life of the project, discounted to the date of the investment:
T
PV =

where A(t) is the difference between total revenue and total costs in year t of the project's life of T years, and i the rate of discount or interest applicable. In a developing country it is particularly important that present value should be calculated to include the project's
external as well as direct effects, although many of these will, in practice, be difficult to measure. A necessary condition for investment in a project located in an underdeveloped region to represent an
1. Part of the investment undertaken in each region was financed from local resources (enterprise revenue, and Republic and commune SIF's) and arguably was not available for allocation nationally. But with
the low rate of internal financing and the high level of federal financing in the underdeveloped Republics, and certainly also in Kosmet,although figures are not available, this element of rigidity can be ignored.

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efficient allocation of resources from the national point of view is that its present value should exceed its investment cost, and by more than in the c-^se of an alternative project in a more developed region.
In the Yugoslav economic system the planners were extremely well
placed to undertake the ex ante appraisal of investment projects along these lines, with the centralisation of much investment Decision-making and the extensive information which had to be submitted with each loan application. Their task was, however, in practice complicated not only by the familiar technical difficulties of anticipating revenue and operating expenses, investment cost and project life, but by difficulties of evaluation in face of the administrative elements in the pricing
system and the various forms of subsidy or concession for individual
types of project or specified items of capital equipment. But in spite
of the complex problems of valuation, the cost of development in the underdeveloped regions, in terms of output foregone as a consequence of the locational decisions, could, at least in principle, be known to the planners.
But direct appraisal through the estimation of present value is not practicable where the data on investment and output are co^iled on a sector and not on a project basis (although a snail number of sectors in the underdeveloped regions consisted of a single project only); the life of each investment cannot be known, nor the various output-streams allocated to the relevant portion of investment.
An indirect method of appraisal has therefore to be adopted, relating
the rate of growth of output achieved in each region to its level of investment. The method of incremental capital-output ratios (ICOR's)
1. The obvious method of simple regression of the growth rates on the level

of investment, as used for example by Hill (1964), proved entirely impracticable because of the small number of regional observations and their high degree of variability.

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uses ratio form to relate the increase in capital stock to the gro'.vth of ,output. The ICOR f s shown in Table 6-4 relate the average investment ratio over the eleven years 1953-63 to the trend growth of output 1953-64, in total and by sector and region. The ICOR's are uniformly higher for the underdeveloped than for the more developed regions in both social product as a whole and in industry, the same general conclusion also holding for the other major sectors &\\( the majority of industrial branches. The regularity of the pattern strongly suggests that the growth of output in the underdeveloped regions was achieved at considerably higher investment cost than among the more developed regions.
As a measure of the efficiency of investment, however, the ICOR f s
must be interpreted with caution. The level of investment has been measured ];ross when the truer measure, relative to the increase in output would be 'new' investment, that is, total investment after the deduction of the replacements for scrapped assets. However, as a result of continuing technical progress, replacements are rarely technologically identical with the assets being "scrapped, making the 'new 1 component impossible to isolate in practice. Gross investment has been preferred to net as a proxy for new investment. In a rapidly-developing economy such as Yugoslavia, a large part of gross investment will be 'new 1,
either in the form of new additions to the capital stock or with incorporated technical progress reducing the replacement component to a small part of the total. Moreover, with the rapid expansion of the
capital stock, provision for depreciation will exceed requirements for replacement investment, depreciation being estimated on all installed capital, while replacement requirements arise from the earlier, and smaller, stock of assets. In Yugoslavia, the arbitrary nature of depreciation

Table 6-4 Incremental Capital-Output Ratios

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Yugoslavia

Developed Regions
Underdeveloped Regions

Slovenia
Croatia
Vorivodina

Serbia Proper

Bosnia-Hercegovina
Macedonia
Montenegro
Kosmet

Social Product

2.77

2.46
3.86

1.92
2.49
2.84
2.48

3.21
7.92
6.51
4.57

Industry

2.49

2.08
3.78

1.84
1.92
2.15
2.40

3.08
5.05
7.25
5.13

305,

Table 6-4___Incremental Capital-Output Ratios, (continued)

Transport
Commerce
Construction

Agric. - social
Agric. - private

Electricity
Coal
Petroleum
Steel
Non-ferrous ores

Non-metallic ores
Metal Manufs.
Ship-building
Electrical Inds.
Chemicals

Building m<c ts
Timber
Paper
Textiles
Shoes

Rubber
Food processing
Printing
Tobacco
Miscellaneous

Crafts - social
Crafts - private

Yugoslavia

6.6
1.3
1.4

8.5
2.1

10.8
5.4
1.8
5.4
3.5

2.5
1.2
1.6
0.8
2.4

2.7
2.4
3.2
1.2
0.9

0.7
2.6
1.2
0.8
4.1

0.8
#

Developed
Regions

6.3
1.3
1.2

7.7
2.1

10.1
7.4
1.8
3.1
3.7

2.0
1.1
1.5
0.8
1.9

3.0
2.0
2.3
1.0
0.8

0.7
2.4
1.2
0.5
3.7

0.8 i
* i

Underdeveloped
Regions

7.5 !
! 1.6 ;
2* 1

13.3
1.7

14.0
3.8
1.7
7.9
2.7

4.6
1.6
20.4
1.7
6.6

2.2
3.6

6.0 j
2.2
1.5

2.4
4.1
1.3
1.3
6.0

0.8
*

Negative or negligible growth of output.

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provision, on the basis of historical cost and centrally fixed schedules of asset"life, is a further disadvantage to the use of net investment. In Yugoslav circumstances, therefore, the arguments are both in favour of gross and against net investment as a proxy for new investment.
While the calculation of present value is based on the life of the asset, the ICOR's quoted relate the level of investment and the growth of output realised over the specified time-period only, thus introducing a certain arbitrariness into the relationship. At the end of the period, certain investments had been undertaken, and their cost included in the investment ratio, but, by being incompletely activated had not yet yielded their full contribution to increased output; part of this effect has been avoided by excluding the investment ratio for 1964 from the average for the period, but, as certain projects take much longer than one year to complete and bri-ig into full production, this cannot
eliminate nore than part of the effect. Similarly, at the beginning of the r»eriod, part of the growth of output recorded would derive from investment undertaken under the Plan for 1Q47-52 and thus not included

2. in the investment ratio. * These effects due to the arbitrary

1. A similar conclusion, based on the first part of this argument only, was reached by Neuberger (1957), (1959) in his study of Yugoslav invest-ment. Domar (1953) first pointed out the relationship between gross,
net and new investment in a growing economy, while Salter (n60, chap.
iv) and Kaldor (I960) are among those who give a central role to replacement investment as a vehicle for technical change.
The most directly relevant consideration is not so much whether
the use of the gross investment ratio distorts the over-all evaluation of the ICOR, but whether it introduces a systematic bias between the regional groups. It is, however, impossible to establish unambiguously
a. priori whether the gross ICOR is more or less favourable to the underdeveloped regions than a 'new 1 or >:et investment measure would be, were the estimation of replacements feasible for the former and the Yugoslav valuation of depreciation accepted for t--.e latter.
2. Part of this effect would have been avoided by including the investment ratio for 1952 in the average for the period, but output fibres for
that ••'•ear are not systematically available.

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definitions of the beginning and end of the period tend, in general, to be offsetting, the '-rowth 1 bonus in the early years being set against the additional investment costs of the later years; -icyvever where, as in the underdeveloped regions, early development efforts were quite limited and the rate of investment increased markedly in later years, the growth bonus is small relative to the additional investment costs. Only in Bosnia-Hercegovina among the underdeveloped regions would the activation of capacity constructed between 1947 and 1952 make a significant contri-bution to the growth of output from 1953. On the other hand, the inauguration of individual projects towards the e:td of the period has inflated sectoral ICOR's in the underdeveloped regions in a number of instances, notably chemicals in Macedonia, coal and electricity in Kosmet, the food-processing industries and the socialised sector of agriculture, also in Kosraet. Their late start in development and the acceleration of the efforts towards the end of the period thus give an upward bias to the ICOR's of the underdeveloped regions.
But apart from these technical considerations, the higher ICOR's in
the underdeveloped regions do not necessarily indicate a mis-allocation
of investment resources, even on strictly economic grounds. Disparities such as exist in Yugoslavia can be eliminated only after a complex process of development; in a period as short as twelve years, additional items appear among investment costs, while the full growth results of the development efforts are not realised. Part of the investment in the under-developed regions was for ' catching-up 1 in the provision of capital facilities already available in the more developed regions; ".liodra;; Jelic (1965) is particularly forceful in emphasising the inflation of the investment cost of many projects in the underdeveloped regions as a result

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of the need to provide ancillary infrastructure, such as minor roads,
local transformers and -;enerating stations and service facilities; these items, already available as social overhead capital in the more developed regions, often became a direct investment cost with no equivalent,
separate contribution to the growth of output in the underdeveloner-
regions.
More difficult to identify and quantify, but of considerable importance nonetheless, are the external economies of development. These are analagous, in a different context, to 'learning by doing'; as the conse-quence of a learning process with the passage of time, gains will be achieved in 'technical progress' or the level of output per unit of factor input, and, more specifically, output will increase over time independently of investment. The advantages to be gained from the external economies
of development can be expected to be greater in the case of the under-developed regions, as experience is acquired in industrial management and a new industrial labour force trained, but to quantify their contribution can scarely be a matter of more than guesswork. The size of any estimate, moreover, is liable to vary closely with the extent to which its compiler is politically committed to the development of the backward regions, and in the extreme case an appeal to the power of the external economies of development can be used to defend any shortfall in the profitability of investment there. The Macedonian economist Miljovski (1963'', p.675), for example, is entirely unconcerned about any possibility of throwing good money after bad when he asserts that, if investment in the underdeveloped regions is unprofitable, the solution is to promote their further development in order that investments there will become effective.
Even after allowance for the upwards bias in the ICOR's of the

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underdeveloped regions due to these various effects, a marked adverse margin must remain between the investment cost of the growth of output achieved in the underdeveloped regions and in the more developed groun. How far this could have been avoided can be a matter of impressionistic judgement only, but by 1963-64, when the entire system of economic management was coming under review during the discussions r>receeding the reforms, criticisms were being made of mistakes and inefficiencies in
the implementation of regional policy. Srebric (n64) gives one of the harshest and most comprehensive atroraisals, criticising the 'one-sidedness* of development, for its excessive concentration on industrialisation to the neglect particularly of infrastructure, the lack of careful choice of the lines of development in manufacturing industry, and the dispersion of industrial projects into very small centres and unsuitable localities. Stojanovic (1963a, p.634) calls for new policies for the underdeveloped regions , containing, as she puts it, less politics and more economics. Y/hile directed specifically at the implementation of regional policy, these lines of criticism had their origins in the characteristics and problems of investment decision-making in the Yugoslav system as a whole. The concentration on industrialisation and the neglect of infrastructure criticised by Srebric was one of the major consequences of the emphasis on securing the immediate expansion of output, of which the more general manifestation was in the tendency for planning to be heavily orientated towards considerations of supnly, with relatively limited regard to demand factors. This dominance of increased production as a short-term objective also received comment from the O.E.C.D. technical assista-ice missions to Kosmet in their reports (Organisation for Economic Cooperation and Development (1968, p.46), which noted that 'the preoccupation with

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questions of production has also h.^d the effect of diverting attention from questions of distribution and marketing'• to this might well be added the tendency to give insufficient regard to the investment costs involved and the longer-term organisation of economic activity.
In the selection of priority sectors for development the -oreallocation
of investment funds by sector as part of the planning process itself impeaed the application of cost criteria, while the national strategy of 'development on a broader front' encouraged the sectoril dispersion of development efforts. Not only were cost criteria regarded as of limited applicability between sectors, but even their application, as intended, between projects was hampered by the structure of decision-making; the pressure of applications from enterprises, communes and the regions them-selves against the inadequate machinery, particularly at the level of the Republic or region, for filtering out projects which were badly conceived not infrequently resulted in the poor enforcement of investment criteria, even where these had been elaborated.
The spatial organisation of development WPS similarly affected, as a facile interpretation of economic equality and the prominence ~iven to the role of the commune as the initiator of new projects combiner1 with the weakness of the Republic and the pressure of decisions on the central organs to encourage the excessive dispersion of development, although in later years the reformulation of locational policy was begun.
In these various respects the underdeveloped regions, with their much greater dependence on federal financin 0;, were more exposed to the deficiencies of the national systei: of investment decisin-.i---!.aVin~ than
were the more developed regions.
But a purely economic critique of the costs and results of development

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policy for the backward regions does not treat tl~e problem on the Yugoslavs' own terms, in that, while development was to be implemented in accordance with the criteria of economic efficiency, the objective was adopted partly on political and social grounds. An element of 'social 1 or 'relief rather than 'development 1 investment was often inclu^efl in assistance to the underdeveloped regions, as is most clearly seen in the case of the separate allocation of investment funds as, for example, in the guaranteed investments^ independent of the projects being proposed for development there and of the comparative rate of return being offered in other parts of the country. The higher investment cost of growth in the backward regions was thus in part an economic price being paid for greater political and social integration of the country as a whole.

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(iii) The Future

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For the elimination of disparities in the level of development

which have built up over generations, twelve years, less than half a

generation, is an inadequately short period. The long-term nature of

the task faced in the backward regions is explicitly emphasised by

Colanovic (1962, p.158):

'The entire process of regional development i-wolves the movement towards an adequate structure. The problems of industrialisation
in backward areas are very deep and complex, while, at the same
time, national resources for special intervention in the under-developed regions are limited. Results can therefore be expected only over the much longer run. Five years is a suitable period for concrete programming, but prior to the five-year plan it is necessary to have a long-term plan for regional development in general and the development of the backward areas. Five years comprise, on average, only one complete activisation period for investment in industry and mining, scarcely one for a complex agricultural project, scarcely one, on average, for the building
of infrastructure, one average time-period for the training of highly-qualified personnel etc. As a result of this, the impact
of the efforts of a five-year period cannot have an emancipatory quality, and, to the extent that this is so, long-term planning
is necessary f. <
Mladenovic (1962, p.178) talks of fifteen-twenty years as the minimum

horizon for regional development.

Growth Prospects

Over the years 1953-64 development policy in the backward regions

yielded an over-all failure to move towards convergence, in spite of a

number of individual growth successes. The prospects for the next decade

or so - subject to all the uncertainties of economic prediction - appear,

however, to be rather brighter, although a number of important doubts

remain.

For the immediate future, each of the underdeveloped regions has at

least one large project 'in the pipeline' which will, at latest by the

early 1970's, make a significant contribution to increased output. In

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Kosmet in particular the lignite and thermal electricity projects of the Pristina kombinat and the non-ferrous metallurgy and chemicals projects at Kosovska ".litrovica were introducing a transformation into the region's industrial position in the later 1960's. The aluminium plant planned for Titograd, to process 700,000 tons of bauxite annually, much of it from near Ni-^ic, will become the largest industrial pro.iect in Montenegro.
The Skopje steel-mill, with its initial capacity of 300, ~>01 tons brought into production in the autumn of 196? and the remainder scheduled for 1968 and 1970, along with the greatly expanded chemical industry, will bring
an acceleration of industrial production in the later 1960»s. Bosnia-Hercegovina, with its lower level of investment in the later years of the period, has least to anticipate from projects begun, although the expansion of the steel industry at Zenica and large hydro-electric project at
Bajina Basta, on the Drina, scheduled to sppply electiricty to the Titograd aluminium plant, will make a contribution.
Various major transport schemes will reduce bottlenecks and bring
the more effective integration of the underc^evelo^ment regions into the national market; the reconstruction (including conversion to standard-guage) and electrification of the Sarajevo-Ploce railway was completed
late in 1966, while road improvements being undertaken particularly in Serbia, will give better access to llontenegro; the Belgrade-Bar railway
and the harbour at Bar, at present, however, Relayed by financial rather than engineering difficulties, will eventually o^en up an entirely new orientation for ..'lacedonia and Kosmet as well as Montenegro.
While individual projects can make notable contributions, the structure
of totpl output is of central importance for the over-all growth rate.
The years 1953-64 showed the limitations of even a successful policy of

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industrial expansion, when industry, designed as the spearhead of develop-ment policy, represented a small proportion of total output, and the growth rates of other sectors were allowed to lag. In this respect the under-developed regions have been much better placed since the -7iid-1960's than in 1953, after the twelve years of successful industrial growth have effected a structural modification more favourable to the rapid growth of total output.
Some decline in the rates of expansion of industrial sectors is to
be expected, once the very high growth rates associated with the establishment of new industries are ">&st. The growth of industrial production in total, however, may well continue at a high level. As an approximate indication, it can be said that the underdeveloped regions had, by the middle 1960? s, attained a level of development comparable with that of the more developed regions in the early 1950's, from which the latter maintained a rate of industrial expansion of 11.1 per cent annually over the twelve years.
But even if the rate of industrial expansion slackens, it is highly likely to remain much more rapid than any feasible rate of growth of agricultural production. While agriculture was very much a slow-growth sector from the Yugoslav point of view, the Pood and Agricultural Organisation (1965), in their review of agriculture in the second post-war decade, credit Yugoslavia with the third highest rate of expansion in the world (after Greece and Israel) in agricultural output per head of the population over the years 1955-^5. -luch opportunity for agricultural improvement still remains in Yugoslavia, for which higher prices are already providing the incentive, and greater acceptance of cooperative farming the means; but an average growth rate of 4 ^er cent annually over

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the next decade would be a major achievement, while an industrial growth rate of 10 per cent would surprise no-one in Yugoslavia.
Over the past twenty years, the structural problem has been seen essentially as one of altering the relative balance between agriculture and industry, by shifting employment out of agriculture with its low productivity and slow growth. But a shift towards industry cannot of itself achieve a long-run solution of the structural problem. The problem is one which is continually self-renewing, as technical progress, changes in demand and the discovery of new resources inrainge on the growth opportunities of individual industries. A further aspect of the structural question is whether the patterns of industrial development adopted in the individual underdeveloped regions introduce a favourable structure, or whether, in the course of the next decade, the regions may again find themselves handicapped by a dependence on slow-growth sectors. 'Picking the winners', as all planners would like to do, is an
extremely difficult task, and 'spotting the losers' only slightly less so, again involving the anticipation of the growth of demand (national and international, intermediate and final) and of the lines of technical change, even aside from the aggregation problem that all products within a sector will not share equally in these. Prom the experience of other countries, and incipient trends within Yugoslavia, however, the prospects for certain major regional specialisations appear dubiously encouraging. Bosnia-Hercegovina in particular appears threatened by ?n obsolete industrial structure. In 1964 13.8 per cent of its industrial employment was in the coal industry, an industry which, in many countries, v as suffered in the post-war years from the shift to other industrial and domestic fuels. Ominous signs of a similar movenent were emerging in

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Yugoslavia in the mid-1960's, with the introduction of Diesel in place
of steam locomotives by Yugoslav Railways and the beginnings of the electrification of certain sections of railway. By 1967 the coal industry held large unsold stocks and laying-off of workers - 1,000 at the Kakanj mines alone, in the summer of 1967 - had bep:un.
The vulnerability of "lacedonia, with its heavy dependence on the
slow growth sectors of agriculture, tobacco and the traditional consumer industries, was recognised as early as the end of the 1950 f s and. a major reorientation of industrial development was launched. Only the 1970's will show whether the region will be successful in the switch to advanced industrial technology which it sought in its decisions of the earlier 1960's.
Technological obsolescence of their capital equipment, even during
the process of development, is a continual threat to the underdeveloped regions. The most modern equipment may initially be installer1 in a project, but, only if improvements are consistently incorporated, particularly through replacement investment, can an ur>-to-date technology be maintained. This is a continuing problem of managerial initiative,
in which the underdeveloped regions are handicapped by their more limited industrial experience and technical expertise. Moreover, the tendency, observable in many countries, for technologically f new f sectors to become established in the more developed areas and further widen the technolo-gical gap between the regions, was also becoming evident in Yugoslavia, with the growth of the electronics industry in Slovenia and Vorjvodina and of the automobile industry in Serbia and Slovenia.
Looking even further ahead, the growth of manufacturing industry and services will reduce the imports,nee of the traditional natural resources,

such as mineral ores and other raw materials, relative to the factors of location and access. None of the underdeveloped regions faces essentially poor prospects in this connection, although Montenegro will always suffer to some extent From its remoteness from the rest of Yugoslavia, and both t.lontenegro and. Bosnia-Hercegovi -?, face natural barriers impeding internal transportation. But as a longer-term prospect, development in the under-developed regions will have to take a stronger orientation towards the national transport arteries, particularly in their central valley areas.
As subsistence agriculture and the population dispersion associated -vith it are increasingly superseded by agricultural concentration and industrial and urban development, an acceleration of the decline of the population

v in the more remote areas, deficient in access and other natural resovrces, is to be expected and welcomed. V/hile only the full results of the next population census can confirm this, both intra- and inter-regional migration appeared to be increasing in the 1960*3 as development began to break down traditional social patterns.
The level and growth of social product t^r head are only approximate indicators of the level and rate of development. Improvements in the education and health standards of the population make a very real contribution to welfare, and in this much remains to be done in the under-developed regions, in spite of the progress of the post-war years. The contribution to higher production, the only way in which these improve-ments are counter1 into 'development', can come only slowly, as the school population of today are not the labour-force until tomorrow.
The contribution of increased output to the welfare of a region's population may, on the other hand, be overstated, if development exists in an 'enclave 1, as in the case of the Tre^ra lead-mines in pre-war and

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early post-'var Kosmet, or, to a lesser extent, in post-war Bosnia-Hercegovina. Particularly in Montenegro, where total output and population are both small, one large project, such as the aluminium kombinat could 'solve 1 t! <e region's underdevelopment in statistical terms, while leaving much of the population following a primitive way of life. Similarly, the impact of the Skopje steel-works and the Pris"tina lignite project on their regions' development will defend the sise and extent of their indirect effects and linkages.

After the Reforms

Regional development policy in the years 1953-64 was pursued within
a very favourable institutional framework, the central accumulation and allocation of a large part of investment funds securing the channelling of investment resources to the underdeveloped regions, while tax concessions and subsidies shielded, enterprises from the consequences of unprofitable operation. But the sequence of economic reforms of 1964-66 introduced major changes, directed towards improving the efficiency of the economic system through the reduction of state intervention and the increased role of economic incentives and penalties. The taxation on enterprises was substantially reduced to effect a major shift towards self-financing; the proportion of investment financed from enterprise
* *

revenue was to be raised to around 70 per cent in ^lace of the 30-40
per cent (subject, further., tq manipulation through the participation requirement) between 1953 and 1964. The SIP's were retained to finance major projects, but their resources and role in allocating them were sharply curtailed. The abolition of much state intervention in price fixing accompanied by the liberalisation of imports was designed to increase competition in the home market, both among Yugoslav enterprises,

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and between domestically produced and imported goods.
Both sets of changes presenter" a major threat to the underdeveloped regions. The lesser threat was probably on the side of investment, where the allocation of 1.85 per cent of social product annually to the Special Fund for the Development of the Underdeveloped Regions was established
as one of the basic proportions of development, * in order to ensure that development assistance to the backward regions kept pace with economic progress nationally. More seriously, greater competition along with the removal of price and subsidy protection threatens to expose the ^oor profitability of a number of enterprises in the underdeveloped regions
(as in other parts of Yugoslavia). The effects of this are already emerging, with the financial difficulties of certain Bosnian coal-mines and of the large textile factory at Titograd in 1967 among those attracting national attention.
Various difficulties have delayed the full implementation of the reforms, and even in 1968 the economic situation in Yugoslavia remains unclear; but the development of the underdeveloped regions, fostered under the system of decentralised planning between 1953 and 1964, has now had much of its institutional protection removed, and has been launched on a new and uncertain era.

1. This allocation was a not ungenerous one; the regions themselves had sought 2 per cent.

.:;

Table A-2 Output per Worker. ctor. 1953 and 1964

Sector

Agriculture - social
Agriculture - private

Electricity
Coal
Petroleum
Steel
Non-ferrous metals

Non-metal minerals
Metal manufactures
Ship-building
Electrical inds.
Chemicals

Building materials
Timber inds.
Paper
Textiles
Shoes

Rubber
Food inds.
Printing
Tobacco
Miscellaneous

Transport
Commerce
Construction

Crafts - social

Crafts - private

1953

Developed Underdeveloped Regions Regions

160
61

1 059
372
2 077
1 2"n
933

757
843
476
1 113
1 053

500
347
1 396
997
637

951
794
396
1 960
148

493
494
277

312
139

95
57

544
466

4 333 "30
1 730

964
345
—

-

1 193

217
337
1 405
526
390

_

475
178
2 284
219

515
347
266

261
85

1964

Developed Underdeveloped Regions rce^ions

1 434
295

3 725
1 326
10 268
? 205
2 787

1 606
1 330
1 391
1 9%
2 787

1 185
1 197
2 366
1 566
1 574

3 951
1 333
1 850
o 144
1 044

2 02?
2 121
1 502

1 097
, 615

360
225

3 024
1 538
12 -03
2 153
1 379

1 205
1 640
1 024
2 338
1 934

734
1 023
2 593
1 295
1 341

2 305
1 053
1 577
3 649
526

1 738
1 678
1 012

9-3

473

All figures are expressed in thousand dinars, at current prices.

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Appendix 1 : National Income Accounting in

The national income accounts of Yugoslavia differ conceptually and
in method of compilation from those of the United nations (the System of National Accounts), O.E.C.D. and most Western countries. The principal differences lie in the definitions of social product and national income, the very limited use of an accounting framework and the absence of a 'factor cost' concept.

Sources

The national income accounts and related statistics are chiefly
published by the Federal Statistical Office (Savezni Zavod za Statistiku), which uses, as the principal source for their compilation, data collected by the social accounting services through a system of enterprise reports. Until 1958 enterprises in the social sector v/ere required to make all their transactions through their accounts with the National Bank (Narodna Banka) and, in addition, to return periodic reports, thus giving the accounting service (at that time a branch of the Bank) a full record of each item in their costs and revenue. This system was consolidated in 1958 with the introduction of the complex annual report (kompeksni godisnji izves'taj (KGI)), a compulsory report completed by the enterprise giving information on gross revenue, costs, sales, fixed assets, stocks, labour force, personal incomes, enterprise funds and other categories.
The introduction of the KGI was followed by the establishment of the Social Accounting Service (Sluzba Drustvenog Knjigovodstva (SDK)) as an independent agency. The cove?sp;e of enterprises in the social sector in the national income accounts is thus virtually complete.
1. Details of the categories and i^ethod of completion of the KGI are given in Savezni Zavod za Statistiku (1959).

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Information for the private sector is not available on this systematic basis, but is compiled from taxation returns, supplemented by census information and sample surveys. A certain amount of imputation, particu-larly for on-farm consumption of agricultural output, has to be used.

Social Product
The Yugoslav concept of social product, like that of the other East European countries, is claimed to derive from the Marxist concept of 'material production 1, ' although Horvat (196lb) accepts that the Yugoslav definition is based on a misinterpretation of what IVIarx meant by production. Social product differs from the Western gross domestic
2
product * by excluding certain f unproductive' services, regarded as necessary inputs for the process of production rather than as final outputs in themselves: public administration and defence, education and health services, insurance, banking and finance, the ownership of dwellings, and miscellaneous personal services, such as legal and domestic services, hairdressing and laundries c
This difference of definition reduces Yugoslav social product by comparison with the U.N. coverage of GNP. Jackson (1955) quotes the finding of an Imerican mission in 1952, agreed, with by the Yugoslav government statisticians, that 'about 10 per centf would have to be added to the Yugoslav concept to adjust it to the O.E.3.C. Standardised System definition of GNP . More recently, estimates of G"P for Yugoslavia on O.E.C.D. definitions have been presented in the Yugoslav submissions to
1. The application of this concept in Eastern European accounting systems and its relationship to Marx's original concept are discussed in Kaser (1961).
2. The official methodological notes on the compilation of social product do not make clear v/het v;er social product is a domestic or national product concept. Vinski (1961), however, affirms that it is domestic product' Horvat (1964b, ^.9) dismisses the quantitative importance of the distinction in Yugoslav circumstances.

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O.E.C.D. (O.E.C.D. (1962), (1963), (1964), (1*65), (1966), (196?)). Comparison of these with the equivalent Yugoslav figures for social nroduct shows that, in the years 1956-64, social nroduct has been increased >y the following percentages to correspond to the O.E.C.D. definition: 11, 9, 12, 11, 12, 14, 16, 16 and 14. While the period is a relatively short one, these figures suggest that the unproductive services were expanding more rapidly than the economy as a whole, and that by 1961-H tfce gap in coverage had widened to about 15 per cent, in place of the 10 per cent of the early 1950's.

The Accounting_Framework
The Yugoslav accounts at the national level are presented on the
familiar balance-sheet compilation, from the three aspects of production, incomes and expenditure. At the regional level, however, the presentation by industrial origin is the most extensively available, with the income side usually in summary form only, and the expenditure side not compiled. Regional accounts are therefore presented entirely from the side of production, in terms of output and incomes producer1, within the region,
and not in terms of incomes received or categories of expenditure.

(i) Output by Industrial Origin

Social product and national income are 'vrlue-added' concepts. The starting-point in their estimation is the gross revenue of the producing unit, from which are deducted, 'material costs', comprising the cost of materials and. intermediate products used u^ in the process of production,
1. 2. services purchased and interest payments on borrowed, funds.
!• Interest payments, which would constitute Dart of value-added in Western accounts, are treated as a cost, financial services oein^ 'unproductive 1,

• Sfe aggregate 'global production' representing ^ross turnover, a familiar category in Eastern European accounting systems, is

Output is thus valued ?*• marke j -rices, inclusive of turnover t.~x
?r.d rnbsidieL. '"''urn over tax, although so called, \ ^s " evi^,. (i;n '1 the rrforns of 19^5) on gross revenue after the deduction of rnrteri-1 corts thus corresponding more closely to a tr:: on value added th?.r> on turnover It v:.r.s Irvied rt rrtes varying from 5 to 60 per ce^t, ?requontl" at the lo\ver end of this mige. Subsidies , as a forr.i of 'negative 1 indirect tax v^ere relatively rare, ^oucchold coal in t^e 12~°'s being one if the "ev iiic-tance^. Tn-^ lesser r^le for t rnov-^r t-.reo and subsidies as a riscrl v:eapon results in :;ne market price vrluatio:... bv-ing niuc 1" less far reuioveu from the factor cost valuation In Yugoslavia th,?ji in the rest of Urst,rn -rrope.
Dv prcc: ?.tion provision is closely regulated for the economy as a
whole and the enterprise has no discretion ._:•! its determination. The central authorities drcv; up detailed schedules of the period over which many individual types of crpit-1 asset are to be r,.iortj^ed. The enter-prise then calculates 'ts depreci^t^ev by tl: e stir.:^t line method, on the Vsis of the scheduled amortisation period for the relevant class o^ asset and its original cost. The '^f":'cicil! iife must v e used as t^e basis for depreciat' on, irrespective of the enterprise's est:r .ate o n the asset's actual life. To take account of increasing replacement cists in a t^'me of rising prices, assets r.re subject to periodic revaluation, as in i;; 62, r.gain deter...,\ncd by the authoi-ities.
rt.— r"_—— -, *t-~ r -—,-r ^'--'_'_ —-i—i—-——————— : ^-^ figures ^—• are sometimes presented **• alonr ^^^ \vit.V. the
national income accounts. m% ey ..ic-.y be presented r.t 'origin,0!'
only occasionrlly presented, although normally easily c?.lculable as the sum of social product and rrrteripl costs. Apart from specific uses, as in input-Gu.tput rnalycic, it K?.s nov/ been virtually pbandonned as a measure of output.

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(undepreciated) or Present' (depreciated) value. The undepreciated value is the total of the purchase prices of all assets held by the enterprise (or the revised price, if a revaluation of assets has taken place since the date of purchase); it is thus a total of items valued
in the current prices of different years. The 'nr^sent 1 value is similarly derived, but from the purchase price of the asset net of the scheduled provision for depreciation.
The sector classification of output by industry of origin is
operated at two levels. The initial division is into seven major sectors (delatnosti), industry, agriculture, forestry, construction, transport, commerce and. crafts, with conrnunal activities (urban water supply etc.) sometimes listed as an eighth and sometimes included alon^ with crafts. Most of these sectors are further divided into branches (rrane).
Industry, which covers mining, manufacturing and part of ^ublic utility, is divided into 22 branches (21 until the revision of 1961), mainly on
the basis of their type of product, independent of its sta<re of production The industrial sectors are: electricity (generation and distribution), coal (including coke and gas), petroleum (extraction and refining), iron and steel (ore mining, smelting, rolling etc.), non-ferrous netals (ore-mining, smelting and processing), non-met?llic minerals (the quarrying and processing of clay, glass etc.), metal manufactures, shin-building, electrical industries (the production of all types of electrical p'-iuip-ment), chemicals, building materials (ruprryirr-- and preparation), timber industries, paper (including cellulose), textiles (spinning, weaving and clothing), footwear (including all leather goods), rubber, food processing, printing (including publishing), tobacco, films, -reological
1. There appears to be no rationale for this, except that both are quantitatively unimportant and placed at the end of the list of sectors

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surveying and miscellaneous.
Further subdivisions often, but by no means consistently, made include agriculture and crafts into their social and private sectors, agriculture into agriculture, fishing and rural v/ater supply, construction into project design, building, interior fitting and surveying, commerce into wholesale, retail and foreign trade, con iercial services, catering and tourism, and transport into rail, river, roar1, sea, air and urban. The small private sectors which exist in construction, cormerce (catering), and transport are rarely separated out, and only occasionally included as 'other private sector'.
'Organisational* and, 'pure activity' principles; until I960 the production account was compiled on an 'enterprise' basis, where the enterprise was taken as the unit of account and classified into its appropriate sector and region. A small number of exceptions were made for large multi-plant enterprises, where the individual plant was taken as the unit of account and could be classified into a different sector and region from the parent enterprise. In 1961 this somewhat go hoc procedure was standardised into two separate principles of classification, the 'organisational' and 'pure activity' rjrir.ci-oles, each extending an aspect of the earlier procedure. On the 'organisational principle' each enterprise is treated as a whole, including all its activities and any branch plants, and is classified by sector according to the activity yielding the largest part of its output, and by region according to its place of organisation. On the r pure activity 1 principle, the various activities of the enterprise, business units, sales outlets, construction sites, workers' restaurants, are each classified individually.
1. -'ull details of the coverage of the sectoral classification are given i-^- Savezni Zavoc1 za Statistiku (196?),

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The 'pure activity' classification yields a lover output in many industrial branches by separating out subsidiary activities, arS corres-pondingly increasing output in sectors such as commerce, hnilding materials antf metal manufactures, and also food-processing, a major subsidiary activity of many farms in the social sector of agriculture. The 'pure activity' principle, also designated, in its regional aspect, the 'territorial 1 principle, reduces the regional output of Slovenia and
Serbia Proper (which includes Belgrade) to the advantage of the other regions, as activities are classified by their actual location rather than the nlace of organisation of the enterprise.
Under the 'pure activity' classification, the level of output oy
sector and region is less liable to be affected by changes involving only the form of organisation of the enterprise. An extreme example of this is the railway industry in Kosmet where, on the pure activity principle, output presents a continuous series over time, while on the organisational principle it a'^rootly becomes nil in 1963 and 19 r 4, all transferred to Serbia Proper under a reorganisation of the region's railways into an enterprise based on Belgrade. But the reorganisation of an enterprise across regional boundaries was relatively rare, although nerha^s slightly more common within tre three regions of Serbia, as a consequence of the additional level of federation there. Similarly, the expansion of a secondary activity to become the major t>art of enterprise output could, on the organisational principle, bring an abrupt reclassification of the whole enterprise, while the pure activity principle -voulri record only the progressive growth of the separate lines of output.

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(ii) Shares in national income
National income at market prices (social product net of depreciation)
is classified into the two principal categories of 'net personal incomes' and 'accumulation and funds'. Personal incomes, from both the social and private sectors, are net of all taxes and social security contributions. 'Accumulation and funds' is the composite share of tbe enterprise and the state, comprising turnover tax, taxes on personal incomes, taxes on the enterprise and on private producers, and. allocations to enterprise funds. These obviously can be grouped into the shares of the enterprise and the state, although this form of presentation is not user", and, at the
regional level, only the broad division between t>ersonal incomes and. accumulation and funds is normally given. This classification is thus according to the ultimate income-recipient, (exclusive of transfer payments by government) where the S.N.A. and other systems show the payments for factor services. Being derived from the production account, the income shares are allocated among the regions on the basis of the location of production, not the place of residence of the income-recipient.

(iii) Expenditure on social product
The categories of the expenditure account are similar to those of
the S.N.A.: personal consumption, general consumption, gross investment and the surplus on the balance of payments. Personal consumption is the expenditure of households on goods and productive services; collective or general consumption corrmrises the 'material expenditures' of governmental and social organs, including subsidies to enterprises. This category is substantially less than total government expenditure since it excludes unproductive expenditure, such as the costs of administration. Gross investment, however, includes non-productive investment. The expenditure

: Data Sources a.nd

The following abbreviations are used throughout:
SZS: Savesni Zavod ra Statistiku (Federal Statistic.pl Office)
SYY: Statisticki Godi' <?,jE>k Ju.^oslavije (Statistical Yearbook of Yugoslavia)
SB : Statisticki Bilten (Statistical Bulletin)
In compiling the series for output, employment and investment by
region Yugoslav definitions have, for the most part, been followed: the distinction between productive and non-productive activities, the classi-fication by sector and the method of valuation. To make a full adjustment to the coverage of GDP, the U.N. industrial classification and a factor cost valuation would require estimates at many stages, detracting severely from the usefulness of the results.
In sr>ite of the extensive collection and publication of economic statistics, many sources have ha.d to be used and adjustments made to secure complete and, as far as possible, comparable series for the individual regions.

The Sector Classification
The various official data series use varying degrees of sectoral
breakdown. A 27 sector classification has been adopted here, as the most detailed which could be systematically compiled.
Of the seven major sectors of the Yugoslav classification, construction, commerce and transport are retained without di segregation; agriculture
and crafts are divided into the social and private sectors to tave account of the important differences between these; industry is divided into twenty industrial branches, in -olace of the twenty-one of the industrial classi-fication in use until I960 and of the tv/e -ity-tv.ro used from 1961, by the

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inclusion of the small sectors, films, geological survey i?v and con-iu^al activities in miscellaneousJ forestry is included in the tirber industry. In 1961 a number of changes were made in the classification, and this revised classification is amlied throughout. ".'/here standardised series are not available from official sources, the adjustments made are described below.
Wherever figures for Serbia Proper are not given in the Yugoslav
sources, they are derived by the deduction of the figures for Vojvodina and Kosmet from Serbia (total).

Social Product and National Income at Current Prices
Sources

Social product and national income by region and sector are commonl^ given in the annual issues of SZS : SYY, 1954-66. I'.Tore complete coverage for the earlier years, when the figures in the issues of the SYY are highly aggregated, is given in SZS : SB 228, A major omission from these is the coverage of the three regions of Serbia, 1953-5 7, which was supplied from the records of the Statistical Office of the Republic of Serbia in Belgrade.
Other omissions filled in from various sources were:
a) social product in the industrial branches, by region, 1961 and 19 C 2, from SZS : Indeks (1962 no. 11, supplementary tables) and SZS : SB 283, Table 3. Both sources give provisional figures only, but the small
number of subsequent revisions can be easily inferred; each figure for output is i>r,rt of two totals, 'industry 1 in its own region and the 'branch' total for Yugoslavia; co^psrisen of the original totals with the available revised totals an^i the pairing off of regional and branch discrepancies indicates the items revised and the revised figure. Revisions were mr.r'e,

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on this basis, in 1961 to chemicals in Slovenia, food industries in Croatia, metal manufactures in Serbia Proper and metal manufactures and printing in Bosnia-Hercegovina, and in 1962 to food industries in Serbia Proper and tobacco in Macedonia.
b) social product in the social and private sectors of agriculture and crafts, by region, 1961 and 1962, from SZS : Indeks (1962, no. 11 supplemen-tary tables) and SZS : SYY 19 r-4, Table 205-2 (in the section on agriculture). * For 1962 the breakdown for crafts is not available but could be accurately estimated from the national income figures for 1962 and the average of the amortisation figures for 1961 and 1963, and then cross-checked for consistency with the regional and sectoral totals. Organisational Principle
Of the two compilations of output available from 1961, that by organisational principle has been preferred to the pure activity compila-tion. Neither is identical with the modifier"! 'enterprise' principle applied until I960 but the organisational principle is much closer, the only differences being in the case of the small number of slants of multi-plant enterprises classified separately until I960. This is also the principle applied in the compilation of the investment series and, for the most part, of the employment series.
Revision of the Industrial Classification
V/hile the non-comparability of the series for social ^roduct and
national income before anr1 after 1961, arising from the introduction of the revised classification, is normally indicate^ in the methodological

1. The corresponding table in SZS : SYY 1963 (Table 205-2) gives the breakdor/n for 1961 but on the 'pure activity 1 nrincinle. This is one of t 1 e few cases r/> ere unspecified output figures are not by or -
tional principle. The point is not noter1 in the Yearbook, but Vie tables are thus inconsistent between the two years.

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notes, no revised figures for the earlier yesrs have been m?de available from official sources. * The following adjustments have therefore been made to improve the comparability of tli^ series:
a) All sectors in I960: in the case of I960, the problem conic* be avoided. I960 is the base year for the series for social oroducl and national income at constant prices, compiled by the Federal Statistical Office and. standardised, on the revised classification. The figures for I960 from the constant price series should, therefore, be equivalent to the current price valuation, adjusted to the new classification. The constant nrice series are given, for the seven major sectors in all regions in SZS : SYY 1966, Table 203-1, and for the industrial branches in the six Republics in Savezni Zavod za Statistiku (1963). The validity of adopting the figures from the constant price valuation is confirmed by the negligible differences between the two sets of figures, except where classification changes are known to be involved.
b) forestry and timber: in every year forestry and timber have been aggregated into a single industrial sector. The inconsistencies between regions, and from year to year in the same region, in the classification of sawmills and log.Tin~ activities made an appropriate adjustment impossible. Prom several footnotes (SZS : SYY 1962, Table 304-2, and SZS : SB 228, introductory note 4) it appears that in 1°. 53-56 s&wnills were classified into forestry, except in Bosnia-ITercegovina and Montenegro, where they -/ere included in the timber industry, while bet'vee.*1 1957 and I960 they were classified 'partly' into forestry and 'partly' into timber in Serbia, Croatia and Bosnia-Hercegovina, totally in timber in ."ontenegro and totally in forestry in Slovenia and Macedonia.
1. Even details of the chr.n^es made are rarely provide'7. One of the detailed lists is given in the introduction to SZS : SB 310.

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c) cement: the transfer of the output of the cement industry in 1953-59 from non-metallic minerals to building materials was usually effected in t; vo stages, the estimation of the value of the output of cement for the country e.s a whole, and then its allocation by region.
For Yugoslavia: for 1959 the valuation is ,o;iven in 3Z3 : SB 205,
Table 1-7, but for earlier years it had to be estimated. For each year the volume index of production and the producer price index for cement are available from SZS : SB 236, Table 1-4, 3ZS : SYY 1962, Table 219-2, and SZS : SYY 1961, Table 219-2. The two sets of indices, expressed on the base I960 = 100 were applied to the value of output of cement in I960, thus adjusting it for changes in both volume and price to give estimates for the earlier years. *
Allocation by region: this valuation of the output of cement for Yugoslavia as a whole was allocated among the regions on the basis of their shares in the physical volume of output (in tons, SZS : SB 81, 103, 136, 169, 205, 236). A cross-check with I960 revealed a close similarity between each region's share in the volume of output snr in its value, except in the case of Slovenia where the region*s share in the value was approximately twice as ^reat. The output in Slovenia, in tons, was therefore doubled when shares in the value were allocated, Volume figures for the three regions of Serbia were not available for the years 1^53-55, and the shares of the regions in the total for Serbia were therefore estimated by extrapolation from the later years.
d) plastics: the transfer of the value of output of plastics from
1. The Federal Statistical Office v;arn against as=imine; the comparability of the price and volume indices for individual sectors, on the grounds that different v/eights may be used in their co'-npilr-^ion. Cement is however a sufficiently homogeneous product for the wei^-1.ting ^roblem
to be unimportant.

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miscellaneous to chemicals was effected in 1958 and 1Q59 only, no category 'miscellaneous' existing in the earlier years. For 1959 the output figures for the six Republics are given in SZS : SB 205; the figure for Serbia v/as allocated among its three regions in the same proportions as in I960 (from SZS : SB 236, Table 1-7). For 1958 the only information available is for the output of the product 'plastics', by enterprise in any sector and excluding the value of ancillary outputs of enterprises classified, on a sector basis, as producers of plastics. (JZS : SB 183, Table 1, chemicals); since the figures for I960 on this definition correspond closely to those from the social product series, the 'product' figures were accented without adjustment. The allocation within Serbia was again made in the same proportions as in I960.
e) cardboard boxes and paper packing: again the transfer of the output of these from miscellaneous to the paper industry -'as made only for 1958 and 1959, no output being presented under miscellaneous for the earlier years* Output by Republic in 1959 is given in SZS : SB 205. The I960 figures inr'ica'e that the entire adjustment in that year originated with Serbia Proper, and this has been assumed to appl.y also in 1959. No information in value or volume terms is available for 1958, but, since the unadjusted figures indicated a discontinuity in 1958, an estimate was made by extra-polation from I960 and 1959, "vhich appeared to eliminate this.
f) geological surveying: the V3lue of output in the years 1953-59 has been deducted from construction and included in miscellaneous. For the six Republics the category is given in SZS : SB 228, Table £-41 to 2-47. (This also includes the small item surveying for mapping purposes, but the discrepancy has been ignored). For the three re ions of Serbia the national income figures for 1958 and 1959 (SZS : SYY I960, Table 3-44, and

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SZS : 3Y1 1961, Table 304-2) s %>ow all the output from geolo icc<l surveying originating in Serbia Proper and this allocation has neen applied to social product in these and the earlier years,
g) communal activities: in the years before 1961 the output of this sector appears to have been included predominantly in construction, and. there in the sub-sector 'building 1 (3ZS : SB 228, introductory note 5)* The only information on their extent relates to 1961-64 (from the national income tables of the current issues of the Yearbook); the proportions shown in these years, by region, have been extrapolated for the earlier years.
h) other classification changes: no adjustment has been made for other minor changes, for which no information is available on the amounts involved: railway workshops (transferred from metal manufactures to transport), optical instruments (from miscellaneous to metal manufactures), sports equipment (from textiles to miscellaneous), vehicle repairs (from trans port to metal manufactures and crafts) and -o?rt of railway track maintainance (in certain years only, from transport to construction).
The Elimination of Investment [Jaintainance
Until the middle of 1957 amortisation was Refined to include
expenditure for major repairs to plant and equipment (investment maintainance) while latterly this expenditure was classified as a material cost and deducted from gross revenue in calculating the value of output. Social product in the years 1953-57 in the Yugoslav accounts is therefore overstated by the amount of this investment maintair.ance; national income is unaffected, being calculated net of V~is amount, whether it is deducted as a material cost or RS prrt of amortisation. While the discontinuity is often indicated in footnotes, no revised

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figures have been provided from official sources, and estimates have therefore been made here.

Figures for expenditure on investment maintenance irrere found in
Narodna Banka: r.ieseo^i Statisti^ki Bilten (the "lonthly Statistical Bulletin of the national Bank (1959, no.2, p.35, footnote) as follows:
1954 53.2 billion dinars, 1955 49.3 billion, 1956 52.3 billion, 1957 50.6 billion. Only this rounded figure for the economy as a whole is .^iven, with no breakdown by region or sector. On the assivntion that investment maintainance represented the same proportion of amortisation in each region and sector, these totals were allocated and deducted from social product. Investment maintainance in 1953 was estimated at the same proportion of amortisation as in 1954 (43.5 billion). Half of the figure for 1?57 has been used, since the change of definition took effect fro^ 1 July.
The deduction of investment maintainance was of the following
importance:
1953 1954 1955 1956 1957
As a percentage of the original
valuation of amortisation 33.9 38.9 32.1 31.1 15.7
As a percentage of the original
valuation of social product 3.8 4.1 3.2 3.2 1.3 Unallocated

The Yugoslav totals for social product and national income each include 23 432 million dinars in 1953 and 32 000 million in 1^54 of output unallocated by region and sector. (SZS : 3YY 1964, Table 105-3 footnote 2).

Social Product and National Income at Constant Prices
Sources

Since 1964 the Statistical Yearbook hr.s given series for social

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product and national income at constant prices of I960, by region, for the seven major sectors, compiled back to 1952; SZS : SYY 1966, Table 203-1 gives these for the /ears 1953-64. Savezni Zavod za Statistlku (1963) ^ives the series by industrial branch (excluding films and geological surveying), for Yugoslavia and the six Republics for the years 1953-62. For 1963 and 1964 similar figures for the industrial branches, for Yugoslavia alone, are given in SZ3 : SB 3?3, Table 4 and SZS : SB 442, Table 4 (including revisions to metal manufactures and tertiles from the previous bulletin). Various items not covered in these series have been estimated as described below.
Compilation
The constant price series prepared by the Federal Statistic?! Office
are not compiled by the more familiar method of deflating the current price valuation by a suitable price index, but by the method of 'value added, per unit of output 1. Some 800 products are selected, to cover much of total output, and suitably grouped by sector; for each product, information has been recorded on value added per unit of physical output in the base year (I960), e.g. per ton of a specified ;^rade of coal, or per unit of service. This valuation is then applied to the data on the physical volume of output in each year to give the valuation of its output in terms of value added per unit in I960. These are t^en aggregated by sector and region. Full methodological details are given in Branimir Markovic (I960).
The series ^iven in each of the sources mentioned have oeen compiled
by the Federal Statistical Office, and revised, on tbe basis of t^eir access to SDK records, to the 'organisational principle 1 aid tre new industrial classi p ication.

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Additional Estimates
Ominissions from the series mentioned have been filler? in as follows:
a) films and geological surveying, 1953-r>2: for these snail categories, figures for Yugoslavia as a whole, reounded to billion in place of the more usual million dinars, are given in 3ZS : 3YY 1964, Table 105-2.
Each Republic has been allocated the same share in this total as in the sectoral total at current trices,
b) Industrial branches within Serbia, 1^53-62: the figures available consisted of the constant price valuation of each branch output for Serbia (total), and the totals for the major sector 'industry in each of the three regions (SZS : SYY 1966, Table 203-1 and SZS : SB 3°>3, Table 4). Vvith the current r>rice valuation of output by region and sector as the starting point, the method of biproportional adjustment (Appendix 3) has been applied, to secure two-way consistency with the regional and sectoral totals.

c) Industrial branches in all regions, 1063-64: the total for the major sector 'industry* in each region is given in SZS : SYY 1966, Table 203-1, and for the individual industrial tranches, in Yugoslavia PS a whole, In SZS : 3B 333, Table 4, and 3Z3 : SB 442, Table 4. Again with the current price valuation for social product by region and industrial branch as the starting estimate, the method of biproportional adjustment was applied.
d) Social and private sectors of agriculture and. crafts in all regions, 19^3-64: the constant price valuation for all regions for the major sectors agriculture and crafts is given in 3ZS : SYY 1966, Table 203-1; the constant price valuation of the social and private sectors separately, for Yugoslavia, is fc 'iven in SZS : SYY 1964, Table 105-2 and SZS : SYY 1966, Table 10 "—2. The .~iet'°od of biproportional adjustment was applied to the

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current orice valuation of social product by sector ar.d region to give consistency with these totals.

Gross Investment at Current. Prices
Sources

some figures are published, particular"!..-.-- for recent years, in
both the Statistical Yearbook and the ''onthly Statistical. Bulletin of the National Bank, t^e series used have been obtained from the compilations of the Institut za Ekonomiku Investicija (the Institute for the Economics of Investment), an independent research institute in Belgrade. The publications used sre Institut za Ekonoraiku Iivesticij-? (1964, narts 1, 2 and 4) and Institut za Ekonomiku Investicija (19o2). Both series are brought up to date annually, and the figures for 19 ?3 and 1964 -/ere supplied by the Institute.
All figures refer to {rross investment in fixed assets. Net investment figures and investment in stocks are not presented in the series.
The Institute figures have been used in preference to those from
the Federal Statistical Office and the National Bank because they present
\

a revised and consistent series. In the case of investment in the social sector all three derive their figures from enterprise accounts filed with the SDK, and for recent -'-ears their figures are closely similar. But for the years .before 1958 the Institute have, by going back to the enterprise records, extensively revised and improved the original compilations published by the other tv-o sources. The adjustments made include the elimination of investment naintainance in the years l Q 53-57, the standar-disation of the entire series on the ba.sis of the revised industrial classification and the transfer of enterprise investment in horsing from the sector of the enternrise to housing.

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The figures given for gross investment in the private sector, in agriculture, crafts, housing and rural electrification, derive largely from the work of Vi"ski at the Ekonomski Institut in Zagreb. In piece of the records of financial transactions, surveys were used to guage the increase in the physical stock of assets in these sectors, to which a valuation was then applied.
Additional Estimates
The only omission from the coverage of the series is for private investment in the three regions of Serbia. Methods were therefore devised to allocate the figure for Serbia (total) among them:
a) investment in private agriculture in Serbia, 1953-64: the figures for investment given in the section on agriculture in later issues of the Yearbook (e.g. SZS : SYY 1966, Table 205-30) cover only, monetary ex->en-diture, while much private investment is in 'natural' form. Moreover, the nrop-~>rtional importance of monetary and natural expenditure cm be expected to show systematic regional variation, "/here the level of agricultural development differs as widely as between Vojvodina and Kosmet.
,'iore useful information is supDlied by the -oeriodic Surveys of
Peasant Holdings (SZS : SB 48, 69, 113, 133, 170, 215, 295, 353 and 387) which give investment expenditure, monetary and natural, and income, again monetary and natural, for a sample of households. The ratio of household investment to income for each of the three regions was applied to its SQcial product in the private sector of agriculture, to give an estimate of gross investment. This figure was then take^ as the measure of the relative magnitude of investment in each region and thus its appropriate share in investment recorded in Serbia. i?or the years 1953-"? when only monetary receipts anr] expenditures are known, th^se li^ve been combined

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with the proportions shown in later years between the monetary and natural portions of income.
This method of estimation is obviously very indirect. Deriving from sample survey data, it is dependent for its accuracy on the quality of
the sampling, particularly its stratification between the regions; and in addition, "/here large parts of income and investment are in 'natural'
form, the necessity of imputation is liable to give rise to random variability. The estimates, however, yielded very plausible results; moreover since they have been used not direct]v as estimates of investment but as a basis of allocation for a given total, any error is confined to t 1 e three figures estimated.
b) investment in privste crafts in Serbia, 1953-64: ^he only Retailed information on the private sector of crafts in Serbia derives from the Censuses of Crafts of 1954, 1959 and 1964. These do not give information on investment or capital assets, "but in 1954 and 1959 they include installed electricity capacity and in 1964 the consumption of electricity, (SZS : SB 185 Table 3-2 to 3-5, SZS : SB 423, Table 2 and oavezni Zavorl za 3tatistiku('1958, Tables 1-6)). Investment in each of the three regions has been estimated in proportion to its share in installed electrical capacity or the consumption of electricity. The intermediate years have been estimated by interpolation.
c) investment in private housing in Serbia, 1953-64: most private invest-ment in housing takes place in agriculture. The Surveys of Peasant Itoldin-s (3Z3 : 313 266, 2°5, 353 and 387) give figures for expenditure on investment in housing, monetary only in 195°-6l, monetary and natural in 1962-64. These v/ere expressed as a proportion of household income and then of social product in the private sector of agriculture in each

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of the three regions to give an estimate of each region's relative level of orivate investment and thus Its share in the total for Serbia. The resulting estimators, however, fluctuated considerably from '-ear to year, making it preferable to adopt an average to apr>ly to e^ch year: Vo:;vodina 35 per cent, Serbia Proper 55 and Kosmet 10 per cent, of the figure for Serbia (total),
d) petroleum v/ithin Serbia: for t Vi e years 1957-59 and 1961 the figure for investment in 'oetroleura in Vojvodina is given as Te?ter than that for Serbia (total) and in 1962 ?nd 19^4 ?s less, although the petroleum industry of Serbia was located exclusively in Vojvodina. The only substantial discrepancies are those for 1959 and 19^1. Two possible sources of the discrepancies suggest themselves: in the series for employment a classification discrepancy is noted between petroleum and construction (SZ3 : SB 310, note to sector 113), v/hile the r>ure activity compilation of output for petroleum and chemicals in Vojvodina differs considerably from that by organisational princinle. out in the absence of direct evidence on the source of the discrepancy, the figure for Serbia has been adopted for Vojvodina also, with a compensating adjustment to miscellaneous.
e) investment in the social sector of agriculture, 1954-56: in the .years 1954-56 soirie investment in the private sector of agriculture iv-s financed from social funds and double-counted into both social end private investment. Here it has been retained in the ->rivate sector, as contributing to output there, and deducted from the series for social investment. The amounts were, however, available for Yugoslavia only, while for the Republics they v/ere included with the p.nounts allocated to housin~ under a similar arrangement. The allocation of the Yugoslav

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among the Republics was made on tv/o alternative hypotheses,
(i) that its distribution between agriculture and Mousing " r as tbe same
in each Republic as in Yugoslavia and (ii) that it represented the same proportion of tot: .1. investment in private agriculture in each Republic
as in Yugoslavia. fortuitously, the estimates on hypothesis (ii) as - r ell as (i) totalled to the known figure for Yugoslavia, although varying among the individual Republics. The two sets of estimates were therefore averaged. 7or the three regions of Serbia, method (ii) alone could be used.
f) other private investment: it should be noted that no estimates are included for investment in the private sectors of construction, commerce and transport, although their output is included in the social product and national income series.
g) net investment: net investment has been derived by the deduction from gross investment of amortisation, obtained from the series for social product and national income.

Gross Investment at Constant Prices
Sources

The Institut za Ekonomiku Investicija compile and publish a series
for investment at constant prices, parallel with their series at current prices. (Institut za Ekonomiku Iivesticija (19^4, parts 3, 4) (1962)); these however could not be used directly, being at -^rices of 19^2 -hiie the constant price valuations of social product and nation?.! income .-.re at prices of I960. A nev" series has therefore been calculated from the current -nrice valuations and a set of orice indices compiled by the Institute,

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Compilation
The figures for investment eomnileo by the Institute are broken cown into three components, construction costs, expenditure on equipment and 'other 1, the last comprising ma±nly the cost of see^s in agriculture and of surveying anc1 nlanning in other sectors. The Institute has prepared detailed sets of price indices for each of these, the details being described in Institut va. Ekonomiku Investicija (1964, r>?.rt 1). In the case of construction costs, an index is given for each Republic in the years 1953-62, for each Republic and the ^a,jor sectors in 19o3 and for all regions and major sectors in 1964. An index of equipment costs is * presented for each major sector, with the exception of transport, where separate indicies are given for the six branches. For 'other', separate indices are given for agriculture and other sectors.
^or present nur^oses each of these indices ^as been converter from
the base 1962 to base I960, and then applied to the individual components of investment in the current price series. The conversion of e?ch figure thus involved the application, to each of its three components, of a separate index, often differentiated by sector and region.
'.Then regional indices have not been available for the three regions
of Serbia, the index for Serbia (total) has been applied to each. For private investment in these three regions, calculated as described, above without information on the technical structure, each region has been assumed to represent the same proportion of the figure for Serbia (total) at constant as at current prices.

Employment
Sources

for employ-^nt in the soci'-l sector, by regior -~nd sector,

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are given in SZS : SB 310, for 1953-62, and SZS : SB 394 for the revised figures for 1963 and figures for 1964. For employment in the private sector of agriculture, figures derived from the Po-iu"1 - tion Censuses of 1953 and 1961 have been used (SZS : SYY 1961, Tahle 3^1-12, SZS : 3YI
19 r>4, Table 201-2) and for the private sector of crafts the Censuses of Crafts of 1954, 1958 and 1964 (SZS : SYY 1966, Table 203-1).
Compilation
The figures for employment in the social sector, 1953-55 are the averages from the twelve monthly figures, those for 1956-64 the average of the figures for 31 March and 30 September.
The series have been revised by the Federal Statistical Office, end standardised to the revised industrial classification. They do not, however, strictly follow either the organisational or the Dure activity principle of classification. Until 19-0 a 'territorial nrinciple' was applied, with the district as the accounting unit: vrhere an enterprise had branch-plants located in a different district, these ~ould be classified individually, into a different sector and region from the parent enterprise, if appropriate. After 1961 the sane principle wrs applied, with the commune as the accounting unit; but in vie^" of the progressive consolidation of the com:r>unes, the Federal Statistical Office (SZS : SB 310, methodological introduction) co-merit th-?.t the change has
no significant effect on the comparability of t'°e figures. The point of difference, again probably of minor importance, is between the 'territorial 1 principle in the employment figures and the 'or.gpnn.s?tional f principle in the output figures.
Adjustments
The follov;i-'2 adjustments have been ro

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?) communal activities: to give r -repter comparability v/ith the output series, employment in non-productive parts of this sector (housing services)
•;

has been excluded. For 1953-55, where figures are not given, they have been estimated by extrp.pole.Mon.
b) social sector of crafts: employment in 'craft services', -vhich are non-productive, has been excluded. Figures for 1953-55 have been
estimated "by extrapolation.
c) private sector of agriculture: figures for 'employment' in the private sector, by excluding t: e self-employer1, give totally ina^equate estimates of the numbers involved, and the active population is counted only at the periodic censuses. Prom the census figures for active po'oulction in agriculture in 1953 and 19^1 employment in the social sector has been deducted and the remainder assumed to represent the active population in the private sector. The figures for 1954-50 a id 1-62-64 ^ve been calculated by interpolation and extrapolction, and rounder to the neprest hundred.

d) private sector of crafts: t'-e Censuses of Crafts yive figures for employment in the private sector of crafts in 1934, 1°59 and 19S4, for all regions. The other years h?ve been calculated by interpolation.

Population
Sources

3ZS : 3YY 1964, Table 204-1, SZS : 3YY 196v, Table 201-2.
Compilation
These estimates for t v e mo-year population are prepared by the
Federal Statistical Office on the basis of the results of the periodic population censuses, and the registration of births, deaths and migration abroad. The population is recorded by region in the censuses according

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to place of ^ermanent residence.

A small number of discrepancies have been noted among the series
for output, investment and employment :
In Slovenia, ship-building records no gross investment in the years 1953- 62 arid. 1964, while output is recorded in the current ^rice series in each year except 1953 and 1956, and in the constant price series in each year except 1953; employment is recorded in every jpiear.
In Vojvodina, petroleum records no output in the constant ^rice series for the years 1953-55 (i.e. no output is recorded for oerbia) but output at current trices. The paper industry records no investment between 1955 and
4

1959, output but no employment in 1956, no output but employment in 1957-58, no output or employment in 1959, and emplo/'ment vdt'n no output in 1960-62.
In Bosnia-IIercegovina electrical industries record output at constant "but not current prices, and no employment, in 1^56, while rubber out nut is recorded at current but not constant r>rices in l q ^?.
In Macedonia output in the electrical industries is recorded at constant but not current -orices in 1^53.

The following misprints also come to light:
Social product at current nrices:
1958 Croatia textiles 39 267 corrected to 38 267 (SZS:SB 228, Table 2-45) 1959 Kosmet total 51 108 " " 51 031 (3ZS:3YY n^3 Table 203-1 a/'d later issues'
19^-3 Bosnia-Kercegovina non-ferrous metals 3 379 corrected to 3 339 (3Z3:3YY IP 6 5 Table
203-7)
National 1. ico^.e at current prices:
1956 Macedonia non- "errors metals 2 713 corrected to 2 ^73 (SZS:3B 228, Table 2-46)

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I960 Serbia (total) total 1 055 267 corrected to 1 005 ?6? (3Z3:3YY 1Q63, Table 203-1 a.-nri later
i ssue s)
1963 Vojvocina tobacco nil corrected to 713 (3Z3: 3YY 1065, Table 203-8) films 713 " " nil

Gross investment at current trices:

1956 Yugoslavia non-ferrous metals 1 0-7 corrected to 1 097
(Institut za ^k^-niku Investi-
cije (196/t, ^.54)).

Employment:

1958 Vojvodina chemicals 1 990 corrected to 1 ^20 (3Z3:SB 310, Table 2-18)

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3 : The Method of L.'.-roportional Ad.1ust'..ent

This method has been devised to estimate individual figures by
region and sector in situations where the regional and sec tore 1 totals are known, but only approximations for t: ~e individual elements which are to sum to these totals. It is an adaptation of the HAS method developed
for the Cambridge Growth Project by Stone and Brown (19^2) and Bates and Bacharach (1963), as an alternative to the assumption of fixed technical coefficients for the estimation of a given-year input-output coefficient matrix, from a base-year matrix and the given-year Vector of gross outputs. Some of the formal properties of the RAS method are established by Bacha.rach (1965).
For any year, the two-way classification of dat~i by region and sector constitutes an mxn natrix A(i,j), i'~e elements a(i,j) of - T hic^ refer to the output (or other economic quantity) of the i-th sector in the j-th region, and

where u(i), the marginal row-total, is the national output of the i-th sector and v(,j), the marginal column-total, is total output in the j-th region. The problem is, given u*(i) and v*(o) as the required sectoral and regional row and column totals, to estimate the matrix A*(i,j). It is assumed the A*(i,j) is ' biproportional' to A(i,j):
a*(i,j) = r(i) a(i,j) s(j) -"here r(i) and s(j) are factors multiplying the i-th row and j-th column of A, and
) = u*(i)
i

The derivation of r(i) a(i,j) s(j) involves a sequence of T iterations, where, in any iteration t

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u*(i) and s(j,t) = v*( .1)

The convergence of the iterative process and the uniqueness of the solution are proved by Bacharach (1965).
This method has been applied, in modified form, to the Yugoslav data.
The marginal regional and sectoral totals, being derived from different compilations, were not normally fully consistent, thus making it impossible to achieve convergence. The iterative process was, therefore, watched at each stage and the process terminated when approximate consistency was achieved. At most three iterations were required to yield discrepancies of less than 2 per cent, often very much less than this, in all but a very fev/ individual totals.
The adjustment process bears an economic interpretation. Its most extensive use was for the conversion of the current r>rice valuation of output to constant prices, with given totals for regional output and the national output of t: e individual sectors. The bipro ^ortional method treats the adjustment as comprising two components, a sectoral ^rice effect and a regional price effect, each element a(i,j) being adjusted
by r(i), the average price change applying to the i-th sector, across all regions, and s(j), the average price change applying in the j-tb region to all sectorso

The advantage of the use of this method is that it makes tbe maximum
use of the. information available, t v e initial elements (e,^. the current-price valuation) and both sets of marginal totals, whereas the adoption of the elements derived by simple proportiorality from either t->e regional or tJ>e sectoral totals and not siuni. •• to the second total ?/ould involve discarding the information contained in the second total and thus the further component in the over-all ef.-ect.

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•r : Notes to Tables

The following abbreviations are used throughout:
SZo : Savezni Zavod za Sf-atistiku (Federal Statistical Office)
SYY : Statisti6ki GodisnjaJ. Jugoslavije (Statistical Yearbook of Yugoslavia)
SB : Statisticki Bilten (Statistical Bulletin)

Table
1-1 Sources : SZS : SYY 1966, Tables 203-3, 201-2
SZS : SYY 1964, Tables 203-3, 2^4-1
The social product figures for 1953 have been adjusted for investment maintainance, as described in Appendix 2.
1-2 Sources : SZS : SYY 19-66, Tables 203-3, 201-2, 203-7, 208-1
SZo : SYY 19-4, Table 2^1-2
323 : SYY 1961, Table 301-12
SZS : SB 394
The numbers employed in the private sector of agriculture have been estimated by extrapolation of the census figures for 1953 and 1961,
as described in Appendix 2.
1-3 oources : SZS : SYY 1964, Table 201-2
SZS : 314, Table 2-2
SZ3 : SB 368, Tables 1-1, 2-1 to 2-9
1-4 Source : SZS : SYY 1945-64, Table 5-5
1-5 oources-: 3ZS : SYY 1945-64, Tables 5-15, 3-23
1-6 Sources : SZS : 3YY 1945-64, Tables 5-15, 3-23
Institut za Ekonomiku Investicija (1°64, p-?rts 3, 4)
The figures in the various columns c-ve slightly non-conrosrable;
oi.itpi.it figures are net and investment figures ^ross, the corresponding

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categories be in" unavailable; '-he social product "inures cover t' e social and private sectors, the investment f:' r 'ures the social sector only; the shares in national income ••rf valued fro^ I960 prices, the shares in in^est^ent from 1962 nrices.
2-1 Sources : Narodna Banka : lUesecni Statisticki Bilten, issue no. 2 of each year: 1965, Table 41
1964, Table 36
1963, Table 27
1959-62, Tables 19, A20-A22, A37-A39
1958, Tables 18, A19-21, A36-38
1957, Table 29
1956, Table 42/4 in typescript supplement.
Figures from these sources contain a large number of minor discre-pancies, not of sufficient size to affect the percentage calculations, Investment maintainance, as calculated above, has been deducted from total and. enterprise investment, 1953-57.
The 1963 figure excludes the special federal allocation of 61.4
billion dinars ror the reconstruction of Skopje.
'Other investment funds', for housing, schools etc. are include^ in budgets.
2-2 Sources and adjustments are as for Table 2-1.
The figures for investment in housing 1953-54 are not available.
In 1953-54, before the reorganisation of local government, districts
and comriunes were not separate units.
2-3 Sources and adjustments are as for Table 2-1.
2-4 Sources : Institut za Ekonomiku Investicija (1964, part 4), (106.2) The conversion to constant nrices is ^escribed in Appendix 2.

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4-1 Sources : Institut za Ekonomikii Investicija (1^54, parts 2, 4), (1962) SZS : SYY 1966, Table 203-3 3ZS : SYY 1964, Table 203-3 Investment maintainence has been deducted from social product and amortisation 1^53-57, as described in Appendix 2.
4-2 Sources : Institut za Ekonomiku Investicija (1964, ^arts 2, 4), (1962) SZS : SYY 1966, Table 201-2
SZS : SYY 1964, Table 204-1
4-3 Sources : SZS : SYY 1966, Tables 203-1, 203-2, 201-2
SZS : SYY 1964, Table 204-1
4-4 Source : SZS : SYY 1966, Table 203-1
4-5 Sources : Institut za Ekonomiku Investicija (1964, parts 2, 4), (1962) SZS : SYY 1966, Table 203-3
SZS : SYY 1964, Table 203-3
Investment maintainance has been deducted from social product, 1953-
57, as described in Appendix 2.
4-6 Sources : Institut za Ekonomiku Investicija (1964), (1962)
SZS : SYY 1966, Table 203-3
SZS : SYY 1964, Table 203-3
Investment maintainance has been deducted from social product and. amortisation 1953-57, as described in Appendix 2.
4-7 Source : SZS : SYY 1966, Table 203-1
4-8 Source : SZS : SYY 1966, Table 203-1
4-9 Sources : SZS : SYY 1966, Tables 203-1, 201-2
SZS : SYY 1964, Table 234-1
4-10 Source : SZS : SYY 1966, Table 203-1
4-11 Sources : SZS : SYY 1945-64, Tables 4-13, 4 SZS : SYY 1955, Table 5-22

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The sources and compilation of the employment figures are r -iven in A^endix 2. Unemployment figures for Serbia Proper, Vojvodina and Kosmet are not available for 1953, and the figure for Serbia has therefore been allocated in proportion to each region's share in unemployment in Serbia in 1952.
4-12 Sources : SZS : SYi' 196S, Table 203-1
The sources and compilation of the employment figures are given in Appendix 2.
4-13 Sources and compilation of figures for social product at constant •prices by region and sector, and employment by region and sector are described in Appendi.v 2.
4-14 Sources : SZS : SYY 1966, Tables 203-3, 201-2
SZS : SYY 1964, Tables 203-3, 204-1
Institut za Ekonomiku Investicija (1964, pa^rts 2, 4), (19&2)
Investment maintainance has been deducted from social product 1953-
57 as described, in Appendix 2.
4-15 Sources : SZS : SYY 1965, Table 221-1
SZS : SYY 1961, Table 320-1
SZS : SYY 1945-64, Table 19-14
Organisation for Economic Cooperation and Development (OECD) (1965), Table 34.

OECD, for the enrolment rates, quotes the Yugoslav Federal Planning office. Following the OECD convention, the figures refer to the school year ending as quoted, i.e. 1953 refers to the school year 1952-53. The enrolment rates are given as a •nercenta-e of the children in the a^e-r;roup S-15 years which, since Yugoslav children may begin school at a~e 7, tends to overstate the enrolment rate.

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5-11 As Table 5-1
5-12 As Table 5-3
6-1 Sources and compilation of social product st constant -orices by region and sector are described in Appendix 2.
6-2 As Table 6-1
6-3 Sources : SZS : SYY 1966, Tables 203-3, 203-1, 201-2
SZS : SYY 1964, Tables 203-3, 204-1
SZS : Indeks, nos. 2-3, 1966 Social oroduct at current ^rices in 1953 has been corrected for investment maintainance, as described in A^nendix 2.
The price index for ship-building has been taken as the s^.^e as for metal manufactures, for transport from t'^e cost of living index and
for printing, miscellaneous and crafts as for industrial prices in general.
6-4 Sources and compilation of social product by region ?• nd sector at constant prices, and investment by region and sector at constant
prices are described in Appendix 2.
A-l Sources : SZS : SYY 1966, Tables 203-3, 201-2
SZS : SYY 1964, Tables 203-3, 204-1
The social product figures for 1953-57 h?ve been corrected for investment maintainance, as described in Appendix 2.
A-2 Sources and compilation of social Drocuct by sector and region at current prices an^1 employment by sector and region are described in Appendix 2.
A-3 Sources and compilation of social product by sector and region at current ^rices are described in Annendix 2.
A-4 Sources : SZS : SYY 1966, Table 20>3
SZS : SYY 1964, Table 203-3

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Institut za Ekonomiku Investijica (1964, ?arts ?, 4), (1962)
Investment maintainance has been deducted from social product in
1953-57, as described in A^Dendix 2.
A-5 Sources and compilation of investment by region and sector at current prices are described in Appendix 2.
A-6 Sources and compilation of social product by region and sector at constant prices, and employment by region and sector, are described
in Appendix 2.

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