REDUCING REGIONAL INCOME DIFFERENTIALS WITH CAPITAL TRANSFERS IN THE SELF-MANAGEMENT ECONOMY: YUGOSLAVIA, 1947-1965

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Yugoslavia has become known as an "economic laboratory" with frequent and radical economic experimentation. In two decades, this socialist nation has moved from a centralized "command" economy to a decentralized economy with market orientation. Simultaneously the philosophy of worker self-management evolved, resulting in worker participation in the basic decisions of each enterprise. The new system which emerged is an extraordinary combination of socialism, worker's management, and the marketplace. This experimentation makes Yugoslavia an important case study of regional development. Perhaps the most interesting aspects are the implications of this new type of economic system for regional development. For example, does self-management lead to convergence or divergence of development levels between regions, particularly in a nation with a serious "North-South" problem?

Yugoslavia is an important case study for other reasons. It has made unusually strong efforts to eliminate its North-South development gap. The program to eliminate that gap is quite unique, depending entirely upon capital transfers among regions. Unlike some Western nations, equilibrating labor migration flows were not encouraged nor were they expected, as they are in the United States. Consequently, the Yugoslav "Regional Experiment" seemingly provides an excellent opportunity to gauge the effectiveness of a "capital-only" policy to eliminate regional development disparities. This is the basic subject of the paper.

The first section describes the Regional Experiment and the criticism it generated. It also includes an initial assessment of the program and its alleged failure. However, a complete assessment requires a thorough understanding of all of the polarization and trickling-down effects which operated in Yugoslavia and their interaction with the experiment. These effects are examined in the second section. Because of its importance, the third section focuses upon the polarization effect of "regional implosion," the increasing fragmentation among the regions which occurred prior to 1965. With this background, the paper ends with an assessment of the Regional Experiment.

I. THE YUGOSLAV REGIONAL EXPERIMENT, 1947-1964

From 1947 until the 1965 Reform, Yugoslavia made massive reallocations of investment funds from its developed to its underdeveloped republics.[1] Seemingly the redistribution amounted to the most ambitious regional program that a country has undertaken, at least in relative terms.

THE REGIONAL EXPERIMENT: BACKGROUND AND DESIGN

The income disparities between the Northern and Southern republics

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have been the principle motivating force behind the regional policies maintained since 1947. See Table 1. Slovenia, the richest republic, had a level of per capita income in 1947 (1964) that was 2.3 (2.8) times that of the least advanced republic, Montenegro. The gap is even larger--3.2 (5.5)--if the comparison is between Slovenia and the autonomous Serbian province of Kosovo, which has twice the population of Montenegro. These appreciable disparities in per capita income levels have persisted throughout the period. By comparison, the Far West in the United States had a per capita income level only 1.8 times that of the least fortunate region in 1957, the Southeast.[2] Differences in development are also evident in the data on per capita fixed assets (capital) shown in Table 3.

Table 1. Indices of Per Capita Income and Product by Republics

Area	Indices (Yugoslavia = 100) Per Capita Income (1) 1947[a]	Per Capita Income (2) 1964[b]	Product per Worker in the Social Sector (3) 1964[b]
More Developed			
Slovenia	162.7	189.3	121.5
Croatia	107.9	120.1	103.4
Less Developed			
Bosnia-Hercegovina	78.8	67.4	88.6
Macedonia	68.6	76.6	78.7
Montenegro	71.1	67.3	101.6
Serbia	96.8	91.6	96.6
Kosovo	50.4	34.3	86.2

[a]Source: Mihailo Mladenović, "Post-War Development in Economically Underdeveloped Republics and Areas," Yugoslav Survey, Vol. VI, No. 21, April-June, 1965, p. 2995.

[b]Source: Statistički Godišnjak, Vol. XIII, 1966.

There are a number of strategies which could have been used to reduce the income disparities, but the strategy chosen was the simple one of central taxation of enterprise income and the redistribution of these funds to the impoverished areas. These funds were used primarily by enterprises for ordinary investment. While labor migration flows were not discouraged, neither were there provisions to encourage migration. Evidently, the basic assumption was that the ethnic homogeneity of the various republics was to be preserved. Migration was also constrained by the severe housing shortage which existed everywhere. In any event, capital flows substituted for migration flows.

The ease with which funds were reallocated regionally was made possible by the existence of the Central Investment Fund. Throughout the period of the Regional Experiment, slightly more than one half of all Yugoslav investment was financed by this Fund.

The specific devices used to redistribute funds differed over the period. During the 1947-1952 period, outright investment grants with no obligation to repay were used. After this period, these grants were still heavily relied upon, but their importance diminished. Sometimes the interest rate to firms in the underdeveloped areas was set lower than to firms in the developed areas. Frequently, the firms did not have to pay interest paid on investment loans were ceded to the underdeveloped republics to be used again for investment. Also, where loans required participation funds by local interests in the developed republics, those in the underdeveloped republics often were permitted to forego this requirement.[3]

The extent of investment redistribution was dramatic. First, in terms of investment in the social sector as a fraction of Social Product, the underdeveloped Bosnia, Macedonia and Montenegro enjoyed investment rates in excess of the Yugoslav average.[4] See Table 2. Developed Croatia and Slovenia were below average, while Serbia was slightly above average. The

Table 2. Regional Investment as a Percentage of Regional Product

Area	Regional Gross Investment as a Percentage of Regional Product, 1952-1964[a]
Yugoslavia	
More Developed	
Slovenia	25.1
Croatia	24.9
Less Developed	
Bosnia	33.4
Macedonia	36.3
Montenegro	77.9
Croatia	24.9

[a]For the socialist and private sectors combined.

Source: Various issues of Statistički Godišnjak

case of Montenegro is more startling, since it had a rate of investment equivalent to 78 per cent of her Social Product! Second, while investment funds were reallocated to only the socialist sector of the economy, the flow of funds was large enough to boost the growth rates of fixed assets in the total economy (social and private) of the underdeveloped republics above that of the developed republics.[5]

The evidence is clear. The flow of funds for investment from rich to poor republics was sizeable.[6] Investment rates in the underdeveloped republics were very high, surpassing rates these areas would have been able to sustain on their own.

THE RESULTS OF THE EXPERIMENT

Dissipation of the Gains - The description so far has been incomplete, having ignored the consequences of Yugoslavia's hovering near the upper bounds of underdevelopment. As such, she is characterized by dualism, the coexistence of modern and traditional sectors. The traditional sector which is concentrated in the underdeveloped areas, has acted as the development economist would expect: population growth rates have been very high. While the socialist sector of the underdeveloped areas had improved, the consequence of population growth was that the per capita gains in investment, fixed assets and income were dissipated.

The structure of new investment per capita and fixed assets (capital) per capita appear in Table 3. Of the poor republics, only Montenegro had more investment per capita than the Yugoslav average. Nevertheless, by 1960 that republic still had fewer fixed assets per capita than the national average. All of the underdeveloped republics gained very slightly on the Yugoslav average of fixed assets per capita, but then so did the more developed

Croatia and Slovenia. Serbia's loss, due in part to rapid population growth in Kosovo, was the offsetting element.

Table 3. Indices of Undepricated Stock of Fixed Assets and New Investment, Per Capita (Yugoslavia = 100)

	(1) Undepreciated Stock of Fixed Assets End of 1946	(2) New Investment 1947-60	(3) Undepreciated Stock of Fixed Assets End of 1960
Yugoslavia	100	100	100
More Developed			
Croatia	124	129	126
Slovenia	179	191	183
Less Developed			
Bosnia and Hercegovina	60	97	72
Macedonia	61	75	65
Montenegro	60	138	85
Serbia	93	78	88

Source: Ivo Vinski, "Regional Growth of Fixed Assets in Yugoslavia, 1946-1960," Regional Science Association Papers, XII: Lund Congress, 1963, p. 138.

The structure of per capita income (Table 1) shows the extent to which relative gains in income were dissipated by population growth. While Macedonia did gain on the 1947 Yugoslav average, Slovenia gained relatively on each of the three underdeveloped republics, while Croatia gained on two and held even with the third. [7] The widening of the income disparities was a major factor in the assessment that the Regional Experiment had failed. [8] But the popular assessment is open to question.

The persistence of the income disparities is misleading in the evaluation of the program because the capital reallocations were directed toward the socialist, modern sector only while the traditional sector was neglected. Without population control measures or rising income in the traditional sector, rapid population growth in the traditional sector meant that growth in average per capita income was retarded. It is important to observe that GNP did grow faster in the underdeveloped areas. Taken together, GNP in the three underdeveloped republics was 3.4 times larger in 1965 than in 1952. The comparable figure for Croatia and Slovenia is 2.9. Also note that the differences between the republics in terms of output per worker within the socialist sector (Column 3, Table 1) are smaller than the differences in per capita income for the total economy (socialist and private sector combined, shown in columns 1 and 2 in Table 1). Indeed, this fact led those in the Southern republics to argue that more funds were needed, not less. Furthermore, some of the differences in product per employee in the socialist sector might be due to lower efficiency in the South, but the development economist would expect (and want) income per employee to be lower in the South because of its substantial labor surplus.

Criticism of the Experiment - In addition to citing the persistent income disparities, critics charged that the Regional Experiment had reduced national growth because investment in the underdeveloped areas was relatively unproductive. Four arguments were offered in support of this contention.

First, it was suggested that investment in these areas was relatively unproductive because labor was less educated and less skilled. Second, there was the observation that economic overhead capital was inadequate. Third, there was the frequent criticism that in the underdeveloped areas, investment was undertaken with no regard to effective demand, resulting in excessive capacity underutilization. Fourth, criticism stemmed from the creation of "political factories," the location of firms for political rather than economic reasons. These "political factories" resulted from the natural desire of every locality to share in expansion. The resulting widespread dispersion of industry allegedly reduced capital productivity.

The fourth (dispersion of industry) argument had several facets. First, the dispersion of industry was economically excessive if firms were too small to realize economies of scale.[9] Secondly, if agglomeration economies are critical to the development process, dispersed investment in the underdeveloped areas reduced growth. Thirdly, the creation of "political factories" meant that location was uneconomic. Too frequently new investment was placed in areas incapable of utilizing the full capabilities of the investment. Supplies of inputs were often inadequate; transportation to markets and from input sources was inadequate, etc. While these problems were common to all of Yugoslavia, they were especially prevalent in the underdeveloped areas where the relative volume of investment was greater and where the prerequisites of growth, especially social and economic overhead capital, were in the shortest supply.[10]

<u>Capital Productivity in the Underdeveloped Republics</u> - There is overwhelming evidence supporting the critics' position that capital was less productive in the underdeveloped areas. Cost-benefit analyses of new projects indicated this. The lagging areas did have markedly higher marginal capital-output ratios than the advanced areas. Surprising, the marginal capital-output ratios for the underdeveloped areas show no improvement over time, even though there are at least four reasons for believing that the underdeveloped republics might have been competitively productive in the use of capital by the time of the Reforms.[11]

First, aid had been forthcoming for nearly two decades: its cumulative impact ought to have been quite favorable. A modern sector was created in Macedonia, for example, where none had existed before. Second, while the required social overhead capital and a skilled labor force had not been present when the new investment began to flow in, they developed simultaneously. By 1965, the skill and educational levels of the workers in the socialist sector in the South matched that of the North. Third, due to higher ivvestment rates, capital vintage was less in the poor areas. Fourth, the underdeveloped areas have had comparatively high ratios of labor to capital. According to the Law of Variable Proportions, this raises the marginal productivity of capita in the underdeveloped areas above that of the developed areas.[12] Coalescence of these four factors implies rising capital productivity. This did not happen.

The high marginal capital-output ratios are consistent with the critics' charge that capital was less productive in the South, but it might be incorrect to attribute the Southern differential entirely to capital inefficiency. Two other factors were possibly important. First, the differences in capital productivity might be the result of differences in the structure of production. The South might have more than its share of capital-intensive production. This seems to have been the case within the South's industrial sector.[13] However, one study found that for the socialist sector as a whole (including industry), there are essentially no differences in the structure of production between North and South strong enough to affect the productivity ratios.[14]

Consequently, the structure of production does not seem to be even a partial explanation of the South's higher marginal capital-output ratios.

The second possible, non-efficiency explanation is capacity under-utilization. Indirect evidence of the operation of this phenomenon in Yugoslavia is provided by an excellent study which found that the marginal capital-output ratios of each republic improved with the rate of growth of output.[15] The absorption of new capacity was a problem nationwide (recall from Table 2 that the national investment rate was over 29 per cent), but the stronger investment rates in the South along with Southern duplication of Northern facilities suggest that capital underutilization was worse in the South. If so, marginal capital-output ratios were correspondingly higher. The necessary data to directly evaluate this argument are not available.

THE DEMISE OF THE REGIONAL EXPERIMENT

Interregional capital redistribution was reduced in the Reforms of 1965, in part because of the interregional tensions it created. One commentator felt that these tensions were at least the number two issue in the movement culminating in the Reform.[16] The Regional Experiment created tension by emphasizing the political integration aspect. It clearly labeled the donors and recipients. Altogether, it highlighted ethnic and regional differences. Furthermore, the poor areas within the advanced republics either received no aid or received aid at terms relatively unfavorable compared to those granted the underdeveloped republics and Kosovo. For this reason, Croatia and Slovenia felt exploited. Their efforts to weaken the Experiment succeeded with the 1965 Reform.

This is not to say that criticism of regional development policy alone led to the Reform. Rather, the Reform reflected a dissatisfaction with centralized decision-making in general. Decentralization was to be implemented largely by permitting the enterprise to retain and invest on its own a larger portion of income than had been previously the case. Thus, the goal of decentralization would have conflicted with large scale income transfers from developed to less developed regions by means of a central fund.[17] Although a modicum of the previous policy was preserved in the form of the Federal Fund for Crediting Development in Economically Underdeveloped Republics and Areas, other funds were expected to flow to the underdeveloped areas via the market from enterprises and banks from all of Yugoslavia.[18] But was it reasonable to assume these flows would indeed occur despite the failure of earlier efforts to raise capital productivity and income in the underdeveloped areas?

CAPITAL-ONLY: IS IT ENOUGH?

It is tempting to agree with the critics that the Regional Experiment failed. After all, the per capita income gap widened and the marginal capital-output ratio remained high in the South, in part due to capital inefficiency. If correct, this criticism points to the conclusion that heavy doses of investment will do little to correct the North-South problem within periods as short as 15-20 years. However, this criticism is an over-simplification and is perhaps in error. What emerges from analysis of the Regional Experiment is not that a capital-only policy will not work, but that such a policy requires the proper supportive policies on other fronts.

The Regional Experiment would have been more effective if the under-utilization of capital could have been reduced. Stronger attempts should have been made to develop internal and external channels of trade. Excessive duplication of facilities should have been avoided while import substitution was expanded.

Furthermore, the redistributions surely raised per capita incomes in the South above what they would have been, but these gains were masked by the faster growth of population in the South, How the closing of the demographic gap could have been achieved is, however, open to question. It should be noted that during the period of the Experiment, birth rates declined substantially in both developed and underdeveloped regions, but the South maintained its differential.[19] It is therefore uncertain whether regionally undifferentiated population policies would have succeeded in narrowing the birth rate gap.

Finally, evaluation of the Regional Experiment must be put in the proper perspective. The Experiment was only one of several factors affecting the development gap. The widening gap might have been due to the operation of these other factors. Two of these factors have been mentioned already: population growth and underutilization of capital. The next section of the paper discusses a number of other factors and whether or not these other factors reinforced the Regional Experiment. These are described in terms of polarization and trickling-down effects and include the impact of the new economic system upon regional development.

II. POLARIZATION AND TRICKLING-DOWN AMONG THE REPUBLICS

Yugoslavia lacks some of the polarization effects which are normally associated with underdeveloped nations that have a serious North-South problem.[20] First, it has avoided the usual polarization effect of the northward migration of the more productive Southern workers. The social, in particular the ethnic, distances among the major areas is so great that migration of labor of all types is negligible. Second, unlike the usual case, Yugoslavia has not had monetary policies which retard Southern development while encouraging Northern growth. For most of the pre-Reform period, the money supply was extremely elastic, expanding automatically to meet the needs of local enterprises in all areas.[21] The money supply frequently was expanded so as to meet the deficits of floundering enterprises which were especially concentrated in the underdeveloped regions. Third, Southern industrial development was not blocked by Northern industry. Because of the political strength of the South, rapid industrialization occurred, even to the extent of duplicating industrial facilities in the North.

On the other hand, some of the traditional forms of polarization were present. The system of exchange rate determination did work against the South. The exchange rate system was designed to protect industry and the North was more industrialized.[22] Furthermore, there is some indication that pricing schemes favored the more industrialized North over the more agricultural, less industrialized South.

While Yugoslavia had only some of the polarization effects, development levels nevertheless did not converge because the county lacked important trickling-down effects. For one, labor of _all_ types did not migrate northwards, as previously mentioned. An important equilibrating mechanism for restoring regional balance did not function. Nor were there equilibrating flows of capital to the South, aside from the funds involved in the Regional Experiment. For most of the period of this study, _direct_ investment by North ern firms in the South was essentially an impossibility. First, government at all levels claimed a very high fraction of the firm's income, leaving the firm with a small amount of funds for discretionary purposes such as investment. Second, local and regional government officials controlled the development of industry. Northern firms were permitted to co-operate with Southern industry, but could not invest directly in their own plants nor manage the plants without interference from local officials.[23]

But even without these constraints there would have been little direct investment. This is to be expected and the reasons are inherent in the nature of the self-management economy. One consequence of this form of management is that workers are afraid of losing control of their enterprises. Investment in a new plant in another region such as the South represents a dilution of control which could have undesireable consequences to the workers in the North. It is doubtful that the Southern branch could pay wages substantially below the wages in the Northern plant: some form of income redistribution is likely. The wages of the Northern workers could ultimately be lower than initially. In any case, the Northern workers would have given up the property right of determining their own income.

Another feature of worker management which tends to retard interregional investment by firms, is the optimization goals of the enterprise. Some argue that the goal of the Yugoslav firm is to maximize income per worker.[24] In this case wages are not a cost, so even with lower wages in the South, there is no incentive for the Northern firm to invest in the South unless non-wage factors enter in. Compare this case with the profit-maximizing capitalist firm which will invest in the Southern low wage area, *ceteris paribus*, in order to lower costs.

On the other hand, there are those who suggest that the goal of the firm is to maximize profits per worker, not income per worker. By investing in a Southern plant paying low wages, ostensibly the Northern firm might increase the profits per Northern worker. However, it is doubtful that this situation would be tenable. Again, pressure for redistribution would be strong and the Northern workers could be worse off after the establishment of the Southern plant.

These two factors--dilution of control and the goals of the worker-managed enterprise--suggest that in a worker self-management economy, firms and investment are not attracted to low wages areas per se. If so, Yugoslavia lacks an important trickling-down mechanism. It is important to note that the Reforms eliminated many of the constraints on interregional investment, yet there has been little direct investment by Northern firms in the South, as expected.

There is another set of factors which contributes significantly to polarization. This set is grouped under the rubric "regional implosion," the tendency of regions to act as separate economic nations with few economic linkages.

III. REGIONAL IMPLOSION: SOCIALIST MERCANTILISM

Until the 1965 Reforms, regions within Yugoslavia increasingly behaved as separate economic nations. A number of factors contributed, with most having the common theme of economic mercantilism.

Regional implosion among the republics was partially the consequence of the Yugoslav economic system. The system is characterized by financial fragmentation. No financial markets existed until very recently and these are still rudimentary. Firms with excessive funds have not been able to channel them to firms experiencing a shortage of funds. The only financial channel has been the banks and most of their activity has been "downward," distributing funds from the central government to local firms and government agencies. For most of the pre-Reform period, banks were entirely regional in operation. Each of the republics had its own bank, with minimal connections with banks in other republics.

But regional implosion was also the consequence of economic rivalry among the republics. Mercantilistic attitudes prevailed. Thus, each republic had to have its own steelmill, even though the capacity of one steel plant equalled the combined, actual production of all 12 producer in the nation! For the same mercantilistic reasons, there were six film industries in Yugoslavia--one for each republic. There are other examples, all leading to the inescapable conclusion that unnecessary regional duplication reduced the possibilities of regional specialization with its attendant advantages.

Furthermore, each republic had its own counterpart of the "Buy American" policy. While there was trade among the republics, causal inspection of the stores and magazines during the pre-Reform period left the impression of strong preferences in each republic for the products of that republic. One writer reports the transfer of the entire management of an enterprise which made the mistake of buying materials from an enterprise in another republic.[25]

Mercantilism at the level of the republics took other forms. Local officials would not permit enterprises from other republics to establish a branch plant. Nor were retail and wholesale outlets from other "nations," i.e., republics, permitted to open.[26] Actually, the mercantilistic behavior of local officials was directed to all outsiders, including those from within the same republic. Laws and regulations were sometimes passed outlawing the sales of similar products from "competitive" localities. For example, one area permitted only the locally-produced cigarette to be sold in the stores. Producers of intermediate inputs occasionally were forbidden to sell outside the locality. Sometimes local firms had to diversify, producing a wise range of products for local markets, rather than specializing in production for regional exporting. Thus mercantilism at the level of the republics was reinforced by mercantilism at the level of the localities.

Not only did mercantilism reduce the possibilities of regional specialization, but it also reduced the spillovers of growth from one republic to the other. The Northern firm found it difficult to invest or find market outlets in the underdeveloped republics. The Southern firm found itself cut off from the richer Northern markets in the same way. Because of these factors, Northern growth could not trickle-down to the Southern republics and North-South polarization was reinforced. This also meant that Southern investment financed by the Regional Experiment had minimal indirect interregional trade multiplier effects upon the North.

IV. CONCLUSION

The Yugoslav Regional Experiment was less effective than it might have been. There is strong indication that the program was hampered by the inefficiency of production in the South. Much of the inefficiency seems to have been unnecessary. But the success of the Experiment was also limited by the lack of proper supportive policies. The capital transfers would have been more effective if population growth in the South had been less pronounced. Also, chronic over-investment at the national level coupled with undue duplication of facilities in the South further limited the outcome of the Experiment. These factors contributed significantly to the widening of the disparities in regional per capita income and the persistence of the high marginal capital-output ratios in the South.

The success of the Regional Experiment was further impeded because polarization effects dominated trickling-down effects. The polarization effect of regional implosion was particularly strong. Also, Yugoslavia lacked two important trickling-down effects. First, labor did not migrate northwards to equilibrate wage levels. Second, direct investment in the South by Northern firms did not take place for a number of reasons.

In conclusion, the Yugoslav Regional Experiment, depending exclusively upon capital transfers, was not a proper test of the effectiveness of "capital-only" in eliminating regional income differentials. The program did not receive the proper supportive policies while powerful influences creating further polarization were at work, reducing the effectiveness of the transfers.

FOOTNOTES

[1]Hereafter, underdeveloped republics include Bosnia, Macedonia, and Montenegro; underdeveloped areas also include the autonomous Serbian province of Kosovo. The developed republics are Croatia and Slovenia, while Serbia is intermediate.

[2]Harvey S. Perloff, et. al., Regions, Resources and Economic Growth (Lincoln, Nebraska: University of Nebraska Press, 1960), p. 27.

[3]For a complete description of the regional programs, see Mladenović, op. cit., pp. 2995-3010.

[4]We shall deal primarily with the socialist sector since the regional policies ignored the private sector. The socialist sector includes all enterprises owned by the state. Since by law no enterprise in the private sector can employ more than five persons, private production is concentrated in agriculture, handicrafts and retail shops. The private sector contributes a little more than 20 per cent of total Yugoslav output.

[5]From 1946-1960, Serbia, Croatia and Slovenia had annual rates of growth of undepreciated fixed assets of 2.7 per cent. Bosnia shows a growth rate of 6.1 per cent. Macedonia is at 5.0 per cent and Montenegro is highest with 7.3 per cent. The source is Vinski, op. cit., p. 130.

[6]While the primary concern here is with redistribution for investment in business enterprises, it is important to realize that there was a strong, general redistribution southwards. Much of this was in the form of grants-in-aid for social overhead investment in schools and the like. This surely supported business investment, at least in the long run. One indicator of the total redistribution is the difference between the federal tax contributions of each republic. One study found that 54 per cent of Slovenian national income went to the federal government in 1952 and 24.7 per cent in 1962. These represent an enormous share considering that Slovenia had only 9 per cent of the Yugoslav population. Croatia's experience seems to have been similar. (See Toussaint Hočevar, The Structure of the Slovenian Economy: 1848-1963, New York: Studia Slovencia, 1965, p. 196.) Significantly, while Slovenia's production per capita (GNP) is three times higher than in the underdeveloped republics, the cash income of the Slovenes is but 20-30 per cent higher! (See Paul Lendvai, Eagles in Cobwebs, Garden City, New York: Doubleday and Company, Inc., 1969, p. 147).

[7]The third region is Macedonia. In every instance, however, Croatia and Slovenia had absolute gains in per capita income over the other republics and Kosovo.

[8]Bombelles, Joseph T., Economic Development of Communist Yugoslavia, 1947-1964 (Stanford, Calif.: Hoover Institute Publications, 1968), p. 113.

[9]George Macesich, "Major Trends in the Post-War Economy of Yugoslavia," Wayne Vucinich, ed., Yugoslavia: An Experiment in Socialism (Berkeley: University of California Press, 1968).

[10]Bombelles, op. cit., pp. 150-154.

[11]Pavle Sicherl, "Regional Aspects of Yugoslav Economic Development and Planning," Separat 74, Institut Ekonomskih Nauka, Belgrade, 1969.

[12]The capital-labor ratios in 1963, expressed as millions of (old) dinars per person employed, were: Croatia, 2.1; Slovenia, 2.7; Serbia, 1.6; Bosnia and Hercegovina, 1.7; Macedonia, 1.4; Montenegro, 1.9; and Kosovo, 1.5. (Source: Statistički Godišnjak).

[13]Kosta Mihailovic, "On the Yugoslav Experience in Backward Areas," in E. A. G. Robinson, editor, Backward Areas in Advanced Countries (New York: St. Martin's Press, 1969), p. 269.

[14]Sicherl, op. cit., pp. 175-177.

[15]Vladimir Franković, Regional Differences in Incremental Capital-Output Ratios: An Economic Model (Ithaca: Cornell University, Department of City and Regional Planning, 1970), p. 119.

[16]Vladimir Bakarić, Borba (March 6, 1966), reported in Rudolf Bićanić, "Economics of Socialism in a Developed Country," Foreign Affairs, Vol. 44, No. 4, July 1966, p. 649.

[17]Centralization before the Reform was possible because of the few degrees of freedom permitted the enterprise in the disposition of its income. In 1959, for example, after wages and depreciation (whose lower bounds were set by decree), only 17.5 per cent of the remaining 54 per cent of income was left to the enterprise for disposition as it saw fit. This amounts to only 9.5 per cent of Yugoslav Social Product, the other 44.5 per cent claimed by the various funds of local, republic or federal governments. The meaning of the Reform is clearest when it is understood that after the Reform, the share claimed by government at all levels fell below 30 per cent, the difference accruing to the enterprise. For a description of the disposition of enterprise income, see Bombelles, op. cit., Ch. 111.

[18]The fund was to be financed by a 1.8 per cent tax on the income of all enterprise. However, conversations with Yugoslav economists disclosed that the actual rates have been much smaller. In addition, the terms under which funds were supplied poor areas are notably less favorable than prior to the Reform. See "Law on the Federal Fund for Crediting Economic Development in Economically Underdeveloped Republics and Areas," Official Gazette SFRY, No. 8, 1965.

[19]In 1953 the crude birth rate in Bosnia and Hercegovina, the largest underdeveloped region, was 38.6 per thousand as against 22.9 for Croatia, the largest developed region. By 1963, the gap was still substantial: 29.7 versus 16.7. See Statistični Letopis Slovenije, 1955 and 1966.

[20]See Albert O. Hirschman, The Strategy of Economic Development (New Haven, Connecticut: Yale University Press, 1958), Ch. 10.

[21]See Branko Horvat, "Yugoslav Economic Policy in the Post-War Period: Problems, Ideas, Institutional Developments," The American Economic Review: Supplement: Surveys of National Economic Policy Issues and Policy Research, June 1971, p. 142.

[22]For a description of the complaints of the underdeveloped republics on this score, see Lendvai, op. cit., p. 143.

[23]Paul Shoup, Communism and the Yugoslav National Question (New York: Columbia University Press, 1968), pp. 239-240.

[24]For description of the operation and goals of the Yugoslav firm, see Horvat, _op. cit._, pp. 99-108.

[25]Shoup, _op. cit._, pp. 243-244.

[26]Shoup, _op. cit._