

**THE POTENTIAL OF SMALL-SCALE INDUSTRY FOR EMPLOYMENT
IN YUGOSLAVIA***

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I. INTRODUCTION

This paper aims at presenting the role of small-scale industry in the industrial sector to increase the industrial sector's ability to efficiently absorb unemployed and underemployed labour in the course of Yugoslav development. The thesis is that if the Yugoslav economy were to develop according to the principle of factor endowment, the size pattern of employment that would emerge in the industrial industry would reveal a relatively larger share of total manufacturing employment in small-scale industry than it actually does. At the same time, such development would also enable the creation of enough employment opportunities so that the employment problem would not have become one of the major problems in Yugoslavia, as it is today.

To evaluate the potential of small-scale industry for employment opportunities in Yugoslavia, the dimension of the employment problem is presented first. What follows is the presentation of the existing dimension of small-scale industry in the manufacturing sector today, its possible prospectives, and instruments for its promotion.

II. THE EMPLOYMENT PROBLEM

The unemployment rate has reached dimensions that cannot be neglected any longer. In 1976, the official unemployment rate was 13.7 per cent compared to 5.1 per cent in 1960 or 4.6 per cent in 1957.

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(Immediately before the war there were 10 per cent unemployed).¹⁾ The present situation is in fact significantly more serious since approximately 1.0 million Yugoslavs have left Yugoslavia during the last decade; for instance, according to the 1971 Census, 672,000 migrants were stated (by relatives at home) to be temporarily abroad in that year. This means that the Yugoslavs left their country because they had to seek employment abroad. To this number, however, should be added those who have already decided to stay abroad, plus those who have been possibly missed by the census, so that the number would have reached approximately 1 million. If the official rate of unemployment, based on the number of persons registered as unemployed, is corrected by those who work abroad, the rate of unemployment increases to 30.3 per cent. A figure of 1.0 million represents about 4.6 per cent of total population and since about 85 per cent are workers, about 16.6 per cent of the domestic force.

The employment problem has been worsening in the course of Yugoslav development, not only on the aggregate level but also on the regional level. At present the unemployment rates of less developed regions when compared to developed regions are not only high in absolute terms but are also higher in relative terms than they were twenty years ago. In 1975, the rates of unemployment in the republics were as follows: Bosnia and Herzegovina 22.2 per cent, Slovenia 1.7 per cent, Serbia Proper 13.6 per cent, Vojvodina 11.2 per cent and Kosovo 23.0 per cent. (Vojvodina and Kosovo are the two autonomous provinces of the Socialist Republic of Serbia). If these provinces are ranked according to level of development, then the order in which they should be stated is the following: Slovenia, Croatia, Vojvodina, Serbia Proper, Montenegro, Macedonia, Bosnia and Herzegovina and Kosovo. The comparison between the ranks of development by regions and the rates of unemployment by regions shows that the greatest unemployment is found in the less developed regions.

With the levels of unemployment being so, especially in less developed regions, the development of small-scale industry in Yugoslavia to maximize employment opportunities in the immediate future, especially in activities where it can achieve a satisfactory level of efficiency with little capital, could be of great importance. Especially so because, as will be shown later in the paper, the policy during the past has been one encouraging the growth of large capital-intensive enterprises. However, capital-intensive techniques are unfavourable to employment.

¹⁾ I. Vinski, "Privredna reforma i zaposlenost" Pregled 6, 1969, 637, in B. Horvat "Analysis of the Economic Situation and Proposal for a program of Action, Separat 148, Institut ekonomskih nauka, Beograd 1973.

III. SMALL-SCALE INDUSTRY — PRESENT SITUATION, FUTURE PROSPECTS, AND POLICY INSTRUMENTS

In this paper the concept of small-scale industry refers to manufacturing carried on in relatively small establishments. Statistically, it is defined here as a productive unit (establishment or enterprise) with no more than 125 employees.²⁾ The period analyzed is from 1959 to 1973 on the regional level. The length of both periods was determined by the availability of data. The end year, 1973, was chosen because the available data for 1974 are not comparable with the previous years. In 1974, due to constitutional amendments, the data on size distribution of employment were collected on an establishment basis and not on an enterprise basis, as they had been collected earlier.

1. Present situation

Small-scale manufacturing in the process of Yugoslav industrialization has too often been regarded as an inevitably backward and lagging part of the economy. On the other hand, too much emphasis has been given to the development of large-scale manufacturing, on the assumption that modern technology demands large-scale operations. This bias towards large-scale manufacturing has resulted in the very concentrated market structure of the industrial sector.

The relative position of small-scale industry and its changing position in the Yugoslav industrial sector in the period 1959-73 are given in Table 1. The emerging size pattern of employment in the industrial sector reveals that small-scale industry accounts for a relatively small share, while medium-size and large-scale industries account for a correspondingly large share of the total manufacturing employment. The period observed shows a declining trend of industrial employment in small-scale industry. From 1959 to 1973, its share dropped by 63 per cent.

The little role of small-scale industry in employment opportunities in the industrial sector is even more pronounced in the social industrial sector alone (excluding private artisan industry), Table 1, column 2. This small share of small-scale industry is not the result of stagnation of small-scale manufacturing but rather of the much faster rate at which medium and large-scale industries have grown during the past. Most large modern enterprises have been set up with direct government support to meet the rising domestic demand for certain commodities.

²⁾ There is no definition of the statistical concept common to different countries. The upper limit varies among countries, usually according to the general conditions of the country concerned: A small scale industry in a highly-developed country with a large market may seem to be medium or even larger scale industry in a small country with a low level of development. For example, in the USA, an industrial firm is officially a "small business" for purposes of government financial and other assistance if it has fewer than 250 employees. Also, measures of size differ. Besides employees, the turnover, value added or assets could be taken as criteria. However the last three measures are not chosen since they are hampered by a valuation problem. A time series comparison is impossible if size classes remain the same (in value terms) over time since inflation will jeopardize the relevance of the frequency distribution of enterprises; in the long run, all enterprises may end up in the highest class. Size measure of the value terms are also inappropriate for international comparison.

Table 1: INDUSTRIAL¹⁾ ENTERPRISES IN YUGOSLAVIA, CLASSIFIED BY SIZE ACCORDING TO PERSONS EMPLOYED, PERCENTAGES, 1959—1973.

YEAR	SMALL-SCALE ENTERPRISES, 1 — 125 EMPLOYEES			MEDIUM-SCALE ENTERPRISES 126 — 100 EMPLOYEES Social industrial sector and social artisan sector	LARGE-SCALE ENTERPRISES 1000 + EMPLOYEES Social industrial sector
	Total industrial sector	Social industrial sector and social artisan sector	Social industrial sector		
	1	2	3	4	5
1959	21.26	14.60	5.8	39.39	39.35
1964	14.55	9.40	3.5	38.20	41.26
1965	13.83	9.25	3.4	38.08	47.10
1966	15.50	9.46	3.3	36.88	47.61
1967	15.76	9.72	3.5	36.78	47.46
1968	15.87	9.71	3.5	36.49	47.64
1969	15.04	8.86	3.2	35.80	49.16
1970	13.04	8.07	3.0	35.19	50.97
1972	12.88	5.91	3.0	35.63	51.48
1973	12.82	7.80	3.0	38.70	48.48

Source: Computed by the author.

1) Industrial sector includes social as well as private and social artisan industry.

On the regional basis, similar trends regarding the share and the changing position of small-scale industry over time are found. The data in Table 2 show a declining trend of employment in small-scale industry in the period 1962-73, which was common to all regions (except Kosovo). A decline in the share of total industrial employment in small-scale industry during the period 1962-73 was the most pronounced in underdeveloped regions such as Bosnia and Herzegovina, Montenegro, Macedonia and Kosovo. As a result, the share of total industrial employment in small-scale industry in 1973 was lower in the underdeveloped regions of Bosnia and Herzegovina and Montenegro than in developed regions such as Croatia, Serbia Proper and Vojvodina.

The observed regional distribution of employment in small industry differs significantly from the expected one. Research on the small-scale industry shows that the relative importance of small-scale industry as an instrument of labour absorption varies according to the level of development. The more developed a country is, the less important is small-scale industry as an instrument of labour absorption. Therefore, one would expect a relatively greater share of employment in small industries in the less developed regions of Yugoslavia.

TABLE 2 INDUSTRIAL ENTERPRISES IN THE SOCIAL SECTOR IN YUGOSLAVIA, BY REGIONS, CLASSIFIED BY SIZE ACCORDING TO PERSONS EMPLOYED, PERCENTAGES, 1962-73

Year	Bosnia and Herzegovina			Montenegro			Croatia			Macedonia		
	A	B	C	A	B	C	A	B	C	A	B	C
1962	4.1	31.8	64.3	10.3	65.8	23.8	4.7	26.4	52.4	9.7	60.6	29.7
1965	2.4	30.1	67.6	7.4	57.9	34.7	2.8	36.6	60.6	6.8	53.1	40.3
1968	2.6	27.6	69.7	4.7	46.9	48.5	3.4	36.0	60.6	5.4	52.8	41.7
1970	1.5	26.8	71.3	3.7	42.9	53.4	3.3	34.5	62.2	4.9	46.2	48.8
1972	1.7	27.6	70.8	3.0	34.4	62.6	3.4	34.3	62.2	4.0	41.7	54.3
1973	1.9	30.3	67.8	2.7	34.0	63.4	4.2	37.4	58.3	5.6	45.5	49.0

Source: The same as in Table 1. to be continued on page 11.

A — represents the share of total industrial employment of social sector in small-scale industries, 1—125 employees

B — represents the share of total industrial employment of social sector in medium-scale industries, 126—1000 employees

C — represents the share of total industrial employment of social sector in large-scale industries, 1000—.

TABLE 2 (continued) INDUSTRIAL ENTERPRISES IN THE SOCIAL SECTOR IN YUGOSLAVIA, BY REGIONS, CLASSIFIED BY SIZE ACCORDING TO PERSONS EMPLOYED, PERCENTAGES, 1962-73

Year	Slovenia			Serbia			Serbia Proper			Vojvodina			Kosovo		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
1962	5.2	48.5	46.2	5.9	44.5	49.6	5.0	36.9	58.1	6.3	61.5	30.4	6.9	58.8	34.2
1965	3.1	44.9	52.0	3.8	39.8	56.3	3.3	34.9	61.7	5.1	54.2	40.6	4.0	37.4	58.6
1968	3.3	47.8	48.9	4.0	37.5	58.5	3.4	32.5	64.1	6.1	54.7	39.1	1.7	33.7	64.5
1970	2.8	40.9	56.2	3.1	35.2	61.7	2.5	29.1	68.5	5.5	55.9	38.6	1.9	32.0	66.1
1972	2.5	40.9	56.6	3.4	36.5	59.9	3.0	29.4	67.7	5.3	57.4	37.3	2.6	41.9	55.5
1973	2.4	39.1	58.5	4.2	43.4	52.3	4.1	38.1	58.0	4.7	48.8	36.5	6.1	46.5	47.5

That the relative importance of small-scale industry as an instrument of labour absorption in Yugoslavia at present is very low can be seen from international comparisons (Table 3). The pattern of employment in the industrial sector (Table 3) reveals not only a significantly larger share of total manufacturing employment in small-scale industry in developing countries but also in countries with

higher levels of development than Yugoslavia. Among the countries compared, the lowest share of manufacturing employment in small-scale industry by industrial branches is found in Yugoslavia. The difference would be even more pronounced if data on enterprises were available.

TABLE 3: SHARE OF SMALL-SCALE INDUSTRY IN MANUFACTURING EMPLOYMENT — SELECTIVE COUNTRIES

COUNTRY	Year	PERCENTAGE OF EMPLOYMENT IN SMALL-SCALE INDUSTRY SIZE OF ESTABLISHMENT ¹⁾ 16 — 125 EMPLOYEES ²⁾
Developing countries		
Brazil	1958	47.4
Ecuador	1965	57.7
Iraq	1969	49.1
Japan	1951	60.6
Pakistan	1965	30.4
El Salvador	1961	55.3
Developed countries		
Australia	1968	55.8
Canada	1968	46.1
Denmark	1970	46.5
France	1962	50.9
Great Britain	1961	31.2
Italy	1971	54.8
Japan	1972	56.1
Sweden	1968	51.2
U.S.A.	1967	37.3
YUGOSLAVIA	1963	23.6

Source: Computed by the author

Several reasons could be stated as to why a significant shortage of small-scale industry exists in the Yugoslav industrial sector. However, it is the author's opinion that they can all be summarized by the following two theses. First, Marx's thesis about the relation between the scale and efficiency. According to him "the cheapness of commodities depends, *ceteris paribus*, on the productiveness of labour, and this again on the scale of production. Therefore the larger capitals beat the smaller."³⁾

¹⁾ The size of establishment is used since most foreign statistics give data on establishments and not on enterprises.

²⁾ Establishments that employ fewer than 16 persons are excluded because different countries regard owners differently; some count them as workers, some don't.

³⁾ K. Marx, *Capital*, Kerr, 1906, Vol. I, pp. 685—89.

Second, the untenable thesis that self-management is incompatible with a modern efficiently-organized economy, integration and higher standards of productivity. Under the pressure of these two theses, the tendency towards big enterprises in Yugoslavia has continued even after the abolishment of central planning.⁴⁾ It is still the reality of today's practice, although the Constitution of 1974 regards the basic organization of associated labour as a primary unit of production and, as such, an autonomous unit in decision-making.

Because labour productivity rises as mechanization and automation are introduced, the capital-intensive technologies have become dominant in Yugoslav production. Given the assumption that capital-intensive technology reaches its optimal size when the average product of all factors are maximized, big enterprises tend to expand to a point where the number of persons employed is relatively greater in absolute terms. Therefore, big enterprises became more dominant in the Yugoslav industrial structure.

An increased push towards big enterprises has occurred during the period of so-called intensive development strategy (1961 onwards). Intensive development strategy was implemented to remove some inefficiency of past development (high growth demanded high rates of investment which were secured at the expense of a slower growth in private consumption) which was believed to be largely a result of the "extensive" pattern of development during 1957—1961, in which increases in employment rather than of productivity per worker were emphasized. It was argued that for greater efficiency, competitiveness and higher living standards for the workers, a shift to an "intensive" pattern of development was needed.⁵⁾

2. Future Prospects

Prospects to develop small-scale industry exist in the developed and underdeveloped regions. They are based on its relevance for employment and efficiency. The relevance of small-scale industry for employment is based on the assumption that considerably less capital as well as less machinery and equipment are used per person in the smaller establishments than in the larger ones. The relevance of small-scale industry for economic efficiency is based on the assumption that a competitive market structure in comparison with a concentrated market structure means more efficient allocation of resources. For efficient allocation of resources, entry is important. Since

⁴⁾ In the stage of central planning, the drive towards large enterprises had also been caused by the economies of scale of coordination between the production units and central planning. Small-scale industrial production in the form of state enterprises is not justified primarily because the complex system of planning management and control in state industry is incompatible with small-scale production. This is why the elimination of private enterprises and the nationalization of industrial production and cooperatives meant liquidating small-scale production in the form of independent enterprises.

⁵⁾ One example of the official statements of that period is the following: To allow integration of the Yugoslav economy in the international division of labour, it is necessary to achieve rapid export growth, which itself depended on the rapid adaption of modern technology in production. Production itself would be reoriented away from the domestic market to what is profitable to produce in world proportions.

barriers to entry are smaller, less initial capital is needed and the promotion of small-scale industry could increase the competitiveness of the economy.

At present the underdeveloped regions are characterized by the following: (Table 4): 1. the highest rate of unemployment, 2. the highest capital stock per worker and 3. the share of industrial employment in small-scale industry which is either the same or lower than in the developed regions. Despite the higher rates of investment, the underdeveloped regions remained underdeveloped. In the period observed, the per capita income of underdeveloped regions decreased in relative terms when compared to the per capita incomes of the developed regions.⁹ It follows that modern technology transplanted into unsophisticated environments does not necessarily positively contribute to development. Although higher productivity levels are achieved by modern technology, lower PCI could be obtained due to increasing capital cost and increased technical unemployment. Increasing capital costs, however, are due to several reasons such as the inadequate state of entrepreneurial capacity, minimal skilled labour supplies, repair and maintenance possibilities, as well as for many sociological reasons which enter into the total milieu in which the plant is required to operate.

Due to the above reasons, the development of small-scale industry in the underdeveloped regions or the use of more labour-intensive techniques would have the advantage of requiring less capital resources, creating a source of employment capable of absorbing the displaced labour force, better use of rural and economic resources and producing a type of industry better suited to market sizes.

On the other hand, the development of small-scale industry is important for the developed regions as well since the imbalance between demand and supply for certain products of small-scale industries exists in the developed regions.

Different types of small-scale industry could be distinguished as a country transforms itself from a traditional, pre-industrial into a modern, industrial economy. The most common distinction is: cottage industry, artisan industry and small factories; traditional and modern small-scale industry. What type of small-scale industry should develop in Yugoslavia, will, *ceteris paribus*, depend on income elasticities of demand, government policy and the market size of the Yugoslav economy. However, some hypotheses in this respect are given below.

While in the long run the type of small-scale industry which holds promise is a modern small industry in which reasonably good application is made of the best science and technology currently available, the promotion of traditional cottage and artisan industry in the underdeveloped regions could also be of much use. It is important to keep in mind that employment is a prerequisite of development. The output

⁹ In the period 1964-76, the share of PCI of underdeveloped regions in the GDP decreased in Macedonia from 74.2 to 68.1 per cent, Bosnia and Herzegovina from 70.2 to 64.2 per cent, Montenegro from 74.5 to 70.3 per cent and Kosovo from 36.2 to 32.2 per cent (values in 1972 dinars).

of even a poorly-equipped man can be a positive contribution to social welfare while the contribution of an idle man is none.

The traditional cottage industry in Yugoslavia could be an important source for female employment. Some places¹⁰ in Yugoslavia are known for handicrafts such as materials, jewellery, carpets and pottery. However, these goods were not produced for the market. The legalization of such activities, however, would on the one hand mean recognition of their work as productive, and on the other provide a source of income, health security and pension. Such a revival of cottage industry could also have more than just a positive economic effect. It also would help the change social conditions of life in the village.

TABLE 4: THE SHARE OF SMALL-SCALE INDUSTRY, RATE OF UNEMPLOYMENT AND CAPITAL/LABOUR RATIO IN YUGOSLAVIA, BY REGIONS, 1951 AND 1973 (INDUSTRIAL SECTOR)

Region	1973			1963				
	share of small-scale industry in total industrial employment		unemployment rate	share of small-scale industry in total industrial employment		unemployment rate	capital/labour ratio	
	size —15	size 16-125		size —15	size 16-125			
Bosnia and Herzegovina	.0	1.9	7.8	.138	0.0	2.9	5.0	.0382
Montenegro	.1	2.6	12.3	.163	0.0	10.7	6.6	.0640
Croatia	.1	4.1	4.8	.129	0.0	3.9	5.8	.028
Macedonia	.1	5.5	19.7	.134	0.1	7.6	10.5	.0276
Slovenia	.0	2.4	1.8	.130	0.0	4.0	1.6	.0334
	.1	4.1	10.7	.134	0.1	4.7	8.0	.0304
Vojvodina	.1	4.0	10.5	.133	0.0	4.3	8.3	.0313
	.1	4.6	8.1	.121	0.2	6.1	5.7	.0259
Kosovo	.1	5.7	20.5	.188	0.1	4.7	16.1	.0393

Source: Computed by the author

Unemployment rate = only registered unemployed workers
Capital/labour ratio = fixed assets/total employment in the social industrial sector of the region, current dinars.

Artisan industry as manufacturing carried on in workshops by craftsmen working singly or with a few hired workers (6 at maximum in Yugoslavia), and without an extensive division of labour, can repre-

¹⁰ Lately, handmade clothes especially from Sirogojino became well-known on the Yugoslav and foreign markets.

sent a great source of labour employment in all regions, developed and underdeveloped, since the demand for their services has been constantly greater than the supply of their services in Yugoslavia.³⁾

Another important role that artisan industry can play in Yugoslavia is that it can serve as a source of utilization of family savings for the productive process which would not otherwise contribute to the country's capital formation.⁴⁾ At present, as was already stated a large number of workers temporarily employed abroad, accumulate significant savings. These savings have been, until now, mainly spent on various types of personal consumption. Artisan industry with its relatively low capital requirements could, therefore, be an appropriate channel to direct savings into the productive sphere and so add to employment opportunities.

Another prospect of employment in small-scale industry lies in the fact that they can perform work that is disadvantageous for large enterprises in terms of prevailing consumer demand and production technology. At present, a significant shortage of domestic consumer goods exists, the production of which is profitable on a small scale. These items represent a substantial portion of imported consumer goods. The question, however, arises as to why scarce foreign exchange would be spent on goods which, given domestic resources, could be easily produced at home.

The very low share of small-scale industry in industrial branches that produce mainly consumer goods can be seen in Table 5. In all

TABLE 5: THE SHARE OF SMALL-SCALE INDUSTRY BY INDUSTRIAL BRANCHES IN YUGOSLAVIA, 1973, SIZE 1—125.

Industrial branch	1954	1957	1962	1967	1973
Food	53.2	19.4	9.6	7.7	5.3
Textile and wearing app.	9.7	7.9	2.5	1.3	1.1
Footwear and leather	15.6	11.8	6.2	3.3	2.5
Wood and cork	9.5	7.8	3.6	2.7	3.5
Furniture and fixture					
Printing and publishing	11.1	5.2	3.3	1.3	1.6
Metal products					
Electrical products	2.9	1.1	1.1	1.3	2.3
Non-metallic	7.6	6.4	1.2	5.1	2.1
Metal products	6.7	3.7	2.4	1.9	1.8

Source: Computed by the author.

³⁾ There had been a wide fluctuation in the number of artisans in Yugoslavia due to tight money credits available to artisans, heavy taxation and high rents as well as undervalued estimate of demand for products produced by small-scale industry.

⁴⁾ Theoretical arguments why the revival of private artisan industry would not mean a revival of the capitalist way of production are given in I. Lavrač, »Osebnostno delo in zasebna lastnina produkcijskih sredstev v socializmu«, and in B. Horvat, »Individualno i društveno vlasništvo u socializmu.«

industries, the share in 1973 was not greater than 6 per cent. However, the contribution of small-scale industry to total employment in these branches in other developed and developing countries is much greater, around 60 to 78 per cent.

Besides the small share of typically consumer-oriented small-scale industry in some industrial branches, which with the level of development retained their importance but again show a very low share in Yugoslavia, could also represent an important source of employment in the future. These are mainly industries similar to those small feeder industries that exist in developed countries, such as non-metallic minerals, metallic products, etc.

Maximizing employment opportunities in the immediate future is not the only important reason why small-scale industries should be developed in Yugoslavia. Its development would have a positive effect on the overall efficiency of Yugoslav industrial production, and so add to employment opportunities in the long run. It is true that large-scale production is a characteristic feature of the modern industrial economy; it is also true that it is not the whole of it. Despite the well-known "economies of scale", manufacturing is not always and everywhere more economical in large than in small establishments. The observed industrial structure of developed countries with highly-competitive industrial production confirms the above statement. It shows that to achieve the economic effectiveness of large-scale industry, small-scale industry should supplement large-scale production. It shows that the problem of the optimum industrial structure is primarily a problem of the sensible combination of large, medium and small enterprises, the place of each determined on the basis of economic efficiency.

On the above basis, it is argued that Yugoslav industrial production, *ceteris paribus*, is inefficient not in spite of the highly concentrated industrial structure but because of it. A separate study made by the same author showed that the industrial sector is not only characterized by the enterprises of which scale of operation is one of the biggest in the world⁵⁾, but also with a very high market concentration. Economic theory suggests that high market concentration leads to a monopolistic or oligopolistic competition. The result of such competition is the inefficient allocation of resources leading to lower aggregate output, higher prices, and enterprises with considerable market power realizing monopoly profit.

That some Yugoslav enterprises practice monopolistic behaviour is not a secret anymore. The daily newspapers continuously bring new

⁵⁾ The average size of an establishment in Yugoslavia in 1963 was 269 persons employed. In some developed countries such as the USA (1963), Sweden (1961), France (1962), Canada (1961) and Japan (1963), size was 152, 107, 122, 120, and 87 persons employed, respectively. The percentage of employees in establishments in the size of 1000 and more employees in Yugoslavia in 1963 was 38.2 per cent. In the USA (1967) 34.3 per cent, Switzerland (1971) 21.7 per cent, Sweden (1972) 22.3 per cent, France (1962) 21.5 per cent, Canada (1968) 21.8 per cent and Japan (1972) 20.5 per cent. Also the average size of enterprises among the countries stated is the greatest in Yugoslavia. The average size of Yugoslav enterprises in 1963 was 402, while it was in the USA (1963) 231, Switzerland (1965) 112, France (1963) 147, Japan (1963) 109, Netherlands (1962) 132 and Italy (1961) 112 persons employed.

monopoly cases into sight.¹⁰ Such monopoly cases are not only bad because they question the efficiency of allocation of resources, but because they also question the basic characteristics of self-management.

First, freedom of employment. A highly-concentrated industrial structure means high barriers to entry.

Second, distribution of income according to work. Monopoly profit is solely a result of market power and, as such a main source of social differentiation.

Third, participation in management by all and on the basis of equality. However, the bigger the enterprise, the bigger the danger that direct self-management is replaced by indirect. In a big enterprise, a tendency may exist to transfer substantial decision-making power to the executive and individual organs of the enterprise. Such a concentration of power in the hands of a few people could inevitably lead to bureaucratization and anti-self managerial tendencies.

In practice, the integration into a larger technological system in fact gave rise to a number of unsolved problems from the standpoint of self-management.¹¹ It has been observed that in large units of production, the problem existed of how to assure that all workers would be fully informed on all the more important matters bearing upon the work and development of their factory, enterprise or institution, and of how to make sure that every employed person exerts an effective influence on the decisions passed by the self-managing and other bodies. Further, to curtail the function and rule of the workers' council was not an uncommon practice. While responsibility for global policy was left to the workers' council, the business was entrusted with direct decision-making on all vital problems. Sometimes, the term of office of the workers' council was prolonged from two to three or even four years or more, to reduce the number of members in the workers' council which would ultimately have led to the deformation of the workers' council into a representative organ isolated from the direct producers and the collective as a whole.

Due to this observed practice, the Constitution of 1974, among others, brought about solutions and forms from the development of self-management which would preclude the concentration of power in the hands of a few people at the top and ensure the direct enlistment of all working people in the process of decision-making. According to the new Constitution associated the enterprise appears as a federation of basic organizations of labour.¹² However, to what degree the frac-

¹⁰ One example is the distribution of mineral water in Yugoslavia. Recently the most well-known brands in highest demand, Radenska and Knez Miloš, cannot be bought in several places in Yugoslavia. Instead, market shelves are stored with local brands, not because the demand would exist for them but because of the power of their producers to curtail the supply of the two well-known brands. Local producers, due to under-utilization of their capacity, had the power to force the local distributors to trade only with the brands they are producing. Local producers were speculating that if the two known brands would not be available on the market, then sales of these brands will increase. However, the result was just the opposite. In the last few years, total consumption of mineral water has decreased significantly because consumers did not want to substitute Radenska and Knez Miloš for local brands. The end result is that, at present, 30-40 per cent of the mineral water production capacity is not utilized.

¹¹ Milentije Pesković, "Twenty Years of Self-Management in Yugoslavia".

¹² B. Horvat, *The Yugoslav Economic System*, International Arts and Sciences Press, 1977.

tionizing of big enterprises into basic organizations of associated labour¹³) would mean a revival towards direct self-management is a question to be answered in the future.

IV. POLICY INSTRUMENTS

Different instruments of policy exist to promote the growth of small-scale industry. However, the discussion here is limited only to two instruments: capital pricing and planning.

The argument for capital pricing as an instrument for the development of small-scale industry in Yugoslavia is derived from the theory of the self-managed market economy,¹⁴ developed on the assumption that the basic objective of each labour-managed firm is to maximize a total net income per worker. Given this assumption, it is possible to show how capital pricing, which does not reflect a scarcity price, leads to a market structure characterized by, with respect to employment, a relatively low share of small-scale industry and a correspondingly high share of large-scale industry. The theoretical explanation is the following. In conditions of underpriced capital relative to labour, and given the assumption about maximizing the behaviour of a labour-managed firm, the tendency towards concentrated industrial structure (relatively high share of large-scale industry) will be caused through self-financing. Self-financing means that a labour-managed firm will, at any level of capital accumulation, try to maximize labour productivity since increased labour productivity will, in the long run, increase net income per worker. As a result, the expansion of already-existing firms will occur, which would lead to a concentrated market structure. The expansion of existing firms under the conditions described will also result from the substitution effect.

The relatively low cost of capital is bound to result in unnaturally high capital labour ratios due to the substitution of cheap capital for relatively more expensive labour.

Underpriced capital leads to a concentrated industrial structure, and at the same time it leads to a decreased labour absorption capacity in the so concentrated industrial structure. On the one hand, unnaturally high capital/labour ratios mean less employment opportunities due to the substitution effect, and on the other, self-financing would mean less employment opportunities because of the lack of incentives for the existing firms to invest in new firms.

¹³ The author's hypothesis is that the aim will be reached in cases when the former growth of the enterprise has been based on horizontal and not on vertical integration. In the latter case, the breaking of the enterprises would probably be more or less only a statistical one.

The basic organization of labour is in a sense an establishment (plant). The importance of the size of the firm for self-management has been stressed by Vanek. According to him, a high degree of industrial concentration corresponds to the capitalist mode of production since it enables a control over capital concentrated in the hands of a small number of capitalists and to achieve the profit maximization objective. Since self-management means decentralized control over the production process, there is no reason why those who have the right to decide should delegate their powers to a central body from which the executive directives would stream back into the establishment production unit.

¹⁴ Vanek, Jaroslav, *The General Theory of Labor-Managed Market Economy*, Ithaca, N. Y., 1970.

Another but not less important effect of distorted capital pricing on employment in the self-managed market economy is the substitution of (expensive) university-trained individuals for (cheap) skilled workers induced by high and unwarranted capital-intensive techniques.¹⁵⁾

The above reasoning seems to be confirmed by the Yugoslav practice. Yugoslav industrial sector is characterized by an extremely high industrial concentration, a very high labour productivity and a very high ratio of new capital investment to new jobs created. For the social sector as a whole, investment cost (in 1966 dinars) per additional job during 1965—69 was nearly seven times that in the period 1953—59. The cost of creating a new job is also very high from the international point of view. For example, it is higher in Yugoslavia than in West Germany. At the same time the labour absorption capacity of the industrial sector has been decreasing. The annual increase in industrial employment was 68,0 thousand in 1952—60, 54,0 thousand in 1960—65 and 26,0 thousand in 1965—71.¹⁶⁾ Lower absorption capacity in the industrial sector resulted in an increased rate of unemployment. The distribution of unemployment according to occupational structure also worsened. The share of the unemployed individuals with high school, university and higher education as well as the share of highly skilled and skilled workers to unskilled workers has increased after 1960 (1960 is the year for which such data are available). The number of unemployed with high school, university and higher education increased from 5.1 per cent in 1960 to 17.3 per cent in 1975 while the number of skilled and highly skilled labour increased from 11.2 per cent to 19.2. The annual rate of growth of unemployment of the two groups was 8.5 per cent and 3.6 per cent, respectively.¹⁷⁾

Given the characteristics of past development, the future expansion of small-scale industry in Yugoslavia could be expected provided there is a readjustment of distorted capital pricing. Namely, if the real scarcity price of capital were paid to a society, then, *ceteris paribus*, a substitution of less capital-intensive technology for high capital-intensive technology could be expected. A developmental access and participation would, under such conditions, be offered to small-scale industry. Therefore, it could be expected that after a period of adjustment the pattern of employment in the manufacturing sector would reveal a greater share of employment in small-scale industry than it does today. As a result, a more competitive industrial structure compared to the already-existing one would emerge. At the same

¹⁵⁾ The existence of this effect has been discovered by Henk Thomas, *Personal Income Distribution in Yugoslavia: A Human Capital Approach to the Analysis of Personal Income Differences in the Industry of a Labor-Managed Market Economy*, Ph. D. Thesis, Cornell University, 1973. In his investigation of the elasticity of substitution, he observed a significant response of an aggregate index of labour services to the capital-intensive techniques. It appeared that capital investment techniques imply some substitution of capital for skilled workers and produce a complementary demand for university-trained people.

¹⁶⁾ World Bank Report, *Yugoslavia: Development with Decentralization*. Johns Hopkins University Press, 1975.

¹⁷⁾ The author's hypothesis as to why the rate of growth of unemployment of the university-trained group is higher, is that unnaturally high K/L ratios produce an unnaturally high demand for university-trained labour. Due to a false signal, a redundancy of university-trained labour is created, which is demonstrated by a high rate of unemployment.

time, this industrial structure would mean more employment, more distribution and more growth.

In the field of development planning, small-scale industries could play an important role. The role of small-scale industry in the future should increase, especially because of a significant shortage of *social small-scale* industry compared with the *private* one. However, the present situation is, in the author's opinion, not the result of a dilemma — self-management and efficiency if large-scale, or self-management and inefficiency if small-scale — but the result of strong favouritism on the state level towards the large technological systems.

The place of small-scale industry should also be found in an industrial plan, regularly prepared. For this purpose, the planning agency should undertake economic studies to identify the following: the potential areas of industrial development, based on previous studies of actual production, availability of raw materials, skills and transport facilities, etc., and the estimates of existing and potential domestic and foreign markets for products produced on a small-scale. Location problems, capital requirements and resources, credit supply and credit conditions should also be investigated. The results of these studies should then be used to channel social financial resources towards the most favourable areas and to encourage investors to direct their interest towards these areas.

Planning of small-scale industry should become especially important at the federal level, since plans of the federation include, among others, the development of the insufficiently developed areas. Especially so, because these areas had remained underdeveloped under the schemes of application of new technological methods and technical advance, with certain technological redundancies of labour.

BIBLIOGRAPHY

- ECLA Secretariat, *Small-Scale Industry in the Development of Latin America*, Document, ST/ECLA/Conf. 25/L.17, December 1966.
- Horvat, B. »Individualno i društveno vlasništvo u socijalizmu«, »Gledišta«, Beograd, 1967, str. 336.
- *The Yugoslav Economic System*. International Arts and Sciences Press, 1977.
- "Analysis of the Economic Situation and Proposals for a Program of Action, Separat 148, Institut ekonomskih nauka, Beograd, 1973.
- Kardelj, E. "The Political System of Socialist Self-Management," *Yugoslav Survey*, November, 1977, p. 25—40
- Lavrač, I. »Osebno delo in zasebna lastnina produkcijskih sredstev v socializmu«, »Ekonomska revija«, št. 2, 1967, p. 168—177.
- Malačič, J. »Nezaposlenost v Jugoslaviji od 1952 do 1975.« *Ekonomska revija*, št. 2, 1977.
- Marx, K. *Capital*, Kerr, 1906, Vol. I, pp. 685—689.
- Petrin, T. *Analiza tržišnih struktur industrijskega sektorja v SFRJ, I. faza makroprojekta*, RCEF, Ljubljana, 1977.
- Pešković, M. "Twenty Years of Self-Management in Yugoslavia," *Međunarodna politika*, Beograd.

- Sacks, S. R. *Entry to New Competitions in Yugoslav Market Socialism*, University of California, Berkeley, 1973.
- Science, Technology, and Development, *Industrial Development*, United States Papers Prepared for the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, U. S. Government Printing Office, Washington D. C.
- Telex, »Ranljiva Slovenija,« Telex, April 1978.
- Thomas, H. Personal Income Distribution in Yugoslavia: A Human Capital Approach to the Analysis of Personal Income Differences in the Industry of a Labor-Managed Market Economy, Ph. D. Thesis, Cornell University, 1973.
- Vanek, J. *The General Theory of Labour-Managed Market Economy*, Ithaca, N. Y., 1970.
- World Bank Report. *Yugoslavia: Development with Decentralization*. Johns Hopkins University Press, 1975.

MOŽNOST RAZVOJA MAJHNE INDUSTRIJE V JUGOSLAVIJI

Tea PETRIN

Rezi me

Osnovna teza referata je, da bi z razvojem majhne industrije v Jugoslaviji, ki je trenutno izredno deficitarna, dolgoročno dvignili učinkovitost industrijskega sektorja, s čimer bi povečali absorpcijsko moč industrijskega sektorja v smislu učinkovitega zaposlovanja nezaposlene delovne sile.

Da bi dokazala veljavnost zgornje teze, avtorica, potem ko v drugem poglavju pokaže perečnost problema nezaposlenosti, analizira v tretjem poglavju sedanjí položaj majhne industrije pri nas kot tudi možnosti razvoja tega sektorja v prihodnosti. Analiza relativnega pomena majhne industrije v zaposlovanju industrijske delovne sile pokaže, da je danes pomen majhne industrije nezaten, tako na ravni Jugoslavije kot tudi na ravni republik. Majna industrija je definirana kot tiste delovne organizacije, ki imajo do 125 zaposlenih. Podatki celo pokažejo, da je delež delovne sile zaposlene v majhni industriji v nekaterih nerazvitih republikah celo manjši kot v nekaterih razvitih republikah. Taka ugotovitev pa je v nasprotju z ugotovitvami mednarodnih raziskav s tega področja, ki so pokazala na zakonitost, da relativni pomen majhne industrije v zaposlovanju negativno variira v odvisnosti od stopnje gospodarskega razvoja. Mednarodna primerjava prikazana v referatu tudi pokaže, da je delež delovne sile zaposlene v majhni industriji v Jugoslaviji izredno majhen tako v primerjavi z deležem v državah z višjo stopnjo razvoja kot v deželah z nižjo stopnjo razvoja. V nadaljevanju avtorica obravnava vzroke, ki so po njenem mnenju pripeljali v tako izkrivljeno razporeditev industrijske delovne sile med male, srednje in velike delovne organizacije.

Možnosti razvoja majhne industrije vidi avtorica tako v razvitih kot tudi v nerazvitih republikah. V nerazvitih zato, ker je za nje značilno tako najvišja stopnja nezaposlenosti kot tudi najvišji K/L razmerje in najmodernejša tehnologija. V razvitih pa predvsem zato, ker obstoja veliko ne-

sklade med povpraševanjem in ponudbo proizvodov majhne industrije. Razvoj majhne industrije, bi tako pomembno prispeval k zmanjševanju zunanjetrgovinskega deficita, kajti razkorak med ponudbo in povpraševanjem se v veliki meri rešuje z uvozom teh proizvodov. Glede na tip majhne industrije, ki bi jo bilo mogoče razviti pri nas, je avtorica mnenja, da pri nas obstojajo pogoji za vse oblike, ki se pojavljajo na poti preobrazbe dežele iz tradicionalno, pre-industrijske v moderno industrijsko deželo.

Trditev, da bi razvoj majhne industrije pozitivno vplival na absorpcijsko moč zaposlovanja industrijskega sektorja utemeljuje avtorica z naslednjim. Prvič, ob predpostavki, da majhne delovne organizacije uporabljajo na delavca znatno manjši obseg kapitala in opreme kot večje delovne organizacije sledi, da bi razvoj majhne industrije, seveda tiste, za katero obstojajo pogoji razvoja in povpraševanje za njenimi proizvodi, prispeval k hitri rešitvi problema nezaposlenosti pri nas. Drugič, pomembnost majhne industrije za zaposlovanje izhaja tudi iz predpostavke, da pomeni bolj konkurenčna tržna struktura v primerjavi z bolj koncentrirano tržno strukturo bolj učinkovito alokacijo produkcijskih sredstev. Za učinkovito alokacijo produkcijskih sredstev pa je vstop novih podjetij pomemben. Ker pa so ovire vstopa manjše manjši je začetni potrebni kapital, lahko pospeševanje majhne industrije poveča konkurenčnost gospodarstva. S tem, ko se poveča konkurenčnost, se poveča učinkovitost gospodarjenja in s tem možnosti zaposlovanja na dolgi rok.

Glede na to, da je obstoječa tržna struktura industrijskega sektorja, celo po mednarodnih standardih visoko razvitih držav, nadovprečno visoka, bi razvoj majhne industrije pri nas, pri danih predpostavkah, ugodno vplival na zaposlovanje. Zaposlovanje pa ni edini razlog za razvoj majhne industrije pri nas. V samoupravni družbi kot je naša je tudi pomembno v kakšni meri so dejansko izpoljene osnovne značilnosti samoupravljanja, kot npr.: svoboda zaposlovanja, distribucija dohodka glede na vloženo delo in enkoppravna udeležba vseh v upravljanju. Nedvomno je, da so te značilnosti v pogojih visoke stopnje tržne koncentracije okrnjene.

Zaključno poglavje obravnava dva izmed možnih instrumentov za pospeševanje razvoja majhne industrije pri nas: cena družbenih sredstev in družbeno planiranje. Pomembnost prvega instrumenta avtorica utemeljuje na osnovi teorije tržnega samoupravnega sistema, osnovane na predpostavki, da samoupravno podjetje maksimizira dohodek na zaposlenega. Avtorica pokaže, kako ob dani predpostavki, v pogojih, ko ne obstoja pravilna cena družbenih sredstev, tak sistem avtonomno vodi k nastajanju velikih kapitalno intenzivnih delovnih organizacij. Pomembnost drugega instrumenta pa avtorica utemeljuje s tem, da danes obstoja izredno velika deficitarnost majhnih organizacij združenega dela v družbenem sektorju industrije. To veliko vrzel v družbenem sektorju bi lahko odpravili le plansko, tako da bi v okviru družbenih planov industrijskega razvoja posebej načrtovali plane namenjene razvoju majhne industrije pri nas.