

The Economic Position of the Enterprise in the Yugoslav Economy

BY SVETOZAR PEJOVICH*

The purpose of this paper is to explain the formation and distribution of total revenue in Yugoslav enterprises. The paper suggests the way in which the prevailing legal and institutional constraints, and internal rules affect the firm's output, employment and investment decisions. It concludes with a few remarks concerning built-in inefficiencies of the Yugoslav system of self-management.

Introduction

Economic and social institutions in Yugoslavia deserve our attention for several reasons. First, the development of the Yugoslav economic system covers a thirty year period in which, by trial and error, a unique set of institutional arrangements has been hammered out. Secondly, the analysis of the labor-managed firm in Yugoslavia provides some useful insights into the possible economic and social consequences of the code-termination movement in Western Europe.¹ Thirdly, the Yugoslav economic system is perhaps the only serious attempt in the socialist world to devise an effective incentive and control system to direct production without a large planning bureaucracy.

In Yugoslavia, decisions concerning the quantity and quality of output, employment, pricing, and the rate of capital formation are made by business firms themselves. It follows that to explain and understand the character of economic life in that country, a theory of the Yugoslav firm must be developed.²

The purpose of this paper is to discuss the formation and distribution of total revenue in Yugoslav enterprises. Analysis of total revenue points to the way in which the prevailing legal and institutional constraints, and internal rules of the game affect the firm's output, employment and investment decisions. In addition, the analysis of the firm's total revenue reveals some unique features of the Yugoslav economic system.

The paper begins with a brief description of the institutional framework in Yugoslavia that is relevant for discussion in the paper. The second sec-

tion explains the firm's legal and institutional constraints, and identifies their behavioral consequences. The third section provides some general statistical evidence on the economic situation of business firms in Yugoslavia. The paper ends with a few concluding remarks.

I. The Yugoslav System of Contractual Self-Management

The social and economic basis of self-management in Yugoslavia lies in (i) the state's right of ownership in capital goods, (ii) the employees' right to approve, police and enforce the decisions made by the managing organs in their respective institutions, and (iii) the system of contracts among self-managing organizations.

The term "firm" (*preduzece*) has been almost completely eliminated from the Yugoslav legal jargon. Instead, the Yugoslav literature uses the expression: organization of associated labor. The term *associated* labor refers to all economic activities that combine live labor with socially (state) owned assets. Legal substance of associated labor lies in the fact that the returns from capital goods can be captured only by those who combine their live labor with physical assets. The term organization of associated labor embraces all organizations that are (i) self-managed, and (ii) carry out their activities with socially owned capital goods. An organization of associated labor "... is in fact what was earlier referred to as a firm in the economic sector and an institution in the non-economic sector".³

The fundamental economic unit in Yugoslavia is the *basic organization of associated labor*. It is a

component part of an organization of associated labor. Basic organizations of associated labor were in the past referred to as work-units, plants and departments.⁴ The terms organization of associated labor and basic organization of associated labor are very broad and cumbersome. For that reason the paper will use more conventional terms: firm and plant, but these terms are to be understood in the much broader content which they have in Yugoslavia. A firm might have one or more plants. Since the plant is the basic productive unit in Yugoslavia, the analysis here is concerned with the plant's total revenue.

The law says that if the results of their joint labor can be measured in terms of value in either the market or within the firm and can be independently expressed, the employees should form their own plant (shipping and receiving in a manufacturing firm, sales personnel in a department store). The *identifiability* and *separability* of the flow of receipts is the major factor here. Moreover, the employees can take the plant out of the firm provided that the benefits they are expected to receive from leaving exceed the cost borne by other plants who remain with the firm.⁵ In case the new plant leaves the firm, the latter is entitled to recoup only its investment expenditure adjusted for inflation.

The right to govern a plant is vested in all of its employees. The employees exercise their right of governing the plant in two ways: indirectly and directly. The forms of direct control are general meetings and referendums. Indirectly, the employees govern through the Workers' Council – the highest organ of the management in the basic organization. Members of the Workers' Council are elected by all the employees for a two-year term. Members of the Council continue at their regular jobs, they receive neither additional compensation, nor offices, nor privileges while serving on the Council. The director of the plant is appointed (and fired) by the Workers' Council. The position must be filled by way of a public contest. When the firm has more than one plant, each plant sends its representatives to the firm's Workers' Council which, in turn, elects the director of the firm.

Plants that belong to the same firm negotiate a *contract*. The contract must specify their mutual rights and obligations. In general, the contract specifies the composition of decision-making bodies in the firm, regulates commercial relations between the plants, provides guidelines for the distribution of income, assigns costs of law suits

and other damages, and coordinates production and financial plans of plants that belong to the firm. *Self-management contracts* regulate issues of common interest to the workers in enterprises, the employees in local communities, and other self-managing organizations in related activities of a region. Those contracts specify the pooling of resources for joint undertakings, criteria for the distribution of income within the participating organizations, and other questions concerning their cooperation. *Social contracts* are negotiated by firms, trade unions, trade associations and socio-political organizations in a region. The purpose of social contracts is to settle the issues of common interest in each region and replace the regulative role of the state in the resolution of some key economic issues. Finally, the provision of many services (health, education, power production) is negotiated *contractually* between plants, other institutions and citizens' groups that use those services, and those who supply them. Buyers and sellers of those services form contractual associations (a different one for each service) covering a region.⁶ Those contractual associations are called *self-managing communities of interest*.

In fact, contractual agreements encompass the entire social and economic life in Yugoslavia. In one sense, contractual agreements are not voluntary because they are mandated by law, and the basic constraints are frequently stipulated in advance. However, within these constraints, the terms of contract are negotiated among the participants. An immediate consequence of the Yugoslav system of contracts is to reduce the role of the state in regulating and controlling economic life. A dynamic, and perhaps the most important, consequence of the system of contractual self-management is that it generates incentives for the participants to seek greater freedom in negotiating the terms of contractual agreements.

II. The Formation and Distribution of Total Revenue

The employees in a Yugoslav firm have one important property right: they own the plant's net-product (*Dohodak*) after taxes. This property right makes the analysis of the formation and distribution of total revenue central to better understanding of the relationship between incentive structures on the one hand, and the plant's output, employment and investment decisions on the other.

Our discussion of the formation and distribution of total revenue is based on a concrete example.⁷ The plant in question is engaged in wholesale and retail trade. The firm to which this plant belongs is located in Belgrade. The accounting period considered here is January 1–June 30, 1978. For reasons of convenience all amounts are expressed in U.S. dollars. At the time of writing the value of \$1 was about 18 dinars.

Turnover Tax. The turnover tax is paid by consumers purchasing final output and does not enter into the plant's income statement. Therefore the plant under consideration pays turnover tax only on the value of its retail sales. It is difficult to specify the turnover rate because it combines federal, republic and local rates, and the last two vary from one region of the country to another. An interesting feature of the Yugoslav tax system is that only customs and turnover taxes are paid into the federal budget. All other taxes are paid into the budgets of individual republics, counties, and self-managing communities of interest. In the case under consideration the total turnover tax bill was \$1,438,495 or 18.3 percent of retail sales (\$6,421,161).

Total Revenue. The Yugoslav law recognizes three major sources of total revenue: sales of goods and services, the value of transactions between plants in the same firm, and returns on external investment (time deposits, credits to other organizations, and joint projects). The plant's total revenue includes expenditure and other obligations incurred in the past and collected during the accounting period (and excludes expenditure incurred during the accounting period) if this expenditure is contained in the value of output that is yet to be sold or is sold but still to be paid for. The plant reported the following revenues for the accounting period:

Total Revenue:		\$ 21,405,972
Sales of goods	\$ 15,946,089	
Internal Transactions	3,988,733	
External investment	646,150	
Other revenues	825,000	

Production Expenses. Production expenses are expenditure on goods, expendable supplies, contractual services, transportation costs, advertising, regular maintenance of fixed assets, travel, costs of energy and reproductive materials, and other business expenses. The plant incurred the following production expenses from January 1–June 30, 1978:

Production Expenses		\$ 18,725,928
Purchase costs of goods	\$ 17,142,172	
Business expenses	1,527,680	
Bad debts	6,158	
Inventory adjustments	21,844	
Court costs and penalties	1,797	
Other expenses	26,277	

Depreciation. In general, the plant must maintain the book value of its assets by reinvesting depreciation allowances. When an asset is sold to another organization, the proceeds from sale must also be reinvested. It means that sale of existing assets generates net investment in Yugoslavia. If the sale price is less than the asset's book value, the difference has to be made up from the plant's earnings. These requirements affirm the state's ownership rights. However, the government cannot take capital goods away from enterprise. The collective is free to change the composition of its assets. It can substitute one type of asset (time deposits) for another (machines). Periodically, fixed assets are revalued to reflect changes in the price level. In our case, the plant had the obligatory depreciation of \$91,666.

Depreciation	\$ 91,666
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Dohodak. A conceptually correct translation of the term *dohodak* is value-added or net product. *Dohodak* is equal to the plant's total revenue less production expenses and depreciation.⁸ The working collective has incentives to minimize production expenses. There exists a sharp positive relationship between the workers' present and future incomes on the one hand, and the size of *dohodak* on the other. The republic and local governments also have incentives to monitor expenses incurred by enterprises. Their tax revenues depend on the size of *dohodak*. Indeed, the government closely monitors the financial transactions of Yugoslav enterprises. The watchdog is the Office for Social Bookkeeping. Yugoslav enterprises can make payments to others neither directly nor through banks. All financial transactions must be cleared through the Office of Social Bookkeeping. In fact, it is the Office for Social Bookkeeping that instructs banks to make payments on behalf of enterprises. However, the costs of detecting, policing and eliminating wasteful activities are not negligible. Thus, the Office for Social Bookkeeping is primarily concerned with the legality of payments (e.g. that monies from one fund are not used to finance transactions of another fund) rather

than their business justifications. At the same time, the director of the plant, the management group, and other influential members of the collective (Chairman of the Workers' Council, the Party leadership in the plant) can increase their total compensation *via* the consumption of non-pecuniary goods such as frequent business trips, sponsorship of conferences, use of company cars, banquets for business associates, and the like. While incentives to minimize production expenses exist in Yugoslavia, the positive cost of monitoring the director and his associates suggests that some unnecessary expenditures can be assumed.

The plant under consideration reported the following *dohodak* for the accounting period:

Total revenue	\$ 21,405,972
less	
Production Expenses	18,725,928
Depreciation	91,666
<i>Dohodak</i>	\$ 2,588,378

According to the Yugoslav law the plant allocates its *dohodak* to: fixed legal obligations, legal obligations that depend on the size of *dohodak*, contractual obligations, and the residual that belongs to the collective.

Fixed Legal Obligations from Dohodak. The plant had to meet the following fixed obligations from its *dohodak*:

Fixed Legal Obligations	\$ 44,595
Insurance for fixed assets, company cars, etc	\$ 20,333
Insurance against injuries at work	8,088
Supplementary disability insurance	1,123
Land tax	10,441
Entertainment & gift tax	2,444
Solidarity Fund tax	2,166

Entertainment tax is 20 percent of the plant's expenditure on entertainment and gifts. Contribution to the Solidarity Fund is 10 percent of the plant's expenditure on entertainment and advertising. The Solidarity Fund is to be used to alleviate damages caused by floods, earthquakes and other disasters. Fixed legal obligations stood at 1.72 percent of the plant's *dohodak*.

Legal Obligations that Depend on Dohodak. A unique feature of the Yugoslav tax system is that it specifies purposes for which tax payments are

to be used. An advantage of this approach is that it reveals the burden of various activities that are financed through taxes.

To calculate the plant's taxable *dohodak* several adjustments are made in its actual *dohodak* of \$ 2,588,378. First, the plant is allowed to subtract from its *dohodak* the amount equal to the employee's guaranteed income. A worker's guaranteed monthly income is 55 % of the last year's average personal income in the country where he works. Clearly, guaranteed monthly income varies from one locality to another as well as from one year to another. In our case, the minimum guaranteed monthly income was \$ 140.34 or \$ 842 for the accounting period. The plant had 330 workers which means that it could subtract \$ 277,860 from its *dohodak*. The next subtraction is the plant's contribution to the firm in the amount of \$ 130,555. This is a contractual payment that all plants make to their respective firms for administrative, legal, accounting, and other services. The amount paid by the plant as obligatory loans for the development of less-developed republics and regions is also tax exempt. Each republic contributes annually to this fund 1.97 percent of its gross national product. To meet this obligation individual republics require each plant to contribute a percentage of the value of its monetary and physical assets net of the amount of loans already made in preceding years. Loans are repaid to the enterprise in 15 annual instalments and carry 4 percent interest. Since Yugoslavia has had double digit inflation for some years those loans are in effect taxes imposed on Yugoslav enterprises. The plant under consideration paid \$ 522,571 to this fund for economic development. Obligatory loans are paid from *dohodak*. The plant calculated its taxable *dohodak* as follows:

Total Subtractions from <i>Dohodak</i>	\$ 1,322,836
Guaranteed personal incomes	\$ 277,860
Contribution to the firm	130,555
Obligatory loans	522,471
Interest payments and banking service	309,701
Insurance for fixed assets	20,333
Memberships of trade ass'ns	10,869
Contribution to the building fund	17,992
Meals for workers	33,055

Taxable *dohodak* was then:

$$\begin{aligned} \$ 2,588,378 - \$ 1,322,86 &= \\ & \$ 1,265,542 \end{aligned}$$

The following taxes are paid from the plant's taxable *dohodak*:

Total Taxes from <i>Dohodak</i>		\$ 310,181
Republic's tax (7.0 %)	\$ 89,473	
Education tax (5.5 %)	69,604	
Tax for science (.69 %)	8,732	
Retirement and disability insurance (7.26 %)	91,878	
Tax for children protection (1.81 %)	22,906	
Health insurance (.68 %)	8,605	
Building fund tax (1.5 %)	18,983	

With one exception, Republic's tax, all taxes listed above are paid into the budgets of self-managing communities of interest. The provision of many services such as welfare, health, education and retirement is negotiated contractually by organizations which represent those who supply specific services and organizations which represent those who demand them. They form self-managed organizations covering a region. For example, in the field of health, a self-management agreement on the formation of a self-managing community of interest is made between self-managing organizations and other institutions representing those who are eligible (by law) to receive health services on the one hand, and self-managing organizations which provide those services on the other (hospitals, clinics, medical institutes, pharmacies, etc).⁹ Territorial boundaries of the regions are determined by such factors as the economic conditions of life in the area, homogeneity of its population, the area geography, and the availability of health services. The law specifies the minimum provision of services provided by self-managing communities of interest. However, contractual partners are free to negotiate the provision of additional services. They also negotiate the cost of services and determine taxes that would raise the required revenue. It means that taxes vary from one region to another as well as from one year to another. Importantly, education, health protection, retirement and some other public services in Yugoslavia are not provided through state budgets, and taxes for these services are not paid into state budgets.

Variable legal obligations amounted to 11.98 percent of the plant's *dohodak*.

Contractual Obligations of the Plant. Contractual obligations by plant include payments to the firm in support of joint administration (when the firm has only one plant this payment is not made), interest on credits, payments for banking services and the like. The plant under consideration made the following payments in this category of expenditures from *dohodak*.

Contractual obligations		\$ 458,230
Contribution to the firm	\$ 130,555	
Interest payment and banking services	309,701	
Membership of trade associations	10,869	
Contribution for Civil Defense	5,308	
Court costs and damages	1,797	

Contractual obligations were 17.70 percent of the plant's *dohodak*.

The Residual. The residual is equal to the plant's *dohodak* less its legal and contractual obligations. In our case, the residual is:

$$\begin{aligned} \$ 2,588,378 - (\$ 44,595 + \$ 301,181 + \$ 458,230) &= \$ 1,775,372 \text{ or } 68.59 \text{ percent of the} \\ & \text{plant's } \textit{dohodak}. \end{aligned}$$

The residual belongs to the plant's employees. According to Yugoslav law, the residual must be allocated into the Wage Fund, the Collective Consumption Fund, the Reserve Fund, and the Business Fund. The Workers' Council determines the allocation of the residual between all the various funds as well as the distribution of the Wage Fund among the individual employees of the plant. However, the Workers' Council must publicly announce its distributional criteria well in advance or have them approved by the collective at a general meeting.

In deciding the scheme for the distribution of the plant's residual, the Workers' Council is expected to adhere to distributional guidelines stated in self-management agreements.¹⁰ As was pointed out earlier, self-management agreements are contracts negotiated by self-managing organizations in related activities of a region. For example, the 1977 self-management agreement for *Vojvodina* (an autonomous province) provided the

following distributional guidelines for plants engaged in trade;¹¹

Average contractual residual per adjusted worker	\$ 2,567
Lowest contractual residual per adjusted worker (63 %)	1,617
Highest contractual residual per adjusted worker (214 %)	5,494

If the realized average residual per adjusted worker is between \$ 1,617 and \$ 5,494 the plant should use the following guideline for the allocation of its residual

$$\frac{\text{Business Fund and Reserve Fund}}{\text{Residual}} =$$

$$= 57.0 - \frac{3400}{q}, \text{ where}$$

$$q = \frac{\text{realized residual per adjusted worker} \times 100}{\text{avg. contractual residual per adj. worker}}$$

If the realized average residual per adjusted worker exceeds \$ 5,494 the guideline is

$$\frac{\text{Business Fund and Reserve Fund}}{\text{Residual}} = 100 - \left(260 - \frac{21400}{q}\right) \frac{77}{q}$$

These guidelines suggest that the ratio of the wage fund and collective consumption fund to the plant's residual falls as earnings per adjusted worker increase. The plant must allocate at least 4 percent of its residual to the business and reserve funds, regardless of the size of dohodak.

The term *adjusted* labor is a common denominator for measuring the size of the labor force in individual enterprises. The common denominator is needed in order to make adjustments for the anticipated effects of the differences in human capital on residual-labor ratios in various plants. The method used in Yugoslavia is to attach a coefficient to each different level of human capital. The adjusted labor force of the plant is obtained by multiplying the number of employees in each category by the relevant coefficient and adding up the results. The coefficients used in *Vojvodina* in 1977 were as follows:¹²

unskilled worker	1.00
semi-skilled worker	1.20
less than high school (or equiv)	1.20
qualified workers	1.70
high school (or equiv)	1.70
highly qualified workers	2.10
junior college (or equiv)	2.30
college (or equiv)	3.00
masters degree (or equiv)	3.30
Ph D (or equiv)	3.80

The plant in our example had 330 employees in the period January-June 1978. However, we have no information on the size of its adjusted labor force. We can only assume that the plant did quite well. Evidence is as follows: the plant's annualized average residual per *unadjusted* worker was \$ 10,760 in 1978, and the Workers' Council allocated 43 percent of its residual to the business and reserve fund. According to the self-management agreement for Belgrade (covering all industries) the average residual per *adjusted* worker was \$ 2,644 in 1977, and the allocation to the business and reserve funds (consistent with the average residual per adjusted worker) was 17 percent.

The allocation to the wage fund and the collective consumption fund enhances the employees' current incomes. The residual allocated to the business fund adds to their future income.¹³ The allocation of the residual is an important decision that has future value consequences for the employees. They capture the benefits and bear the costs of that decision. Within the prevailing legal constraints, the employees are contractual partners in the team production process.

The allocation of the plant's residual for the accounting period was as follows:

Residual		\$ 1,775,372
Wage Fund	\$ 860,168	
Collective Consumption Fund	151,794	
Business Fund	698,701	
Reserve Fund	64,709	

Wages. The Workers' Council allocated \$ 860,168 to the Wage Fund. A unique aspect of the economic system in Yugoslavia is that the plant employees are residual-takers. Yugoslav workers receive no contractual wage like their counterparts in the West and the East. Moreover, they receive no contractual wage plus a share of profit. The entire wage of a Yugoslav worker comes from and, in effect, depends on his plant's residual.

There is a minimum wage in Yugoslavia. It is equal to 55 % of the average wage in the area during the preceeding year. When the plant's residual is not sufficient to pay minimum wages, the enterprise can use its reserve fund. When the reserve fund is not sufficient to cover the minimum wage, the local community is supposed to help. Each month, workers receive *advances* which are based on either their earnings in the previous year or the plant's financial plan. At the end of the accounting period, workers receive the balance. When the balance is negative, the difference is covered from the plant's *dohodak* in the next accounting period.

The distribution of the Wage Fund among the plant's employees is regulated as follows: The Workers' Council attaches a certain number of points to each position in the plant. The criteria used to determine the number of points for each job usually include skill required, education, health risks, hardship, working conditions and the like. Those are general criteria used in Yugoslavia but their relative importance differs from one enterprise to another. In addition, self-management agreements provide general guidelines for individual Workers' Councils. Importantly, job classifications and the number of points attached to each job in a plant must be publicly announced well in advance. Plants belonging to the same firm are also expected to negotiate some redistribution of their respective residuals in order to alleviate large income inequalities. The plant's wage fund after taxes is divided by the total number of points. Next, the value of a point is multiplied by the number of points associated with each job, and the result is the employee's take home income for that accounting period.

The plant pays taxes from the Wage Fund *before* the employees are paid. Taxes from the Wage Fund are primarily paid into the budgets of local political units and self-managing communities of interest. Those taxes vary from one region to another and their uses are specified. As was pointed out earlier, the Yugoslav tax system relates the benefits of various public activities financed through taxes to their costs. The plant under consideration paid the following taxes from its Wage Fund.¹⁴

Total Taxes from the Wage Fund		\$ 273,103
County tax (1.41)	\$ 12,128	
Social protection taxes (.52)	4,472	
Education taxes (8.11)	69,760	
Tax for cultural activities (.77)	6,624	
Tax for physical education (.16)	1,376	
Tax for children's protection (.88)	7,569	
Tax for employment services (.24)	2,065	
Retirement and disability (5.97)	51,352	
Health protection (7.89)	67,867	
Tax for land improvements (.74)	6,365	
Additional tax for health protection (1.0)	8,602	
Additional tax for disability (.20)	1,720	
Other taxes (3.86)	33,203	

Taxes reduced the Wage Fund from \$ 860,168 to \$ 587,065. The average net income per unadjusted worker was then \$ 1,779 for the accounting period, or \$ 296 per month.

Collective Consumption Fund. The Collective Consumption Fund is used to finance the provision of some specific benefits for employees. Most common benefits financed from this fund are apartments for workers, purchase of apartments in resort areas, subsidies for cultural and sport events, scholarships for workers and potential employees, and investment in improved working conditions.

Reserve fund. According to Yugoslav law, all self-managing organizations must form the reserve fund. The monies in this fund are to be used to cover business losses, to finance retraining and job search for laid-off workers, to pay the minimum wage when the residual of a plant is not adequate, and to provide depreciation funds when an asset becomes obsolete before the end of its legal life.

Self-managing organizations must allocate to the reserve fund at least 2.5 percent of their *dohodak*. When the reserve fund in a plant reaches 25 percent of the average *dohodak* for the last three years, the plant's obligation to contribute to the reserve fund ceases. In our case, the plant allocated \$ 64,709 ($\$ 2,588,378 \times .025$) to its reserve fund.

Business Fund. The business fund consists of the book value of the firm's fixed assets, working capital, and external investments. External investments are joint undertakings with other self-managing organizations, time deposits, credits and others. The purpose of the Business Fund is to carry out the process of production, repay loans (only principal because interest is a contractual obligation that is paid *before* the residual is determined), and finance new investments. The allocations to the business fund together with the plant's depreciation allowances forms the base for investment activity carried out by the plant.

The plant under consideration allocated \$ 698,701 to its business fund. From this amount \$ 522,471 was for obligatory locus, and \$ 176,230 for the plant's business fund.

IV. Concluding Remarks

The analysis of the prevailing institutional structures within which the Yugoslav plant operates and internal rules for the formation and distribution of total revenue suggests that the Yugoslav system of contractual self-management has some built-in inefficiencies. Let us specify those inefficiencies that could be readily inferred from this paper.

(1) The working collective in Yugoslavia has the right of ownership in the plant's residual but no right of ownership in the stock of capital. When a worker leaves the firm he loses all his claims to the future returns. It means the collective has incentives to choose investment projects (regardless of whether those projects are financed internally or via bank credit) that maximize net cash flows of the plant over the employees' expected employment with *that* plant. The employees will prefer those projects whose present value of the returns on the truncated flows exceed the present value of the outlays. In general, incentive structures in Yugoslavia favor investment decisions that maximize the near term cash flows over those alternatives that would maximize the plant's present worth.

(2) In Yugoslavia, old employees have to share with new workers the return from past investments. Yugoslav law has tried to alleviate this problem by allowing the enterprises to pay a bonus to old workers for each year of service. Yet, a share of returns from past investment is captured by new workers. New workers might also have different time horizons and different perceptions concerning the disposition of the resid-

ual. Thus, the marginal product of labor increment must be substantial and possibly in excess of the average product of labor if the increase in the plant's employment is to be acceptable to the original group. A testable proposition is that business enterprises have a conservative bias in hiring new workers. In 1977, the rate of unemployment in Yugoslavia was about 13 percent.

(3) The employees of a Yugoslav plant cannot transfer (sell) their claims to the plant's residual. The non-transferability of the workers' right of ownership in the plant's earnings means that the system provides no room for specialization in risk-bearing across individuals with different degrees of risk aversion. The Yugoslav workers are forced in the aggregate to bear risks which are, in fact, insurable by diversification.¹⁶

Footnotes

- The author is grateful to the Earhart Foundation for a grant that has facilitated the writing of this paper.
- Svetozar Pejovich, Acting President, University of Dallas, Irving, Texas 75061, USA.
- ¹ See M Jensen and W Meckling, "On the Labor-managed Firm and the Codetermination Movement in the West", paper presented at the Interlaken Conference on *Analysis and Ideology*, June 1977.
- ² See E Furubotn, "The Long-Run Analysis of the Labor-Managed Firm: An Alternative Interpretation", *American Economic Review*, 66, March 1976, pp 104-23; S Pejovich, "The Labor-Managed Firm and Bank Credit, in *Economic Analysis of the Soviet-Type System* (ed: J Thornton), Cambridge: Cambridge University Press, 1976, pp 242-254.
- ³ *The Constitution of the Socialist Federal Republic of Yugoslavia*, Belgrade: Sluzbeni List, 1974, p 307.
- ⁴ *Ibid.*
- ⁵ *The Law of Associated Labor*, Belgrade 1976, pp 111-2.
- ⁶ S Pejovich, *Social Security System in Yugoslavia*, Washington, D.C: American Enterprise Institute, 1979.
- ⁷ The income statement discussed in this paper was published in a highly specialized journal whose purpose is to instruct accountants and managers on the implementation of Yugoslav laws and regulations. See *Contemporary Practice*, Appendix No 703, 1978.
- ⁸ For detailed discussion see E Furubotn and S Pejovich, "The Formation and Distribution of Net-Product and the Behavior of the Yugoslav Firm", *Jahrbuch der Wirtschaft Osteuropas*, 3, 1972, pp 265-88.
- ⁹ S Pejovich, *Social Security System in Yugoslavia*, *op cit.*

- ¹⁰ These guidelines were introduced in the early 1970s in response to a continuous decline in the allocation of the residual to the Business Fund. The author was recently told by the director of a Yugoslav enterprise that those guidelines are being abolished. However, the author has been unable to verify it.
- ¹¹ See *Bulletin for Trade, Catering and Tourism*, No 10, 1977, pp 55-6.
- ¹² *Ibid.*
- ¹³ Allocations to the business fund generate higher wages in the future.
- ¹⁴ Taxes paid by the plant on its wage fund were not enumerated in the published income statement. Tax payments are calculated from a number of legal acts and verified with the director of an enterprise in Belgrade.
- ¹⁵ S Pejovich, "The Banking System and the Investment Behavior of the Yugoslav Firm", in *Plan and Market* (ed M Bernstein), New Haven: Yale University Press, 1973.
- ¹⁶ M Jensen and W Meckling, *op cit.*