

**RADNIČKO UPRAVLJANJE I UČEŠĆE RADNIKA U RASPODELI
PREKO AKCIJA U HIJERARHIJSKIM RADNIM
ORGANIZACIJAMA**

Masahiko AOKI

Rezime

Cilj ove rasprave je detaljna analiza implikacija radničkog upravljanja u kontekstu modela preduzeća koje se suočava sa mogućnostima rasta, te nastoji:

(1) da obezbedi eksplicitan tretman unutrašnje organizacije preduzeća koji se bazira na principu starosnog prvenstva (*seniority principle*). Dohodak radnika tokom njegovog života postaje nesiguran, u zavisnosti od odabrane stopu rasta od strane preduzeća. Radnikovo opredeljenje za rast preduzeća izvedeno je iz aksiona o maksimiziranju njegovog dohotka u celokupnom radnom dobu;

(2) da ispita način na koji se izabrana postojeća struktura preduzeća u vezi sa njegovim planiranim rastom. Smatra se da preduzeće ima dve mogućnosti za finansiranje investicije. Jedna se sastoji u korišćenju sopstvenih sredstava, a druga u pozajmljivanju finansijskih sredstava;

(3) da sugeriše način povezivanja ekonomike samoupravnog preduzeća sa opštom teorijom preduzeća.

Od analitičkih nalaza mogu se pomenuti sledeći:

(1) Opredeljenje radnika za rast zavisi od njihovog položaja u odnosu na rizik i hijerarhijsku strukturu unutrašnje organizacije. Što je manji rizik koji snose i što je manja jednakost unutrašnje raspodele, utoliko se više radnici opredeljuju za rast preduzeća.

(2) Optimalna stopa rasta u preduzeća sa radničkim upravljanjem bira se tako da izjednači marginalnu sposobnost rasta (MEG) i relativan rast troškova (RGC). RGC je veći, a prema tome i optimalna stopa rasta je niža, što se više radnici protive prihvatanju rizika.

(3) Preduzeće sa radničkim upravljanjem nastoji da svoje investicije finansira spolja, utoliko je izabrana stopa rasta veća od kritičnog nivoa. Kritični nivo zavisi od relativne razlike između kamatne stope i subjektivne diskontne stope udruženih radnika, i od razlike u visini nadnica unutar preduzeća. Utoliko je raspoloživost spoljnih fondova opadajuća funkcija dohotka po pojedinačnom radniku preduzeća, ono nastoji da poveća svoje prodajne cene i ograniči prilič novih radnika, za razliku od slučaja odsustva restrikcije u korišćenju spoljnih fondova.

(4) Optimalna stopa rasta kapitalističkog preduzeća u kojemu postoji učešće radnika u upravljanju biće izabrana tako da, izjednači MEG sa harmonijskom sredinom relativnog rasta troškova radne snage i efektivnom kamatnom stopom za akcionare, pri čemu kod uprošćavanja učešća radnika i akcionara u dohotku služi kao ponderi. (1) Što je udeo starijih radnika u ukupnoj radnoj snazi veći, (2) diskontna stopa radnika je viša, ili (3) utoliko su mlađi radnici manje spremni da prihvate rizik, utoliko je verovatnije da preduzeće prihvata sporiji rast, kao i u slučaju relativnog povećanja pregovaračke moći radnika u odnosu na akcionare.

**PROFIT AND SELF-MANAGEMENT ENTERPRISE:
SIGNIFICANCE AND IMPLICATIONS**

Veselin ĐURĐEVAC*

I.— THE OBJECTIVES AND BEHAVIOUR OF THE SELF-MANAGED ENTERPRISE

1. The theory of the business firm has generally focused attention on two points:

The firm as a decision-making power, and its goals;

The motivation and behaviour of the firm.

Recent analyses of firms clearly show that their objectives may be multiple and not always reconcilable. Most contemporary theoreticians defend the concept of profit maximization. What is largely in dispute, however, is the uniformity of these aims. In their analyses, various methods of multiorriteria and pluri-objectives have been developed.

The question of the motivation of the self-managed enterprise in market economics is among the most controversial in present economic literature. The theories advanced range from moderate to extreme, often with strong ideological overtones.

Thus some non-Yugoslav scholars, such as Ward (21), Dumar (5), Vaneck (19) as well as others, believe that the main objective of a self-managed enterprise in a market economy is the maximization of the per worker income. This conception seems to be in contradiction with the present economic evolution in Yugoslavia, although it may have been nearer the truth at the initial stages of its self-managed development, when enterprises did not possess independent sources of capital accumulation. Among the Yugoslav economists, one may distinguish three main schools of thought:

... The first claims that the principal objective of a self-managed enterprise is the rate of income — relation between the income realized and the amount of investment applied to the means of production, including the new added value (11). The second group of authors regard profit as the maximizing objective of a self-managed socialist enterprise (16). And finally, according to the third group, the maximization of per worker income acts as the all-embracing aim in a socialist economy (17).

*.) Maître-assistant de sciences économiques à l'Université de Paris 1 — Panthéon-Sorbonne.

The adherents of the rate of income as the main objective of a labour-managed enterprise base their views on the fact that workers are both decision-makers and, at the same time, collective entrepreneurs. However, there is no agreement as to how this concept could be developed towards an objective-function, as it results from the activities of collective work, simultaneously productive and entrepreneurial. The controversial points also refer to the amount of income. What is its nature? Is it a homogeneous category or is it made up of separate, independent components?

Regarding the theory of profit maximization, it presupposes, firstly, that there is an agreement on the concept of profit, and secondly, on the choice of method of maximization. Even in the case of the classical entrepreneur, the sole center of decision-making profit maximizing involves a particular psychological make-up in the entrepreneur himself.

Other economists, taking into consideration the complexity of a self-managed socialist society and the many-sided phenomena that characterize it, propose a plurality of objectives for a labour-managed enterprise. Here one finds a certain similarity with the evolution of the occidental theory of the firm and its objectives.

In the labour-managed enterprise, the workers dominate the process of decision-making and consumption, within the limits of job security and employment considerations, and this appears as the most probable objective. Furthermore, many writers — mostly Yugoslav — maintain that the politico-organizational goal of a socialist self-managed enterprise is to maximize the democratic processes in decision-making and efficiency-implementation. () The concept of pluralistic aims affords a more complex and encompassing approach and may be considered as a step forward in the theory of the self-managed socialist enterprise. However, it is not without some problems related to theoretical interpretation and empirical evaluation. We shall revert to these problems when we examine the behaviour of the labour-managed firm and the problem of conflicts as well as the results achieved.

2. Behaviour of self-managed enterprises

In order to arrive at a more balanced picture of the whole problem, in addition to exploring the goals and objectives, an analysis of the behaviour of self-managed enterprises should also be presented. Therefore, the treatment of certain specific aspects and characteristics of socialist self-managed enterprises is necessary.

Most economic analyses concentrate on the behaviour of the enterprise and presuppose the existence of a chief or a power center whose policies and objectives are imposed upon the entire group of individuals making up the firm. If one assumes that this chief will strive to formulate a policy or goal of optimum achievement, the organization theory boils down to the choice of the best means available to attain it. Consequently, there is a possibility here not only of a conflict as regards means, which limits the area of sovereign exercise of power by rationality, strictly speaking, but of aims as well. For, even though the term rationality can have but one meaning, here there is not only one rationa-

lity of aims, but of means as well. This, of course, does not imply the non-existence of logic and a dialectic of goals (3).

The question of behaviour of labour-managed enterprises has been studied by various schools of economic thought. They range from those who treat the problem from a purely Marxist point of view and base their analyses on Marx's postulate that modifications in productive forces of necessity influence the behaviour of economic factors, to those who base their study upon the actual evolution of the capitalist enterprise. Somewhere in between are certain economists who advocate particular behaviour for a self-managed socialist enterprise.

However, there does not exist a fully developed and generally-accepted theory explaining the behaviour of labour-managed enterprises or of self-managed socialist enterprises in particular.

The traditional microeconomic theory treats the enterprise as a monolithic entity with a specific and well-defined objective, and a perfect flow of information. But what about a labour-managed enterprise?

Benjamin Ward has tried to answer this question. He maintains that rational behaviour would require that the firm maximize income per worker.

The so-called Illyrian firm behaves in a very different fashion as compared to the capitalist firm (21). The following table illustrates the point:

Effects on output and employment

Type of change	Neoclassical firm	Illyrian firm	U-maxim firm	Yugoslav firm
Increase in wage rate	—	0	0	0
Increase in lump sum tax	0	+	0, +	0
Increase in product price	+	—	0,—	+

The above table reveals the following facts: a) the wage rate has no place in the Illyrian firm (which seems desirable on ideological grounds since labour management does away with wage exploitation); and b) under the conditions of diminishing marginal productivity, the Illyrian firm will employ less labour than its capitalist counterpart.

Some other economists, such as E. Domar (5), J. Vanek (19), and B. Horvat (9—10), have carried this theoretical approach even further by introducing several variable factors. They observe that in the long run both firms behave in the same fashion whereas in the short run, the Illyrian type tends to be more unstable and to provide less employment than its capitalist competitor.

In the self-managed enterprise, where the means of production are neither private nor public, but are socially-owned, the status of labour changes fundamentally. The workers behave like a collective entrepreneur. Thus the self-managed enterprise is managed by the entire body of workers that make up the firm. They decide on production, investment, distribution, etc. They are guided, at least theoretically, by a common and predetermined aim.

achieved nor to economic efficiency, properly speaking. Actually, of the eight indicators mentioned, only two can be said to refer to efficiency in its strict sense of the term, while the other six deal with the division of the fruits of labour.

However, if one applies four of those indicators, that is the indicators used in calculating efficiency per worker, then the output has been taken to mean that as per qualified worker. Therefore, the same value produced per worker with different qualifications may refer to different degrees of economic efficiency.

Certain economists have tried, by using the neo-classical model of functional distribution (shares of production in the national product), to empirically verify the capital formation potential of the Yugoslav self-managed enterprise, by leaving out the consumption factor (14). A steady increase in personal income at the expense of rental income, owing to the present methods of income-sharing, has been characteristic of the Yugoslav system since the sixties. The cost of the production factors has steadily deviated away from the cost of labour, the individual income growing in relation to the cost of fixed fund utilization. The functional distribution seems to be seriously deformed by the rapid growth of individual income so that a corresponding growth in productivity simply could not follow.

The analyses of hypothetical and highly-oversimplified models are not without interest, but they remain rather unintelligible because they deal with non-existing enterprises. The weakness of the neoclassical theory of the enterprise resides in the fact that it has construed a model that may be better applicable to other economic phenomena than to those governing an enterprise (12).

The non-separability of income factors has some important implications with regard to methodology. It is quite impossible to calculate the implicit costs in a Yugoslav self-managed enterprise, either of labour or of capital, and to compare them with the other cost factors in order to arrive at a reasonably realistic assessment. Consequently, it is impossible to calculate the respective shares of labour, management, risks, monopolistic power, or profitability of different enterprises. Thus, the enterprise does not accept the proposition that workers ought to be recompensed separately and directly for their „entrepreneurial” contribution. This is probably due to the influence of Marxist ideology, which recognizes only differences relative to work input, ability and qualifications of the worker (15). It is thus necessary to come back to the specific characteristics relative to the managerial role of workers.

The appraisal of efficiency and of social behaviour of the self-managed enterprise should take into account the following two criteria: in order to achieve organizational efficiency, to what extent does rational behaviour bear upon the output increase of social work leading to minimization of expenditure of raw materials, energy and human resources; and secondly, to what extent does a self-managed enterprise fulfill the social purpose implicit in the concept of the self-managed enterprise as such.

2. From non-optimum to conflicts

Does the self-managed economic system assure the optimal allocation of resources?

J. Vanek has elaborated a whole theory on the subject and comes to the conclusion that the self-managed enterprise is at present the best form of producing organization offering the most effective incentives to its members (19). The problems of income-sharing can be approached more effectively and optimal solutions found, for the workers can see for themselves who is getting what and take corrective measures if necessary. Neither the capitalist market nor the statist bureaucracy is capable of doing that.

A number of economists have observed some problems regarding the adjustment of the Yugoslav self-managed enterprise to changing market conditions, which in itself may cast serious doubt upon the whole conception of self-managed type of business.

One may remark that there is no mechanism for measuring, even to a fairly approximative extent, the uniformity of allocation of certain resources among different economic activities which could lead to the equalization of marginal efficiencies of investment in alternative cases.

Another problem refers to the process of association or merging of different production units, which involves the transfer of funds on a vast scale and often depends on a number of non-economic factors and the power position of the negotiating partners (13).

Such a system does not seem to possess the necessary mechanisms for evolution toward a definitive and optimal form. This absence helps explain the relative inability of the system to reach a dynamic optimum, according to the logic of its structure and the mode of its functioning.

A number of economists maintain that it is hard to speak of the efficiency of a system, if one postulates the non-existence of conflicts, with the objectives clearly set, even if not defined operationally (1). In a self-managed socialist enterprise, by definition, all the workers identify with the economic organization in question. This implies the absence of any conflicts within the organization, and consequently, the greater efficiency of a self-managed enterprise as compared to a capitalist or state enterprise.

And yet, upon closer examination, the diversity of objectives of an organization reflects the existence of conflicts, the origin of which lies in different conceptions and different values that different people adopt spontaneously or under the influence of their environment.

It may also happen that a large number of people in an organization do not have a very clear idea concerning the objectives pursued or to be pursued in an enterprise. They are thus an impediment to both internal and external goal-setting and drive. In fact, considering the diversity and number of decisions that a modern enterprise deals with daily, the absence of an elaborate and precise mechanism to deal with such conflicts may be considered as a serious flaw in the Yugoslav system of self-management.

This leads to the basic question of power in the enterprise. Admittedly, we don't know exactly which groups hold decisive power in their hands and what their precise interests are. Thus, these conflicts may be viewed as conflicts between the objectives of a society as a whole and those pursued by individuals.

This, of course, leads to a series of differentiations, between a) regions, b) sectors of production, c) economic and social sectors, and, d)

among individuals themselves. The development of any organization, and especially of an enterprise, is faced with conflicts relative to various objectives which often have nothing to do with the logic of optimum, and the big question always remains: what is the best way to solve them?

The principal characteristics of the evolution of the self-managed enterprise — such as continuous growth in size, diversity of motivation, separation of ownership and management, conflicts among various groups — lead us to the following conclusions: 1) the self-managed enterprise is a complex organization that is still in the stage of development; 2) the self-managed enterprise is an organization conditioned by the system itself, but exercising an influence on the system as well.

In any event, the system needs further study and research, especially with reference to the self-managed enterprise and its environment, taking into account all the factors bearing upon the firm's organizational and social efficiency. Thus, we may be able to find a solution to the basic conflict between labour remuneration, as a basis of socialist ethics, and the need for a sound investment allocation. The self-managed, socially-organized system deserves then some merit.

REFERENCES

- 1) ADIZES I. — »Samoupravljanje i efikasnost rada i odlučivanja«. Gledišta, n° 3, Beograd, 1970.
- 2) — BOLOIĆ S. — Socijalno-strukturnalne determinante nestabilnosti u posleratnom privrednom razvoju Jugoslavije. Institut ekonomskih nauka, Beograd, 1967.
- 3) — COTTA A. — «Eléments pour une théorie des conflits: la diversité d'objectifs dans une organisation» in R. E. F. n° 1, Paris, janv-fev., 1977.
- 4) — ĐURĐEVIĆ V. — See »Essai sur la propriété étatique et la propriété sociale» in ECONOMIE POLITIQUE DE L'EPLANIFICATION EN SYSTÈME SOCIALISTE, études coordonnées par M. LAVIGNE, Paris, Economica, 1978.
- 5) — DOMAR E. — The Soviet Collective Farm. A. E. R., 1966, pp. 734-57.
- 6) — DUBRAVCIĆ D. — Ponašanje samoupravnog preduzeća kod izbora kombinacije proizvodnog faktora. Ekonomski Institut, Zagreb, 1967.
- 7) — DUBRAVCIĆ D. — »Labour as Entrepreneurial Input: An Essay in the Theory of the Producer co-operative Economy«. Economica, August 1970, London, p. 297-309.
- 8) — FURUBOTN E. G. — »Toward a dynamic Model of the Yugoslav Firm«. The Canadian Journal of Economics, n° 2, 1971.
- 9) — HORVAT B. — »A contribution to the theory of the Yugoslav Firm«. Ekonomika analiza, n° 1-2, 1967, Beograd.
- 10) — HORVAT B. — »Critical notes on the theory of the labourmanaged firm and some macroeconomic implications«. Ekonomika analiza, n° 3-4, 1972, Beograd.
- 11) — KORAC M. and alii — Problemi teorije i prakse socijalističke trobne proizvodnje u Jugoslaviji. Informator, Zagreb, 1965.
- 12) — LEBRATY J. — »Evolution de la théorie de l'entreprise«. Revue économique, n° 1, Paris, 1974.

¹⁾) — MADŽAR L. J. — »Alokacija resursa i efikasnost privredovanja«. Ekonomist, n° 3, 1976, Zagreb.

¹⁾) — MADŽAR L. J. — Raspodela dohotka i nelikvidnost. Institut ekonomskih Nauka, Beograd, 1973.

¹⁾) — NEUBERGER E. — JAMES E. — »Jugoslovensko samoupravno preduzeće«. Ekonomika misao, n° 3, Beograd, 1972.

¹⁾) — PJANIĆ Z. and alii — Specifična cena proizvodnje i stvarne cene u privredi Jugoslavije 1964-1968. Institut društvenih nauka, Beograd, 1971.

¹⁾) For more of the development on his question see: POPOV S. Ponašanje socijalističkog samoupravnog preduzeća. Institut ekonomskih nauka, Beograd, 1974.

¹⁾) — SCITOVSKY — »A note on Profit Maximization and its Implications«. The Rev. of Eco. St., 1973.

¹⁾) — VANEK Jaroslav — The General Theory of Labour Managed Market Economies, Cornell Univ. Press, Ithaca, 1970.

¹⁾) — VANEK Jaroslav — Milena JOVIĆ — »Uloga kapitalne opremljenosti rada u formirajući raspodeli dohotka u Jugoslaviji: Teorijska i empirijska analiza«. Ekonomika analiza, Beograd, 1-2, 1972.

¹⁾) — WARD B. — »The Firm in Illaria: Market Syndicalism«. A. E. R., 1958, p. 566-589.

¹⁾) — ŽELENIĆ N. — »Jugoslovensko preduzeće i teorija o ponašanju samoupravne tržišne privrede«. Ekonomika analiza, 1-2, 1976, Beograd.

¹⁾) — ŽUPANOVIĆ J. — »Proizvođač i rizikoneki socijalno-psihološki aspekti kolektivnog poduzetništva«. Ekonomist, n° 3, 1967, Zagreb, p. 389-406.

PROFIT I SAMOUPRAVNO PREDUZEĆE

Veselin ĐURĐEVAC

Rezime

Analize vršene od strane istraživača čije su doktrinalne tendencije, često različite, nastojale su da osvetle brojne aspekte samoupravnog preduzeća. Uzeli smo rentabilnost kao optiku zbog njenog interesa i značaja u izučavanju aktivnosti samoupravnog preduzeća. Pitanje motiva (cilja) poslovanja samoupravnog preduzeća u tržišnim uslovima je jedno od najviše diskutovanih u ekonomskoj literaturi. Mogu se, uz pokušaj pojednostavljenja, sresti četiri tendencije, počev od onih koji uzimaju dohodak po radniku, zatim pristalica dohodne stope, i nasuprot njima branioca profitne stope, i najzad onih koji zastupaju tezu o plurilitetu ciljeva samoupravnog preduzeća.

Raznovrsnost teoretskih interpretacija je od značaja u izučavanju ponašanja samoupravnog preduzeća, o ceni rezultata njegove aktivnosti kao i problema konflikata vezanih za više ciljeva.

Iako je uglavnom, prihvaćeno da je ponašanje donosioca ekonomskih odluka u uslovima samoupravnog socijalističkog preduzeća u osnovi različito od onog u kapitalističkom ili etatističkom preduzeću, još uvek smo daleko od zadovoljavajućeg objašnjenja kada se radi o dubljoj teoretskoj interpretaciji kao i empirijskoj verifikaciji. Većina teoreti-

čara, polazeći od društvene svojine nasuprot privatnoj i državnoj svojini prihvata tezu o položaju radnika kao kolektivnog preduzetnika. Upoređenja sa ponašanjem kapitalističkog preduzeća, polazeći od tradicionalne mikro-ekonomiske teorije, su signifikativna.

Međutim, efektivno ponašanje radnika kao preduzetnika nije bilo dovoljno izučavano uprkos izvesnih radova koje smo naveli. Ovo se posebno odnosi na polemiku o nespremnosti radnika samoupravljača da prihvate rizik kod donošenja odluke. Protvurečne teoretske postavke zahtevaju šira konkretna izučavanja na terenu.

Problem evaluacije aktivnosti samoupravnog preduzeća nije još uvek jasno i zadovoljavajuće definisan. Analize i upoređenja na bazi hipotetičnih i uprošćenih modela nisu bez interesa, međutim nisu integrabilni jer se tiču firme koja ne postoji faktički.

Polazeći od pretpostavke da su indikatori efikasnosti tesno vezani sa valorizacijom resursa, Zakon o udruženom radu, predlaže osam indikatora „rada i rezultata aktivnosti“. Međutim, primena četiri od osam indikatora (računatih po radniku), podrazumeva da su oni definisani po uslovnom radniku. Znači, iste vrednosti *per capita* sa različitim strukturama što se tiče kvalifikacija mogu biti u relaciji sa raznim nivoima ekonomskih aktivnosti.

Analiza ekonomskih i socijalnih efikasnosti samoupravnog preduzeća poredrazumeva uključivanje sledećih dvaju kriterijuma: a) postići organizacionu efikasnost racionalizacije procesa proizvodnje; b) u kojoj mjeri ono realizuje zadovoljenje socijalnih potreba (ciljeva) sadržanih u samom konceptu samoupravljanja.

Mnogi autori smatraju da je samoupravno preduzeće trenutno najbolja forma proizvodne organizacije s obzirom na stimulanse koje pruža svojim članovima. Po drugima, teško je govoriti o efikasnosti jednog sistema koji prepostavlja nepostojanje konflikata. Ovo tim pre ako se uzme u obzir raznovrsnost ciljeva ekonomskih organizacija, o kojima je bilo reči ranije, kao i mnoštvo subjekata odlučivanja u stvarnosti.

Mogu se konstatovati konflikti između ciljeva društva kao celine i pojedinaca. Ovo vodi ka nizu diferencijacija i to između: a) regionala, b) sektora proizvodnje, c) ekonomskog i takozvanog socijalnog sektora, kao i individualnih diferencijacija.

Nepostojanje izgradenog mehanizma za rešavanje konflikata, odnosno njihovog prevazilaženja može se uzeti kao ozbiljan nedostatak jugoslovenskog samoupravnog sistema.

QUANTIFICATION OF CAPITAL—LABOUR RELATIONSHIPS

Jose-Luis MONTERO de BURGOS*

O. INTRODUCTION

0. 1. Purpose. Under the same heading as that of this paper, I presented a report to the First International Conference on Workers' Economic Management.

In that report, which was 69 pages long, I set out to concisely summarize my Theory of the Firm, how it was worked out, its basic formulae, and its most important possible consequences in micro and macroeconomics. In addition, I included a programme for the Theory to be put to the test and verified in the laboratory.

Bearing in mind, too, that my Theory of the Firm contained several new concepts, it was inevitable that such a condensed summary could not be easily assimilated by readers who were not well up on my previous publications. Therefore, without straying from the conception and development of the original Report, but heeding the reasonable plea which The Editorial Committee of the Dubrovnik Conference had made to me, I have decided to view all my work from a new perspective which, although it does not present the Theory's rigorous scientific bases and dispenses with many quantitative aspects, does allow the new concepts to be more easily understood exactly as they should be applied at the firm level, nevertheless maintaining the statement of some of its more important practical consequences.

All this, of course, does not prevent an uninterested reader from taking recourse to the original Report, which I shall gladly send to anyone who asks for it, as soon as it is published.

0. 2. Motivation. For ten years I have devoted a large part of my intellectual activity to the search for a new model of the firm which, on the one hand, would be worthy of mankind, and on the other, would help to overcome the radical division in the world today. I make this last remark because, at a first and superficial analysis, it can be said that today's world is divided due to the firm: one part of the world accepts the private firm and the other rejects it. One might say that the reasons for this division go deeper. But this statement is an objective fact which may be verified on a map.

*) Madrid, Spain.