$$\Delta Q_t = pI_t$$
$$\Delta Q_t = pI_{t-1}$$
$$\vdots$$
$$\Delta Q_t = pI_{t-m}$$

Among the above relations, we choose the one with the best statistics. In that way, the length of gestation period of investment is discovered by econometric investigation.

In the empirical analysis, the OLS method was used. This estimator, within the class of linear unbiased estimators, gives the most efficient estimates if the assumptions of the model are fulfilled. Linearity of the specified function is assumed by constancy of incremental capital-output ratio. In most of the examined cases, there is a statistically significant linear relationship between the increase of production and gross investment (high values of the coefficients of determination). Also, autocorelation of the stochastic variable is not significant. Thus, there is no indication that the empirical function is not linear and that the ICOR for the period, under consideration, is not constant.

By comparative analysis of the two periods of development of the Yugoslav industry, it is obvious that there is a tendency towards the lengthening of gestation period in the majority of branches, and thus in the overall industry. The values of ICORs are, for the overall industry, higher in the 1966—1979 period than those in the 1952—1965 period. These two conclusions point in the same direction: the economic efficiency of investment in the Yugoslav industry worsened.

ECONOMIC ANALYSIS AND WORKERS' MANAGEMENT, 3, XVI (1982), 287—298

CAPITAL MAINTENANCE & INVESTMENT IN YUGOSLAVIA: TWO OBSERVATIONS

*Michael CONNOCK**

1 — INTRODUCTION

Since 1970, a considerable literature has appeared on the subject of capital maintenance in labour-managed firms in general and Yugoslav firms in particular. It has been argued that the absence of private property rights in labour-managed firms, coupled with the requirement to maintain social capital, will cause the workers in such firms to be less willing to engage in capital investment than would be the workers of firms under a system of private property rights.

The purpose of this article is to discuss two reasons why this may not always be so. The first of these has to do with bank finance, and seems to me to be relevant not only to Yugoslavia but to any likely labour-managed economy. It has been dealt with by other writers but not, in my opinion, with sufficient clarity about its implications. The second reason, which is specific to Yugoslavia, has to do with obligatory saving, and so far as I know has not hitherto been raised in the literature.

In Part 2 I outline, briefly, the arguments of capital-maintenance theory. In Parts 3 and 4 I explain my own arguments, and finally in Part 5 I consider where the whole disoussion appears to leave Yugoslavia.

2 — CAPITAL-MAINTENANCE THEORY

The debate was started by Furubotn and Pejovich (1970). However, that article embodies the unreallistic assumption that capital lasts forever, with the consequence that no depreciation provisions are necessary. That assumption was relaxed in separate articles by the two original authors, Pejovich (1973) and Furubotn (1974). I shall summarise the argument as it appears in Pejovich (1973).

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Pejovich deals with a labour-managed firm which is already in existence and which is considering whether to engage in additional capital investment. There is, I think, a hidden assumption that this investment will not involve the employment of any additional labour.[1] The new investment will have to be financed out of the firm's current income, which will involve the diversion of money which could otherwise be distributed to the workers. Another implicit assumption is that the income so diverted would otherwise be saved, individually, by the workers who would receive it.[2] The opportunity cost of using the money for investment is therefore the interest, of i per 1 dinar per year, which they would receive on it from a savings bank.

Once new investment is created, it must be maintained by the provision of true economic depreciation (defined, in a circular manner, as that amount which is sufficient to maintain the productive power of the investment). This means that the flow of additional income created by the investment is a permanent one. The size, net of true economic depreciation, of the income flow created by 1 dinar of investment is labelled r.

If a worker in a labour-managed firm enjoyed capitalist property rights, he would therefore be able to expect a perpetuity of r per year for each 1 dinar of present income which he chose to forego. The present value of this perpetuity, discounted at the opportunity cost interest rate of i, would be

$$\sum_{k=1}^{\infty} \frac{r}{(1+i)^k}$$

This can be shown to be equal to, simply,

$$r/i$$

and the worker will be willing to invest 1 dinar if

$$r/i \geq 1 \tag{1}$$

that is, if

$$r \geq i \tag{1a}$$

Of course, the worker, being mortal, could not enjoy this perpetuity forever, but he could sell it.

[1] If the possibility of extra labour hiring were involved, it would be necessary also to consider all the arguments about reluctance to hire labour in labour-managed firms, which are raised in the famous article of Ward (1958) and many subsequent works following his line of argument.

[2] If this were not so, the opportunity cost would be a rate of consumer time preference, which would be higher than the savings bank rate of interest.

In a labour-managed economy, by contrast, capital once created becomes social property. The individual worker, foregoing one dinar of current income, acquires a claim to the stream of future income arising from the investment only for as long as he remains with the firm. The present value of this stream is

$$\sum_{k=1}^{n} \frac{r}{(1+i)^k}$$

where n is the number of years that the worker expects to remain with the firm. This can be shown to be equal to

$$\frac{r}{i}\left(1 - \frac{1}{(1+i)^n}\right)$$

For the investment to be justified, this sum must be at least equal to 1, which gives the result

$$r \geq \frac{i(1+i)^n}{(1+i)^n - 1} \tag{2}$$

For any possible n, r must be greater than i. In other words, labour-managed firms require a higher minimum rate of return on investment projects than do firms under private property rights. Thus the labour-management system is relatively discouraging to investment.

3 — THE IMPACT OF LOAN FINANCE

The theory, as outlined above, assumes that funds for new investment are provided out of current income. It does not take account of loan finance. Pejovich (1973) and subsequent writers do deal with bank loans but not, in my opinion, entirely adequately.

In order to see more clearly what is implied, it seems to me to be helpful to take an accounting approach. Figure 1 is a "typical" balance sheet of a Yugoslav firm, taken from a Yugoslav university textbook of accounting. On the left-hand side it can be seen that the firm currently possesses capital equipment worth 820,000 dinars, and 60,000 dinars in its bank account.

Suppose, first of all, that not all the current year's income has been distributed and that it is therefore legally possible[3] for the 60,000 dinars in the giro account to be distributed to the workers as personal incomes. Suppose, further, that the workers in the firm agree that the 60,000 dinars shall be invested in a new machine. The giro account entry will be reduced to zero, and the "working equipment"

[3] This point will be explained below.

entry will rise to 880,000 dinars. The total assets on the left-hand side of the account will not change, and the whole of the right-hand side of the account will remain the same.

Now that the new machine has been obtained, its value will have to be maintained. Machinery and equipment in self-managed firms is social property, and the relevant present-day law seems to be the Law on Associated Labour (ZUR) of 1976, Article 19 of which reads in part: —

> In the realisation of the right of labour with social assets, workers in associated labour are responsible to one another and to the socialist self-managing society as a whole for the socially and economically appropriate use of those assets. .. and they have the obligation that they constantly renew, enlarge and improve them ...

In practice, of course, it is not possible to maintain a particular piece of equipment forever, and the obligation under the law is interpreted as consisting in the provision of depreciation allowances (*amortizacija*) out of the firm's current sales receipts. These allowances must be kept in a separate account, and only applied to the acquistion of new basic assets.

Figure 1

OOUR Bosna, Sarajevo

Balance Sheet as at 1. 1. 1976

BUSINESS ASSETS			SOURCES OF BUSINESS ASSETS		
a) Circulating Assets			a) Short-term obligations		
1. Giro account	60,000		1. Suppliers of basic assets	80,000	
2. Cash	1,000		2. Suppliers of circulating assets	70,000	150,000
3. Stocks	230,000	291,000			
b) Basic Assets			b) Long-term obligations		
4. Buildings	460,000		3. Long-term credits		1,000,000
5. Working equipment	820,000	1,280,000			
			c) Permanent sources		
		1,571,000	4. Own sources of business assets		421,000
					1,571,000

Source: J Klobučar & J Rodić, Računovodstvo (Accounting) I, Sarajevo, 1976

In this case, the 60,000 dinars have been irrevocably removed from the hands of the workers. Instead, of course, they will enjoy a stream of additional income arising from the greater productivity of their labour in conjuction with the new machine (and its successors, which will be bought with the depreciation allowances). In this case, therefore, the analysis of Pejovich (1973) seems to me to be entirely correct.

There will be an entirely different story, however, if the same machine is bought with the help of a bank loan. In this case, the entry under "working equipment" will still rise to 880,000 dinars, but the "giro account" entry will not change. On the right-hand side of the account, the entry under "long-term credits" will rise to 1,060,000 dinars. The totals, on both sides of the account, will rise to 1,631,000 dinars.

In this case, also, the firm will have to put aside depreciation allowances, but these can be used to repay the loan.[4] Suppose that the machine is depreciated over 5 years in straight-line depreciation, and that the depreciation allowances are used to repay the bank loan. Depreciation is thus at a rate of 12,000 dinars a year and, after 5 years, both the value of the machine and the debt used to acquire it will have been wholly written off in the balance sheet. Assuming (unrealistically) that everything else remained the same, the balance sheet would have reverted to its appearance in Figure 1.

In this loan case, there will have been no sacrifice of current workers' incomes, nor is there any question of a perpetuity. The analysis of Pejovich (1973) is, quite simply, irrelevant. The appropriate analysis is one of the ordinary Discounted Cash Flow techniques recommended in dozens of manuals of financial management in capitalist countries. The form of analysis closest to that of Pejovich is the Net Present Value technique, which requires that the discounted cash flows arising from a project should be at least equal to the outlay. In the present case this gives

$$NPV = -60{,}000 + \frac{R_1}{(1+i)} + \frac{R_2}{(1+i)^2} + \ldots\ldots + \frac{R_n}{(1+i)^n} \qquad (3)$$

where the R's are the additional net cash flows arising from the installation of the machine, n is the number of years during which these flows will be available, and i is the rate of interest which will have to be paid to the bank. Condition (3) simplifies to

[4] Some people, in Britain at least, have doubted this to be so. But there is ample documentary evidence that depreciation allowances in Yugoslavia can indeed be used to repay loans. See, for example, footnote 32 on page 413 of Privredni Sistem SFRJ (Economic System of the Soc. Fed. Rep. of Yugoslavia), ed. Smiljan Jurin, Belgrade, 1977, in which Dr Dragomir Vojnić, Director of the Zagreb Economics Institute, writes "Available resources (for the repayment of investment credits) include resources allocated to the business fund and depreciation".

$$\sum_{t=1}^{n} \frac{R_t}{(1+i)^t} \geqslant 60{,}000 \qquad (3a)$$

The R's consist of sales receipts in the corresponding years, minus material costs, taxes etc., but *not* minus depreciation, because cash does not leave the firm merely because it is put aside as a depreciation allowance. It is available to pay back a loan if necessary, and its use in this way extinguishes a liability at the same time as it removes an asset, so it cannot be said to be a cost from a management accounting point of view. This point is emphasised in Western textbooks of financial management and is equally relevant for Yugoslavia.

Condition (3a) is valid alike for Yugoslav firms using loan finance and labour-managed firms anywhere else under similar conditions, and also for partnerships of working people under private property rights in capitalist countries. (The position of capitalist firms, using hired labour, is superficially different in that the R's, for them, must be net of labour costs; but provided that no hiring of additional labour is involved, their decision in such a case will also be the same). Thus, under the conditions stated, the absence of private property rights is simply not a disincentive to investment.

It is only fair to acknowledge that Pejovich (1973) does make it clear that Yugoslav firms are permitted to pay back loans out of depreciation allowances, and thus are not obliged to maintain the full value of capital acquired with loans. He presents some geometrical treatment of the implications of loans, but does not investigate their implications for his algebra, and therefore does not reveal the extent to which the distinction between the situation under Yugoslav property rights and under private property rights disappears.

Stephen (1978), in a complex article which defies summary here makes some points about the treatment of loan finance by Pejovich (1973). However, his treatment is mainly within the framework of perpetual investments, established by Furubotn and Pejovich, and it is only in his final section (section 5) that he confronts the question of investment in an asset which can be physically run down while the depreciation allowances are used to repay the loan with which it has been financed.

Here, again, he starts with the perpetual return, r, envisaged by Pejovich (1973). This, it will be recalled, is the return on 1 dinar of investment *after* true economic depreciation has been allowed for.

Stephen assumes that his asset retains a constant productive capacity for a certain time but then, in the absence of maintenance, declines rapidly to zero productivity after n years. Since there is no legal requirement that the asset be maintained, the depreciation allowances can be used to repay the loan. For the reasons stated above, they should then be included in the net cash flows. Stephen assumes linear depreciation of d_t per 1 dinar in each year t, where $d_t = \frac{1}{n} K$, K being the initial cost of the asset. This of course is accounting depreciation, but Stephen

appears to treat it as true economic depreciation as well, since he shows $r + d_t$ as equal to total cash income in the initial period before the asset has started to run down.[5]

The difference between the maximum income flow per 1 dinar per year, and the actual income flow in any year t is labelled δ_t. Thus the net cash flow per 1 dinar invested, in any year t, is $(r + d_t - \delta_t)$. Then, says Stephen, the minimum acceptable constant cash flow, r, per 1 dinar invested is given by the equation

$$1 = \sum_{t=1}^{j} \frac{r + d_t - \delta_t}{(1+i)^t} \qquad (4)$$

where j years is the period of the loan.

Although this looks different from anything we have seen so far, a moment's consideration will show that if j is assumed to be the same as n, equation (4) is substantially the same as (3a) above. This is because $(r + d_t - \delta_t)$ is really just a more elaborate way of writing net cash flow in year t, R_t. Thus, once again, the difference from what happens under private property rights is more apparent than real.

It is true, of course, that we have imposed a restriction on Stephen. He is right in saying that if the loan period, j, is shorter than the life of the investment, n, then there will be a difference between what happens under private property rights and what happens under Yugoslav property rights. His explanation is fairly terse, and it may be helpful to give a simple, numerical explanation of why this is so. Consider a farm co-operative which invests 200 dinars now in the (certain) expectation of getting a net return of 110 dinars in one year's time and a further 121 dinars in two years' time. If the investment is financed by a loan at 10%, of which half must be repaid with interest in one year's time and the other half in two years' time, then the project will just break even and will be acceptable (just) to a co-operative under private property rights or to a labour-managed firm under Yugoslav property rights. But if the whole loan must be repaid in one year's time, the position will be different. To the co-operative under private property rights, the project will still be acceptable, provided that it has enough of its own money to replace the external money with internal money for the second half of the project. But to the Yugoslav firm it will not be acceptable, because it will have to find 110 dinars out of its own retained income at the midway point to replace the bank finance of the second half of the project and this will then become social property and not be recoverable by the individual workers.

A loan repayment period shorter than the life of the capital asset, in other words, will oblige the workers, at some point during the life

[5] r is defined (by Stephen following Pejovich) as net cash flow of the perpetuity (NCFP) — true economic depreciation (TED). (Abbreviations supplied by the present writer). Thus r + TED = NCFP. If, for Stephen, $r + d_t$ = NCFP, then obviously his d_t = TED. Taken over the whole n years of the life of the project, this seems to be roughly correct, since $n \cdot d_t = K$, which is the amount needed to reproduce the asset.

of the asset, to forego some of their current distributable income. They may nevertheless be willing to undertake an investment under these conditions, if it appears justified by the prospective returns. The conditions in accordance with which they will decide whether to undertake the investment will involve, theoretically, a mixture of the capitalist DCF method and of the Pejovich (1973) method: returns within the loan period will have to be dealt with by capitalist DCF, and returns beyond the loan period by the Pejovich method. The sizes of the returns beyond the loan repayment period *will* make a difference, and it appears to me that Stephen is mistaken in ignoring them.

The main point which I am concerned to argue here, however, is that the investment decision criterion for a Yugoslav firm, *when it is able to borrow money over the whole length of a project*, and when all or at least the voting majority of the workers concerned expect to be with the firm until the end of the project, is just the same as for a firm under private property rights. Stephen (1978) maintains that Yugoslav loan periods are generally shorter than project lives: this is an empirical question which merits further investigation.

4 — OBLIGATORY SAVING

My second point is concerned with obligatory saving. As is well known, until 1965 most of the income of Yugoslav enterprises, to the extent that it exceeded the total of government-established wage norms, was channelled off by taxation. From 1965, taxation was much reduced and enterprises acquired the freedom to choose in what proportions their net income (= gross receipts — material costs — depreciation — interest charges — turnover tax, etc) should be distributed between workers' personal incomes and "funds". "Funds" means, mainly, the business fund, which in turn means simply the assets used in the business. Additions to it will appear as increases in the total of money or other assets shown in a balance sheet such as that in Figure 1 above: on the right-hand side of the account, there will be a corresponding increase in the "own sources of business assets" entry.

The share of "funds" in net income of industry was at first high after 1965, but soon began to decline, as seen in Table 1.

Table 1

"Funds" as a percentage of national income created in industry

	%		%
1965	22.9	1973	17.2
1966	24.5	1974	21.2
1967	18.2	1975	16.0
1968	17.4	1976	10.3
1969	12.0	1977	15.4
1970	12.6	1978	15.9
1971	18.5	1979	16.7
1972	17.4		

Source: Calculated from *Statistički Godišnjak Jugoslavije*

As can be seen from the Table, the level of saving within industry had declined sharply by 1969—70, suggesting that as they became aware of the opportunities opened to them by the 1965 Reform, workers were exercising a choice in favour of the distribution of a greater proportion of enterprises' income in the form of personal incomes.

In 1971 the legal forms of industrial organisation were changed, with the former "enterprises" *(preduzeća)* being replaced by "Organisations of Associated Labour (OOURi)". At the same time, it seems that greater social pressure was exerted on the new OOURi to retain a higher proportion of their income in the form of "funds".[6] By 1973—74, this social pressure had been formalised in the new system of "social contracts" *(društveni dogovori)* in accordance with which industrial firms (OOURi) were obliged to allocate a certain minimum proportion of their net income to "funds". The proportion was determined by a sliding scale, according to the relationship between a firm's net income per unskilled man and the average for that republic. For example, in 1974 in Montenegro, a firm whose net income per unskilled man was only 65% of the republican average for industry was expected to contribute only 2.28% of its income to funds. A firm whose net income per man was at the average level was expected to contribute 20% of its income to funds, while a firm with a net income per man 50% above the average was expected to contribute 34.43%.[7]

These social contracts were, and are, voluntary in the sense that they are entered into, without legal compulsion, by the chambers of trade *(privredne komore)* on behalf of the firms, by the trade unions on behalf of the workers in their capacity as employees, and by the republican governments. But once entered into they are, at any rate theoretically, binding, and the social pressure to enter into them is undoubtedly considerable.

The very fact that the system of social contracts was instituted, suggests that the authorities felt some need to ensure that savings levels in firms were maintained. But, in any case, the levels of savings achieved in the 1970's, coupled with the levels which were required under the social contracts (to which the Montenegro figures may be a fair guide) suggest that once the social contracts were in force, there was very little saving in Yugoslav industry which could be described as truly voluntary. Firms making industrial investments in Yugoslavia are normally required by the banks to contribute money of their own to be used in conjunction with the bank's loans in financing the investments. But if we consider that each firm is likely to make a major investment only once every half-dozen years or even more seldom, and that each year the typical firm may be saving some 20% of its net income,[8] then it is

[6] In 1971 Tito sent his famous Letter to the League of Communists, which asserted the need for stronger Party leadership in all spheres of national life.

[7] Source: original document kindly given to the present writer by a Montenegrin factory director in 1974.

[8] That the proportions shown in Table 1 are generally lower than this may be explained by the fact that Table 1 shows "funds" as a proportion of national income created in industry. National income created in industry is larger than net incomes, because it also includes taxes and bank interest payments.

likely that the whole of the firm's own financial contribution to a major investment may come from accumulated obligatory savings.

From a theoretical point of view, the picture in this case is very different from that outlined by Furubotn and Pejovich with respect to savings out of current income. The important point to grasp is that, according to Yugoslav law, only a firm's current year income may be distributed to the workers.[9] Once the income account for a particular year has been closed, financial savings from that year are already social property. They appear on the asset side of a firm's balance sheet but neither they, nor even the interest earned on them at the bank, may be distributed to the firm's workers. Only by investing them in new real assets, from which a labour income may be earned, can the firm's members make use of the savings.

Thus the opportunity cost which the workers incur in using accumulated money savings for investment is not Pejovich's (1973) r, nor even the savings bank rate of interest i. It is simply the rate of return which could be earned on an alternative project. It follows that if a firm uses accumulated savings to finance the best available project, its members have nothing to lose and, perhaps, much to gain. If, for example, a firm undertakes an investment project costing 1 m. dinars, financed as to 500,000 dinars by a bank loan at 10%, and as to the other 500,000 dinars by the firm's own accumulated, obligatory savings, then the effective interest cost[10] is only 5%. In these circumstances, willingness to invest is hardly going to be a problem.

Another important point is that, even if Stephen (1978) is right and loan periods in Yugoslavia are generally shorter than project lives, the accumulation of obligatory savings out of current income, after a project has started, is likely to provide enough cash to enable a firm to replace external with internal finance without having recourse to income which would otherwise be available for distribution.

5 — CONCLUSION

In this article I have discussed two factors — the possibility of financing industrial investment by bank loans, and the role played by obligatory saving — which are likely to mitigate the effects of Yugoslav property rights on the willingness of Yugoslav industrial firms to invest, predicted by Furobotn and Pejovich (1970) and Pejovich (1973).

In reality, of course, there are many factors at work, and I am certainly not claiming that those which I have identified provide a

[9] Even the current year's income is social property: Article 18 of the Law on Associated Labour (ZUR), 1976, starts "The whole new value which workers in associated labour create with their joint labour is social property...". Numerous articles of the ZUR make it clear that workers have a right to personal incomes out of the added value created in the current year by their work in conjunction with social assets, but no right of ownership over any assets in the possession of firms.

[10] Apart from any opportunity cost of the internal part of the funds, constituted by the potential return on alternative projects.

complete explanation of the continued, fairly high level of investment in Yugoslavia. Stephen (1978) and other writers have pointed to the role of inflation: Yugoslav bank rates of interest have generally been under 10%, while the rate of inflation has often been 25% or more. In these circumstances, the real rate of interest has been negative and it is not at all surprising that firms have been so keen to invest that there has, in effect, been a queue for loan capital at the banks. In addition, an obligation to maintain the money value of capital does not mean much in times of rapid inflation.

Moreover, the analysis of Furubotn and Pejovich (1970), Pejovich (1973), etc, is a microeconomic one. It identifies reasons why workers in labour-managed firms may be unwilling to allow their income to be retained within the firms for investment, but fails to point out that if the workers insist on paying out the income in question to themselves, but then save it, aggregate savings in the economy will be the same. Private savings will be channelled to firms via the banking system. The capital market will still clear at the same level of savings and investment, but at a lower market rate of interest. One could add that investment can also be financed from foreign sources, and that this has happened to a great (perhaps, too great) extent in Yugoslavia.

My contention, therefore, is simply that the availability of bank loans which can be repaid out of depreciation allowances, and the system of obligatory savings under the social contracts, both play a part in maintaining a high level of industrial investment in Yugoslavia in spite of the absence of private property rights.

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REFERENCES

Furubotn E.G. (1974): 'Bank Credit and the Labour-Managed Firm: the Yugoslav Case', in Furubotn & Pejovich (eds), *The Economics of Property Rights*, Cambridge, Mass., Ballinger, 1974.

Furubotn E.G. & Pejovich S (1970): 'Property Rights and the Behaviour of the Firm in a Socialist State: the Example of Yugoslavia, *Zeitschrift für Nazionalökonomie*, 30, (3—4) 1970.

Pejovich S. (1973): 'The Banking System & Investment Behaviour of the Yugoslav Firm', in Bornstein M (ed) *Plan & Market* New Haven & London, Yale U.P. 1973.

Stephen F. (1978): 'Bank Credit & Investment by the Yugoslav Firm' *Economic Analysis & Workers' Management*, 12 (3—4) 1978.

Ward B. (1958): 'The Firm in Illyria: Market Syndicalism' *American Economic Review*, 48 (3) 1958.

Zafiris N. (1982): 'Appropriability Rules, Capital Maintenance and the Efficiency of Co-operative Investment' *Journal of Comparative Economics* 6 (1) 1982.

KAPITALNO ODRŽAVANJE I INVESTIRANJE U JUGOSLAVIJI: DVE OPSERVACIJE

Michael CONNOCK

Rezime

U ovom članku razmotrio sam dva faktora (mogućnost finansiranja industrijskih investicija bankarskim kreditima i ulogu obavezne štednje) koja verovatno ublažavaju dejstvo koje jugoslovenska svojinska prava imaju na sklonost jugoslovenskih industrijskih preduzeća ka investiranju, što su predvideli Furobotn i Pejovich (1970) i Pejovich (1973).

U stvarnosti, naravno, deluje mnogo faktora i ja, sigurno, ne tvrdim da faktori koje sam ja identifikovao potpuno objašnjavaju kontinualne, prilično velike investicije u Jugoslaviji. Stephen (1978) i drugi autori ukazali su na ulogu inflacije: kamatne stope jugoslovenskih banaka bile su redovno ispod deset posto, dok je stopa inflacije iznosila često dvadeset pet odsto i više. U takvim okolnostima, realna kamatna stopa je bila negativna, tako da uopšte nije iznenađujuće što su preduzeća toliko bila sklona investiranju i što su u bankama postojali redovi za zajmovni kapital. Osi mtoga, obaveza za očuvanje novčane vrednosti kapitala ne znači mnogo u vremenima ubrzane inflacije.

Nadalje, analize Furubotna i Pejovicha (1970), Pejovicha (1973) i još nekih autora mikroekonomske su prirode. One otkrivaju razloge zbog kojih radnici u samoupravnim preduzećima mogu da ne žele da sa njihov dohodak zadrži u preduzećima i nameni investicijama, ali propuštaju da istaknu da će, ako radnici insistiraju na isplaćivanju toga dohotka, koji potom štede, agregatna štednja u privredi biti ista. Privatna štednja biće kanalisana ka preduzećima posredstvom bankarskog sistema. Tržište kapitala i dalje će biti u ravnoteži pri istom nivou štednje i investicija, ali pri nižoj tržišnoj kamatnoj stopi. Može se dodati i to da se investicije mogu finansirati i iz stranih izvora, i da je to činjeno u velikoj (možda, i prevelikoj) meri u Jugoslaviji.

Ja stoga tvrdim da raspoloživost bankarskih kredita, koji se mogu otplatiti iz amortizacionih otpisa, i sistem obavezne štednje po društvenim dogovorima — imaju određenu ulogu u održavanju visokog nivoa industrijskih investicija u Jugoslaviji uprkos nepostojanju privatnih svojinskih prava.

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WAGES, INVESTMENT AND INCOME DISTRIBUTION: SOCIALIST THEORY AND POLICY

*Brian BURKITT**

INTRODUCTION

During the late 1940s and early 1950s much of the European left entertained an optimistic view of the possibility of democratic social change, based primarily on the significance of the transformation already achieved, partly at least in response to radical pressure. As Crosland (1) wrote in 1952, 'it is now quite clear that capitalism has not the strength to resist the process of metamorphosis into a qualitatively different kind of society'. A number of socio-economic developments were cited as promoting past and future changes, but two were considered crucial:

(i) the belief that full employment could be permanently achieved. Crosland said, 'the trend of employment is towards a high level, and the recurrence of chronic mass unemployment is most unlikely'.

(ii) the belief that full employment, nationalisation of basic industries and the extension of the welfare state represented not only an initial step towards equality but could also be the basis of an ongoing egalitarian trend. To quote Crosland again, 'the level of social services is now so high that our present society is often called the Welfare State. This has far-reaching consequences. It removes the insecurity which made so strongly for social discontent; it involves (since it is financed partly by high taxation of the rich) more equality than would be the case in a low tax laisser faire economy: and it makes inevitable (owing to the level of taxation involved) a high degree of government intervention in economic affairs'. Events in the last thirty years, particularly since the mid-1960s, have gradually undermined these beliefs.

FULL EMPLOYMENT AND PRICE STABILITY

Optimism concerning the feasibility of maintaining full employment evaporated, as the numbers out of work climbed to record post-

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