# The Persistence of Job Security in Reforming Socialist Economies

## Milan Vodopivec

The job security and overemployment that characterize even the reforming socialist economies are the result not of planning but of a complicated bargaining among coalitions that results in a massive bailing out of the ailing or less productive firms and workers at the expense of the more productive ones and of the household sector as a whole.

This paper — a product of the Socialist Economies Reform Unit, Country Economics Department — is part of a larger effort in PRE to investigate the labor markets in socialist economies. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact CECSE, room N6-045, extension 37188 (44 pages).

The quest for efficiency underlies the reform efforts of the socialist economies, but job security and overemployment (redundant jobs) still characterize these economies. Vodopivec argues that reforming socialist economies have maintained job security not through planning but mainly through a complicated bargaining among coalitions (special-interest groups) that results in a massive redistribution. This redistribution amounts to a bailing out of the ailing or less productive firms and workers at the expense of the more productive firms and workers and of the household sector as a whole.

Vodopivec substantiates his argument with an empirical analysis of the redistribution associated with the soft budget constraint in Yugoslavia in the 1970s and 1980s. He shows that redistribution to be the outcome of a confrontation among coalitions and explains its compensatory nature.

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by
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In Marxist ideology, the primary avowed goal of socialist countries has been to abolish capitalism's exploitation of workers. According to Marx, workers under capitalism are treated as "commodities" and are exploited by selling their labor at a price below the value of what that labor produces. Marx claimed that workers are forced into such transactions because their labor is their only source of income and the so-called industrial reserve army prevents wages from rising above a subsistence level. To uproot exploitation, then, the abolishing of the labor market seems to be no less necessary than turning ownership of the means of production to the public.

In traditional centrally planned economies (CPEs), central planning and state ownership are the primary means for achieving Marxist goals.[1] This paper recognizes that the reforming socialist economies (RSEs)--Yugoslavia, Hungary, and Poland--carry over the job security and overemployment typical in the traditional CPEs, but argues that the mechanism generating that phenomenon is fundamentally different from that functioning in CPEs.[2] Rather than being achieved by planning, job security and overemployment are produced primarily by a complicated bargaining process that could be regarded as bargaining over employment subsidies. The outcome of such bargaining is a massive compensatory redistribution of income, a redistribution that amounts to bailing out (preventing bankruptcy) or increasing the earnings of ailing or

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[1]    Granick (1987) argues that overemployment and job security in CPEs is
       consistent with the hypothesis that planners prefer employment over all
       other economic goals (that is, that planners have lexicographic job-rights
       preferences).

[2]    By RSEs I mean countries that initially adopted the model of a centrally
       planned economy developed in the USSR between the two world wars and later
       abolished central planning as a key coordinating mechanism while retaining
       state or social ownership of the means of production (best examples are
       Yugoslavia since the mid-1960s and Hungary since 1968).

less productive firms and workers--all at the expense of those that are more productive and of the household sector as a whole. In other words, the notorious softness of the budget constraint of firms (the fact that firms do not have to look at the bottom line) explains job security and overemployment in RSEs.[3] And the softness of that budget constraint is itself endogenous in economies where the conflicting interests of various groups are not intermediated through the market and where checks and balances do not countervail the power of political elites.

To substantiate this argument, I rely on empirical analysis of income redistribution as practiced in Yugoslavia in the 1970s and 1980s.[4] I start by comparing goals, means, and outcomes of CPE and RSE labor markets (section 1). I then describe the channels through which the redistribution is carried out, the quantification of the redistribution flows associated with those channels, and the econometric investigation of the pattern of redistribution (section 2). I further probe the mechanism of redistribution by viewing it as a confrontation between distributional (special-interest) coalitions in section 3. That sets the stage for conclusions and policy implications (section 4).

1.    THE REFORMS AND EMPLOYMENT GOALS OF SOCIALIST ECONOMIES

After World War II, the countries of Eastern Europe adopted, with a few modifications, the economic system the USSR developed between the two wars. The central authorities--the state planning commission and branch ministries-

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3/    See for example, Kornai (1980) on the soft budget constraint.

4/    Even in Yugoslavia, the only socialist country with open unemployment (15 percent by the end of the 1980s), overemployment is very significant. For example, Mencinger (1989) estimates that about 20 percent of employment in Yugoslavia is redundant.

-formulated detailed production plans and exercised control over their implementation. Through a detailed balancing of labor as a key ingredient of planning (Schroeder 1982), government tried to match the demand for workers embodied in production plans with the existing supply of labor (by skill and region). To cope with labor shortages, the government also manipulated basic wage rates to steer labor in desired directions.

The system as it worked in those countries initially produced relatively rapid economic growth, together with a seeming macroeconomic rationality-- that is, it prevented open unemployment and inflation. But as early as 1948 the most eager reformer (Yugoslavia) recognized that the traditional CPE model had serious flaws. The thrust of reforms in socialist economies has been to replace the existing system of central planning with a more efficient coordinating mechanism. First, mandatory short-term central plans (representing the planners' tightest hold on the economy) were abolished and replaced by more subtle instruments of indirect control. Second, paralleling the reduced scope of planning was an increased reliance on the market (and hence prices) as a means of coordinating economic activity. Third, enterprises were given autonomy in many areas, ranging from price-setting to decisions about product mix and investment and even to the selection of managers--an autonomy that government has, however, continually breached. Fourth, to improve motivation, profit incentives replaced the multiple criteria of central planning.

The general emphasis on the market as a coordinating device implicitly acknowledged that the objective of full employment is hardly consistent with the objective of rational employment (Fallenbuchl 1982). To some extent, this was also reflected in officially proclaimed goals. For example, Gierek's

strategy of economic growth explicitly identified rational employment policy as a goal (Adam 1984, 143). Moreover, all of the reforming countries (Yugoslavia, Hungary, Poland) have been encouraging a rational use of labor by introducing various incentive schemes in firms. Only Yugoslavia, however, among the RSEs, was willing to accept open unemployment as a necessary by-product of its reforms.

Despite the quest for efficiency that underlies the reform efforts and goals of socialist economies, employment has remained remarkably unchanged. The labor market in RSEs is still characterized by overemployment (redundant workers). This paper argues, to repeat, that the means for achieving overemployment in RSEs differs fundamentally from the means for achieving it in CPEs. In CPEs, overemployment is planned. In RSEs, it is a result of the redistribution of income aimed at bailing out the ailing parts of the economy.

## 2. THE MECHANISM OF REDISTRIBUTION

To characterize the Yugoslav economy, one must widen the framework for discussing redistribution of income. Formal taxes and subsidies are only the tip of the iceberg of income redistribution. Significant redistribution takes a less visible form. The appropriation of financial savings based on an inflation tax is also a form of redistribution; compulsory financial investments with large stipulated negative returns is another.

### 2.1 Channels of redistribution

I introduce several subcategories of taxes and subsidies. Taxes include formal taxes, quasitaxes, and "losses on money"; subsidies include formal subsidies, quasisubsidies, and "gains on money." These categories are described below (see Appendix for their precise definition).

**Formal taxes and formal subsidies**

Formal taxes and formal subsidies are pure income transfers. Formal
taxes are republican income taxes, some other obligations which have the
nature of taxes (such as expenses for preserving the environment and payments
for so-called social self-defence), and payments for the provision of social
services to the so-called Self-Managed Communities of Interest (SMCIs).
Formal subsidies are nonreimbursable resources obtained to prevent or lessen a
loss reported in the annual income statement, or to help once such a loss has
been incurred (at least part of grants can be used to finance personal
incomes). Sources of subsidies are other firms with the Working Organization
of Associated Labor (WOAL) and government (state) reserve and solidarity funds
(Law of Associated Labor, Article 155). Also, some forms of interfirm
crediting (called "resource pooling" because the creditors supposedly retain
decisionmaking power over the resources lent) specify that the creditor must
help cover the debtor's losses, should they incur.[5]

**Quasitaxes and quasisubsidies**

Quasitaxes are complete or nearly complete appropriations of resources
by one agent that are formally accounted for as financial investments by
another agent. That is, the resources appear on the asset side of the
investor's balance sheet, but are typically written off after some time
(several years, for example).[6] To a much lesser extent, they are repaid to

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5/ The opposite case, participating in the debtor's profits, rarely yields
positive real gains, since principal is usually not revalued and payment
of the profit share (in Yugoslavia's highly inflationary environment)
normally does not even make up for the loss of the principal.

6/ Enterprises are advised by government to accept self-management agreements
to that effect. These agreements are supposed to serve as a veil
preserving the legality and integrity of the system despite the involuntary
and discretionary nature of the transfers.

the investor, but only at their face value or at a small positive nominal

interest rate with a grace period of several years, which means--with

inflation--at a substantially negative real interest rate (in real terms only

a minute portion of the original investment is recovered).[7]  Both sides

clearly understand the grant implicit in this kind of financial investment, so

these investments are clearly involuntary.  Quasisubsidies are the

counterparts of quasitaxes.

The channels for this type of transfer are as follows:

- Credits to cover the loss.

- Rehabilitation credits.

- Resource pooling.

- Investments in development funds, special government funds, securities,

  or SMCIs of material production.[8]

- Investment in a WOAL's solidarity and reserve funds.

- Foreign loans to enterprises from commercial banks--to the extent that

  the enterprises are relieved from exchange rate risk.[9]

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7/  For example, the loan to the Federal Fund for the Acceleration of the
Development of Less Developed Republics and Provinces is repaid in 13
annuities, after a grace period of three years and with an interest rate
of 5 percent!  (The Use of the Account Plan for an OAL, *Information on
Book-Keeping and Profession*, 1985.)

8/  These include natural monopolies (electricity, coal mining, oil, and gas),
infrastructure (railroads, roads, ports, airports), and some utilities
(broadcasting, telephone, mail).  They finance part of their investment
through direct "contributions" from firms in other industries.

9/  Until recently, this was true in Yugoslavia. Authorities allowed exchange
rate differences stemming from this type of loan (the effects of
revaluation of foreign loans denominated in dinars as a result of the
depreciation of domestic currency) to be deferred and thus to be shown on
enterprises' balance sheets as an increase in assets (under "active
deferrals").  Thus, they would not appear among costs when they were due,
so only the original counterpart of a loan in dinars was translated into
costs--creating large excess demand (see World Bank 1989).

- Waivers of taxes, contributions, and compulsory pooling of resources.

- "Borrowing" from the firm's own business fund to cover the loss

(lossmakers are, to some extent, entitled to do so).[10]

Most of these channels (vehicles of taxation) are used only selectively. If a firm is unable to meet its obligations without incurring a loss, the obligations are reduced, deferred, or simply waived. Lossmakers (and some other firms, as determined by law) are thus exempted from partly relieved of, or allowed to defer the obligation (a) to pay taxes for republican government, (b) to contribute to republican reserve and solidarity funds, and (c) to pool resources in the Federal Fund for Financing Less Developed Regions and SMCIs of material production.

A word about the enterprises' "ability to pay." The income-sharing nature of personal incomes in Yugoslavia makes labor costs, at least theoretically, very flexible. If external obligations (and capital accumulation) were given priority, and the firm's personal income fund were treated as a residual, most enterprises would indeed by able to meet their obligations. Of course, the residual left for personal incomes could had been small--even dropping below the level needed to provide a minimum standard of living. To avoid so socially undesirable a situation, priority is given to personal incomes, and capital accumulation and other obligations considered residual. The quasifixed nature of personal earnings determines the amount of residual net income and thus the firm's "ability to pay" its obligations.

Gains and losses on money

Real gains (losses) from inflation based on holding money assets (assets

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10/ The firm is obliged to repay these funds in the future, but at least the "gain on money" clause applies (that is, with inflation the firm repays to its business fund less in real terms than it borrows from it).

whose values are firmly fixed in the money unit, such as cash, debts owned by the firm, and loans given to other firms), are called "gains (losses) on money" (Baxter 1984, 58-78).[11]  Given Yugoslavia's historical practice of holding the interest rate significantly below the inflation rate, the borrower thus accrues significant gains on money and the lender loses on money.[12] (Also, there were several debt write-offs for the worst firms in the 1970s and 1980s.) Thus the banking system has been a significant source of redistribution from net creditors to net debtors.

In the empirical analysis that follows, these channels of redistribution are quantified from the accounting data. But other important channels of redistribution--not easily quantifiable if at all--are omitted from the analysis. The most important channels not accounted for are:

(a)   Implicit taxation through regulated prices.

(b)   Redistribution through accounting methods: A firm's financial results also "depend" on the accountants' ability to bend rules and come up with a "positive zero" (a barely positive result on the income statement), to avoid paying taxes and quasitaxes. This is particularly important in Yugoslavia, where accounting rules do not allow for inflation,[13] and

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11/   Yugoslavia has traditionally been plagued by inflation. Inflation rose from about 30 percent in 1980 to full hyperinflation by the end of 1989.

12/   The government has repeatedly confirmed "active interest rate policy" (advocating positive real interest rates) but that was more rhetoric than intention. The conflict of interests on interest rate policies-- reflecting a personal rather than an objective, impersonal approach to decisionmaking--will be discussed later.

13/   The treatment of inventories is especially deficient. As one empirical study shows, because of the widespread use of the FIFO accounting method, material costs have been understated and income overstated, thus allowing higher wage increases and adding to pressures on inflation (Lavrac and Cibej 1986).

where no independent auditing companies restrict firms' discretion in applying rules.

(c) Eating up a firm's own capital through "greater or lesser depreciation of all assets in real terms through improper or inadequate operation of the enterprise" (Vanek 1972).

## 2.2 Quantification of redistribution

Before presenting empirical evidence on the flows of interfirm redistribution, let me describe the methodology used to calculate those flows. Formal taxes and subsidies are calculated as the sum of appropriate flows (taken mostly from the income statement). For other variables (quasitaxes, quasisubsidies, and losses and gains on money), the following method is used. The redistribution flow (RFLOW, where RFLOW could be each of the above variables) is calculated as

$$RFLOW = INFLR \times \frac{B_{-1} + B_0}{2}$$

where INFLR is an inflation rate (equal to 95.9 percent--retail price index-- for Slovenia in 1986) and $B_{-1}$ and $B_0$ are the tax (subsidy) bases at the end of the previous and current years, respectively. Note that the redistribution flows are expressed in terms of the money units at the end of the period, and that the equilibrium real interest rate is assumed to equal zero. The tax (subsidy) base is the sum of the items described for various categories (see Appendix).

In calculating losses on money, the amount calculated using the above formula is reduced by the sum of interest payment received and the amount of joint income received through participation in resource pooling. Similarly,

in calculating gains on money, the amount calculated using this formula is reduced by the sum of interest payments paid by the enterprise and income paid to other enterprises as a dividend from resource pooling.[14]

Table 1 shows the redistribution of income for a sample of 416 Slovenian enterprises for 1986, based on their annual income statements and balance sheets. Formal taxes amount to 16.4 percent of income, and the tax rate varies little (the coefficient of variation is 24.9 percent). By contrast, the informal components of taxation--quasitaxes and losses on money--are both larger and more variable. Quasitaxes are nearly 50 percent higher than proper taxes, and vary greatly. The coefficient of variation of losses on money is somewhat lower, and their share in income (63.1 percent) is the highest.

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14/ Although generally in the 1980s the discrepancy between the inflation rate and the dinar depreciation rate was not significant, that was not the case in 1986. Then, even money liabilities (assets) dominated in foreign exchange could bring gains (losses) on money. This type of gain (loss) is atypical (and unpredictable), however, so it has been ignored.

Table: Redistribution Flows

| Variable | Mean | Coefficient of variation | Minimum value | Maximum value |
|----------|------|--------------------------|---------------|---------------|
| FTAXR  | 16.4  | 24.9   | 0.2   | 134.1 |
| QTAXR  | 23.1  | 93.7   | 0.0   | 201.7 |
| MLOSSR | 63.1  | 66.8   | 1.2   | 611.8 |
| FSUBSR | 0.4   | 821.3  | 0.0   | 63.8  |
| QSUBSR | 7.4   | 200.7  | 0.6   | 377.3 |
| MGAINR | 60.5  | 89.3   | -45.9 | 852.5 |
| NSUBSR | -34.2 | -108.5 | -157.5 | 533.5 |

Notes:    All variables are in the form of rates (a percentage of the firm's
income); their mean is the income-weighted mean.
FTAXR:    formal tax rate.
QTAXR:    quasitax rate.
MLOSSR:   rate of losses on money.
FSUBSR:   rate of formal subsidies.
QSUBSR:   rate of quasisubsidies.
MGAINR:   rate of gains on money.
NSUBSR:   rate of net subsidies, defined as the difference between
the sum of subsidy rates (SUBSR, QSUBSR, and MGAINR) and
the sum of tax rates (FTAXR, QTAXR, and MLOSSR).

Formal subsidies for the sample amount to 0.4 percent of income. Most

enterprises receive none of them (they are distributed only to the lossmakers)

and some receive heavy subsidies, so formal subsidies vary extremely--more

than any other redistribution flows. Quasisubsidies are considerably higher

(7.4 percent) and also vary greatly. The largest among subsidies are gains on

money (60.5 percent of income); they vary less than other subsidy flows, but

more than formal taxes and losses on money, and only a little less than

quasitaxes.

Looking now at overall redistribution (the sum of taxes minus the sum of

subsidies, as reflected in the variable NSUBSR), this sample of enterprises

turns out to be a net taxpayer. Net taxes amount to 34.2 percent of income.

Many social services in Yugoslavia are financed directly from enterprise

income (in capitalist countries they are paid for largely from disposable

income) so the fact that enterprises are net taxpayers should not come as a surprise. But many enterprises--75 of them, or 18 percent--receive a net subsidy. Significant intraindustry differences confirm the general finding that redistribution is highly selective and discretionary.

These results lend themselves to some interesting conclusions:

(a)     Quasitaxes are much higher than formal taxes. And formal taxes are fairly uniform, while quasitaxes are selective.

(b)     Formal subsidies and quasisubsidies (largely, pure gifts) together represent a significant 7.8 percent of income. Some firms receive only small and others very large subsidies.

(c)     Total taxes (formal taxes, quasitaxes, and losses on money) for the enterprises in the sample are large, exceeding total income by 2.5 percent. Total subsidies are significantly lower, but still amount to 68.3 percent of income. Both are clear evidence of the heavy resource transfers.

## 2.3     The pattern of redistribution

What are the driving forces behind such variable income redistribution? As described in Vodopivec (1989), the mechanism of controlling personal earnings assumes that the personal earnings fund participates regressively in firm income, explicitly aiming to reduce personal earnings differentials among firms. But such a system for determining personal earnings can only be realized through income redistribution. To be able to offer higher personal earnings and meet other contractual obligations, enterprises with below-average income per worker must receive subsidies (in various forms). The donors of these subsidies are the above-average enterprises and households

with net money assets.

This mechanism is confirmed by the following regression equation (OLS method, t-statistics in parentheses; industry dummies are included, but not reported):[15]

$$NSUBS/N = 5.157 - .511 *INC/N \qquad R^2 = .44 \qquad (1)$$
$$\phantom{NSUBS/N =} (1.40) \quad (-11.29)$$

where NSUBS are net subsidies (defined as the sum of formal subsidies, quasisubsidies, and gains on money) minus the sum of formal taxes, quasitaxes, and losses on money (as defined in section 1), INC is the firm's realized income gross of depreciation, and N the number of workers in the firm.[16]

3. THE PUBLIC CHOICE EXPLANATION OF REDISTRIBUTION

Literature on the soft budget constraint acknowledges the bargaining nature of redistribution under the soft budget constraint, but has so far failed to identify the institutional characteristics of an economy that allows such a massive redistribution. This is particularly surprising, as such an analysis should be a guide to the reforms currently under way in many countries of Eastern Europe--geared, among other things, to dramatically reducing such redistribution.

I contend that RSEs simply lack adequate institutions to prevent such redistribution. To develop my argument, let us analyze income redistribution in terms of the confrontation between distributional coalitions (special-

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15/ The income-leveling nature of redistribution among enterprises in socialist economies is also confirmed by Kornai and Matits (1987) for Hungary, and Schaffer (1990) for Poland.

16/ The results are based on 416 observations from the above-mentioned sample of Slovenian enterprises.

interest groups). Every instance of redistribution involves a conflict between two parties with diametrically opposing interests: one advocating and the other opposing the transfer (redistribution is a transfer of income--that is, an uncompensated, one-way flow of resources). Redistribution is so pervasive and extensive because of the restrained institutional framework--in particular, the structure of political (and, thus economic) power in socialist economies. The coalition pushing for redistribution can often--and, in certain situations, always--gain enough support to overcome opposition and make the transfer go through.

Let me illustrate. Take, for example, concessionary financing (quantitatively, probably the most important source of redistribution)--say, a short-term bank loan to an enterprise at a negative real interest rate.[17] The usual "rationale" for requesting such a loan is simply to put out the fire-- that is, the enterprise's "need" for a financial injection because of its poor performance. Why would a bank undertake such an obviously unprofitable deal? Surely the bank's depositors (more precisely, net depositors) oppose it. The bank manager and staff (to the extent that their personal income and the manager's reputation depend on the bank's profitability) also have an incentive to avoid such deals. But a clearly defined group--the enterprise's workers and managers--is pushing for such a loan. For the firm's managers not only personal income but a career and reputation are at stake.

No matter how good an enterprise's reasons for trying to get

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17/    In 1986, the average interest rate Yugoslav banks charged on their loans
       to enterprises was about 32 percent (World Bank 1988). The inflation rate
       in 1985 was 85 percent, and the government had no serious commitment to
       contain inflation, so the expected inflation rate in 1986 was no doubt
       higher than the average interest rate on bank loans--which means that these
       loans were granted, on average, with ex-ante negative real interest rate.
       (The actual Yugoslav inflation rate in 1986 was 91 percent.)

concessionary financing, the coalition opposing such a deal would, in a market economy, pay little attention to them and would reject this kind of a deal. But in socialist economies the enterprise is never alone in its request. Local government and party representatives (and for larger operations, high level politicians)--motivated predominantly by personal considerations--have a great interest in preserving employment, even at the price of continually subsidizing enterprise. So these "godfathers" form a coalition with the enterprise for the purpose of getting financial help. The scale of this type of redistribution is evidence of the relative power of the two coalitions.

Or take the example of formal subsidies, such as the transfer of non reimbursable resources between sister Basic Organizations of Associated Labor (BOALs) to cover losses in one of them. The coalition opposing the transfer is, clearly, workers at the donor BOAL. They usually have little if anything to do with the causes of economic problems faced by colleagues in the lossmaking BOAL. Why should they transfer their income to cover the loss? The coalition pushing for this transfer is not hard to identify, either. It consists of workers of the lossmaking BOAL, commune government, and party representatives, and probably the WOAL management. Whatever the reasons for the losses (incompetent management, rigid employment legislation, wrong investment decisions, and so on), it is to the advantage of the coalition to shift income from one BOAL to another, and resort to both persuading and putting pressure on the workers of the donor BOAL.

Similarly, mandatory "financial investments" (for example, in SMCIs of material production and development funds) are clearly opposed by investors (managers and workers). But political structures sometimes find these arrangements the most appropriate vehicle for implicit subsidies (for example,

of big users of electricity) and--by the force of law--impose their will on

enterprises. The same can be said about waiving taxes and deferring exchange-

rate differences.

One can argue, in the first two examples, that the coalition presented

here as opposing the transfer may in fact (when its longer-term interests are

taken into account) favor them, since they represent an insurance scheme. In

a system where labor is meant to absorb all risk, as in Yugoslavia, the need

to ensure against variations in personal earnings is of paramount importance-

-so this objection has some validity. But the point is that such insurance is

inefficient as it creates a moral hazard: without institutional constraints,

workers would probably not want to bear the whole risk and would rather shift

it onto the shoulders of the owners of capital, who can ensure themselves by

holding a diversified portfolio. One indicator that such an arrangement is

not optimal is the "premium" payment schedule: the least endangered

enterprises pay the highest "premium," and the ones in the worst shape pay

nothing at all (obviously, such a scheme must be mandatory).

It is important to note in the first example that ultimately the bank

itself will probably not bear the costs of concessionary financing--at least

not the full costs. With the same excuse of being financially squeezed, the

commercial bank will in turn knock on the door of the central bank and ask for

help (again in the form of subsidized credit). The bargaining between

coalitions is then repeated on a higher level--again with a predictable

outcome. One coalition is representatives of the central bank and possibly of

the ministry of finance. The other is representatives of the commercial bank

(a potential beneficiary) who lack the power on their own to enforce

redistribution--so they are joined by republican and, in more important cases,

federal ministries from the sectors that are to benefit from such loans, and, if necessary, by top federal government and party officials.[18]

The chief characteristic of the above-mentioned methods of resolving distribution problems is the personal nature of decisionmaking (contrasted with the impersonal nature of market intermediation). The logic of collective action implies that various social groups differ greatly in their power to organize for collective action--with grave consequences for efficiency (Olson 1965). The foregoing cases illustrate this point.

The constituency opposing concessionary crediting is the population as a whole, which eventually pays for it through an inflation tax. No wonder a coalition with such a broad base has problems representing its interests. Similarly, workers at the donor BOAL are unable to organize and block the inter-BOAL transfer. Their formal leaders, the firm's managers, are reluctant to resist the transfer, because they are under direct pressure from advocates of the subsidy. And for an individual worker, the consequences of intervention (getting a reputation for stirring up trouble among workers, which makes it difficult to get a new job) by far exceed the expected benefits. Similarly, the constituency opposing legally imposed financial investments is workers in the firms that are forced to invest--and the constituency opposing legally-authorized tax waivers is the tax payer who must pay higher taxes as a result of the waiver. Because of their large number and

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18/  Bartlett (1989) describes in detail the struggle between opposing coalitions in the frustrated attempt to enforce restrictive monetary policy in Hungary in 1987-88. He notes that ". . . the National Bank's defeat in this case reflects not merely the specific circumstances which obtained in early 1988. In the Hungarian context, the political position of actors seeking to pursue policies of financial discipline is inherently weaker than that of actors aiming to expand the stock of money and credit" (p. 33). This study documents that claim for Yugoslavia, but it applies to all socialist economies.

the unavailability of selective incentives (Olson 1965), these workers are unable to organize themselves to defend their interests. Their chances to organize themselves are further reduced because management, rather than defending their interests, is likely to remain loyal and conform to the center. The same is true for (official) labor unions.

## 4. CONCLUSIONS AND POLICY IMPLICATIONS

The mechanism that enables Yugoslav firms to avoid layoffs is a system of bargaining among coalitions that results in a massive redistribution of income aimed at--in Kornai's words (1980, p. 315)--". . . 'stabilization' of every firm, and even of every job." A similar conclusion is likely to apply to other RSEs.

What does this tell us about the efficiency of such economies? Some economists defend such economies as being "distributive efficient."[19] But an economy in which a substantial part of GNP is redistributed through bargaining among coalitions is bound to be inefficient in distribution, because coalitions differ in their power to organize for collective actions (Olson 1982). Socialist economies cannot, therefore, be praised even for equity.

RSEs fare even worse, or course, at production efficiency. Compensatory redistribution offers security and insurance for economic agents, but creates a moral hazard which bears directly on the inadequate work motivation (X-inefficiency),[20] the irrational investment (allocative inefficiency), and the

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19/ Kornai (1986), for instance, claims that "(t)he elimination of unemployment is an achievement of great historical importance" (p. 131).

20/ Using a static framework, my estimate of the deadweight losses produced by compensatory redistribution in Yugoslavia in 1986 is 6 to 7 percent of GNP (Vodopivec 1990).

suppression of entrepreneurship (dynamic inefficiency) found in RSEs.[21]

Moreover, subsidies create a wedge between the wage paid to a worker and his

or her value marginal product. When wages do not reflect the opportunity

costs of labor, they do not send the right signals for labor allocation

economywide. The macroeconomic instability of SEs also has its roots in

compensatory redistribution, because these economies lean heavily toward

expansionary monetary policy (see Rocha 1990 for evidence of the impact of

public sector losses on inflation in Yugoslavia).

The implications of this analysis are important for economic policy,

particularly in the current transition of the socialist economies of Eastern

Europe. Overemployment in the RSEs has not been a goal in itself. Rather,

employment subsidies are the logical result in a constrained institutional

system that allows powerful distributional coalitions to emerge. Imposing and

sustaining financial iscipline (attaining a "hard budget constraint")

requires more than the government's *willingness* (within an unchanged

institutional system) to do so. Among other things, it calls for (a) a

transparent structure of property rights; (b) an unselective, transparent

fiscal system, and (c) a multiparty political system (to provide checks and

balances on the ruling party and thus limit its ability to redistribute).

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21/ A similar position, pointing to the discretionary behavior of bureaucracy
as an important cause of inefficiencies in the Soviet Union, is taken by
Litwak (1990).

APPENDIX: METHOD AND DATA USED TO CALCULATE REDISTRIBUTION FLOWS

The analysis in this paper was based on 1986 data for a sample of 416 Slovenian manufacturing enterprises. Only units directly engaged in production activities were selected. (So-called working communities that perform general services such as marketing, planning, and analyses, were dropped). Most of the units in the sample were BOALs, but some were also so-called uniform WOALs (units that do not consist of BOALs). The enterprises in the sample account for about 10 percent of total GNP of the republic of Slovenia, the most developed of Yugoslavia's republics and autonomous provinces.

Data analyzed--Social Accounting Service data--included 149 variables from the income statement, 362 variables from the balance sheet, and 110 variables from the special accounting data set, from each firm.

To allow for industry-level analysis, only industries (as defined at the lowest, 5-digit level) with 10 or more firms were selected: drawn and rolled steel, cast metal products, brick production, building materials, sawmilling, board manufacturing, furniture, paper and paper products, cotton fabrics, wool fabrics, knitwear, underwear, garments, footwear, bread and pastry, vegetable and fruit processing, slaught·ring, wine production, and printing.

## How variables were calculated

### Formal taxes

Formal taxes were calculated as the sum of the following items from the income statement:

- Obligations to BOALs providing services in education, science and culture, health, social security, other social services determined by law, pension and disability insurance.
- Obligations for housing solidarity.
- Obligations for employment and social security of workers.
- Republican income tax.
- Expenses for maintaining and improving the environment.
- Memberships.
- Expenses for national defense and social self-protection.
- Contributions for Economic Chambers and other professional organizations.
- Other obligations from income.
- Part of the income for other specific purposes.
- Monopoly part of income transferred to other enterprises.
- Part of the net operating income used to cover the losses of other BOALs.
- Part of net operating income for other purposes.
- Part of net operating income for other funds.

### Formal subsidies

Formal subsidies are calculated as the sum of the following items (all memorandum items on the income statement, except "coverage of the loss from previous years," which is taken from the "special accounting data set"):

- Coverage of losses from the fund for joint reserves of sister BOALs.
- Coverage of losses from common risk-bearing within a WOAL.
- Coverage of losses from other sources of a nonreimbursable nature.
- Coverage of losses from resource pooling.
- Coverage of losses from previous years (received in the current year) by nonreimbursable resources, and debt write-offs incurred to cover losses from previous years.

## Quasitaxes

A quasitax base is calculated as the sum of the following items from the asset side of the balance sheet:

Claims within a WOAL

- Coverage of the losses of other BOALs.
- Rehabilitation credits.
- Short-term and long-term resource pooling.

Short-term lending

- Purchase of securities.
- Resource pooling with other firms.
- Resource pooling in the internal bank.

Long-term lending

- Pooling with other firms.
- Pooling in the SMCIs of material production.
- Resource pooling in the internal bank.
- Resource pooling in banks.
- Resource pooling with firms from the less-developed regions.
- Resource pooling with other social agents.
- Pooling in the development fund of the sociopolitical community.
- Long-term rehabilitation credits.
- Lending to the Federal Fund for Acceleration of the Development of Less Developed Regions.
- Lending according to the regulations of sociopolitical communities.
- Purchase of securities and other long-term lending.

Financial investment in reserve and solidarity funds

- Claims for resources pooled in the fund for joint reserves of the WOAL.
- Claims for resources pooled in the fund for joint reserves of Sociopolitical Communities.
- Claims for rehabilitation credits from the reserve fund.
- Purchase of securities and other lending from the reserve fund.
- Claims for pooling of resources from the solidarity fund.

**Quasisubsidies**

A quasisubsidy base is calculated as the sum of the following liabilities:

- Liabilities for the part of the business fund to cover losses.
- Liabilities from long-term pooling (with other BOALs, in the SMCIs of material production, with banks, other social agents, farmers, and private persons).

**Short-term liabilities**

- For long-term rehabilitation credits.
- For short-term rehabilitation credits.
- For underpaid income taxes.
- For underpaid contributions based on income.
- For other underpaid obligations based on income.
- For taxes on personal incomes.
- For contributions based on personal income.
- For resources lent to cover losses during the year within a WOAL.
- For rehabilitation credits within a WOAL.

**Liabilities from the reserve fund**

- To other firms.
- Other liabilities.

**Liabilities from the solidarity fund and the fund for other purposes**

- Liabilities for the resources of the solidarity funds lent by other firms.
- Other liabilities from the solidarity fund.
- Liabilities for the resources for other purposes lent by other firms.
- Other liabilities for the resources for other purposes.

**Losses on money**

The sum of the following assets is the base used to calculate losses on money:

- Money assets.
- Securities (checks, promissory notes, bonds, other).
- Claims on the basis of business relations.
- Claims on the basis of income.
- Claims within a WOAL.
- Paid obligations from income.
- (Short-term and long-term) lending.
- Money assets held for investment purposes.
- Claims for advances of investments.
- Reserve fund assets.
- Assets of the solidarity fund and assets for other purposes.

Collective consumption assets

- Money assets.
- Financial assets pooled in the SMCI for housing.
- Pooled resources for housing within a WOAL.
- Other lending from resources earmarked for housing.
- Claims from resources earmarked for housing.

Assets earmarked for other needs of collective consumption

- Money assets.
- Pooled resources for other needs within a WCAL.
- Pooled resources for other needs.
- Other lending from resources earmarked for other needs.
- Money assets held on giro account.
- Claims from resources earmarked for other needs.

The reduction of losses on money mentioned in the text (returns on the above financial investments) is calculated as the sum of interest revenues, revenues from participating in joint bank income, and revenues from participating in the joint income of other enterprises, minus expenses for covering the loss of other enterprises as stipulated in the agreement on resource pooling.

**Gains on money**

The sum of the following liabilities is used as the base for calculating gains on money:

- Long-term credits.
- Short-term credits.
- Liabilities for short-term pooled resources.
- Liabilities from business relations, except liabilities to workers.
- Liabilities on income, except for distributed net income for personal incomes.
- Liabilities for taxes and contributions.
- Liabilities within a WOAL.
- Liabilities for pooled solidarity resources.
- Liabilities for other solidarity resources.
- Liabilities for pooled resources for housing.
- Liabilities for loans earmarked for housing.
- Other liabilities for resources earmarked for housing.
- Liabilities for pooled resources for other needs of collective consumption.
- Liabilities from loans for resources for other needs of collective consumption.
- Other liabilities for resources earmarked for other needs of collective consumption.
- Other sources of resources earmarked for other needs of collective consumption.

The reduction of gains on money (interest payments on the above financial investments) is calculated as the sum of interest payments for credits for working capital, interest payments for credits for fixed assets, payments of dividends to other enterprises, and payments of dividends to foreign persons.

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