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***Structure and Strain in Explaining
Inter-Enterprise Arrears***

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Structure and *Strain* in Explaining Inter-enterprise Arrears

(Abstract)

This study considers *strain* to be the main source of arrears; strain can be linked with the structure of the economy and the size of resource misallocation. The focus here is on the real side of the economy in explaining the growth of arrears and on exploring avenues for their reduction. Arrears "soften" markets and influence the system, apparently, in an ambivalent way: they seem to operate as a self-protecting device against the pressure for change (against the need to proceed with swift and fundamental reforms); at the same time, they can slow down dangerously the speed of restructuring and adjustment by relaxing financial discipline. Arrears preserve a soft-budget constraint syndrome. As temporary quasi-inside money, arrears in fact fuel inflation: they enable firms to raise prices and wages without fearing immediate consequences. Since they are only a temporary substitute for real money, arrears work to 'endogenize' money supply dynamics in a perverse way. The dimension of the arrears problem in the various post-command economies is linked, basically, with their capacity to adjust, which in turn depends on structure and the size of required structural change (adjustment). Exports are a possible side-effect of arrears and a constraining factor on these. The best one can hope in fighting inter-enterprise arrears is, essentially, to try to contain and reduce them. Containing arrears cannot be a one shot policy-drive; here one deals with a process that will eventually overlap with the evolving environment.

Non-technical summary

Inter-enterprise arrears mirror the tremendous strain under which post-command economies operate. The existence of arrears is not a surprise for they can be detected in all real economies, the relatively well-functioning advanced market economies included. What is unusual in the transforming (post-command) economies are the magnitude and the effects of arrears, which make up a structural trap for stabilization. The fight against arrears means, essentially, trying to contain them to a level that does not undermine efforts to stabilize the economy. Setting up a clearing house, securitization of inter-enterprise credits are only temporary, or partial solutions; they do not focus on the main (primary) sources of arrears, which, as the paper argues, are structure and the size of required structural adjustment (resource mis-allocation). Since dealing with their primary roots will take time it makes sense to presume that containing arrears can not be a one shot policy; it is a process that will overlap in time and reflect an evolving environment acquiring ever more traits of a fully fledged market system. The more quickly restructuring and privatization will proceed, the more competitive markets become and the more mobile labor will be, the less menacing inter-enterprise arrears will be for stabilization policy and the functioning of the economy. Containing arrears will help 'stabilize' stabilization policy. Stabilization, itself, would have to be understood as a process, most likely, to evince a stop and go dynamic including setbacks). It can be surmised that the control of dis-equilibria during transition will reveal a stabilization policy path moving in tandem with the speed of change of the domestic environment.

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Because of their impact on stabilization policy and on the transformation of post-command economies, inter-enterprise arrears have captured the attention of both theorists and decision-makers. However, the diagnosis and solutions which have been submitted so far do not directly address what this study considers to be the main source of arrears: strain, which itself, can be linked with the structure of the economy and the size of resource misallocation. Therefore, the study focus here is on the real side of the economy in explaining the growth of arrears and on exploring avenues for their reduction.

Section two deals with macroeconomic implications of arrears. Arrears "soften" markets and influence the system, apparently, in an ambivalent way: they seem to operate as a self-protecting device against the pressure for change (against the need to proceed with swift and fundamental reforms); at the same time, they can slow down dangerously the speed of restructuring and adjustment by relaxing financial discipline. Arrears tend to preserve a soft-budget constraint syndrome. As temporary quasi-inside money, arrears in fact fuel inflation: they enable firms to raise prices and wages without fearing immediate consequences. However, paradoxically, arrears can also have an anti-hyperinflationary potential. Since they are only a temporary substitute for real money, arrears work to 'endogenize' money supply dynamics in a perverse way.

Section three underlines that the systems undergoing transformation have been under tremendous strain because of internal reforms and external shocks. Structure and magnitude of resource misallocation are highlighted and it is argued that the system develops a logic of motion that entails inflation tax and real interest rates as implicit subsidies. Analogies are made with the adjustment of the industrialized countries following the oil price shock in the 1970s and early 1980s, as well as with that of the oil-importing developing countries to the real interest rate shock in the early 1970s. The dimension of the arrears problem in the various post-command economies is linked, basically, with their capacity to adjust, which in turn depends on structure and the size of required structural change (adjustment). Relatedly, a paradox of policy credibility in undertaking structural adjustment is emphasized.

Section four uses the Romanian experience as a background in order to show exports as a possible side-effect of arrears and as a constraining factor on these. Arrears tend to restrain the evolution of enterprises along a common denominator path, which explains why those that can grow try to escape the real liquidity constraint by pushing exports: even when exports seem unprofitable, a premium on liquidity can more than compensate the value differential. Dollarization is mentioned in this regard, and the size of the economy is seen as affecting the relationship between arrears and exports.

Section five tries to offer an operational framework for containing arrears; the areas for action include in particular: 'breaking up' structure by inducing a strategic alliance among creditors and insulating the big offenders (debtors); imposing a disciplining 'straitjacket' on structure, by modifying the set of rewards and penalties so that agents optimize in congruence with the thrust of transformation; industrial policy, as part of the policy-mix of stabilization and transformation, is viewed as a 'damage-control device' ('picking losers among losers') which

allows a breathing space needed to cope with the high degree of uncertainty and fuzziness about property rights, and which can mitigate the costs of resource reallocation; and targeted external assistance. Incomes-control policy is seen as an essential component of the 'straitjacket' in light of the heavily monopsonized labor markets.

The concluding remarks underline that the best one can hope in fighting inter-enterprise arrears is, essentially, to try to contain and reduce them. Containing arrears cannot be a one shot policy-drive; here one deals with a process that will eventually overlap with the evolving environment.

2. Macroeconomic implications of arrears

Inter-enterprise credits are a normal way of doing business in a market economy and their existence should not, normally, be a cause of concern. In a mature market economy bank and non-bank credit are of roughly equal size (D.Begg and R. Portes, 1992, p.9). When certain enterprises enjoy excess liquidity they lend it and, thus, non-bank credit emerges. Complications arise for both theory and policy when credits are not voluntary, or when payments overdue are, as a matter of fact, payments delayed sine die i.e., arrears with less than a very slim chance of being repaid.

Inter-enterprise arrears are a symptom of an economy under stress and it is conceivable that during recessions, the length of delays in making payments grows; the weaker, less competitive firms try to survive by resorting to arrears and, thereby, they spread financial strain around. But in a well functioning economy, market (financial) discipline (see T. Lane, 1992) is a golden rule of the game and, ultimately, exit befalls those companies that can not deliver accordingly.

Ever more attention has been paid to inter-enterprise arrears in the transforming(post-command) economies lately for two main reasons:

a) the peculiar nature of the phenomenon in these systems, with aggregate net arrears portraying congenital inefficiency (losses/incapacity to pay) and gross arrears reflecting the institutional primitiveness of the domestic market environment; b) the impact of arrears, as temporary quasi-inside money, on monetary policy and, ultimately, on stabilization policy. The evolution of arrears in the transforming economies, especially, in those that have started reforms later, has thrown more light on the extreme structural rigidities of these systems and raised questions about the microfoundations of macroeconomic stabilization policies during transition

2.1 Arrears 'soften' markets

It can be assumed - and empirical evidence supports it - that the more rigid (inadequate) a system is structurally and institutionally, the more intensely arrears will show up as a structural problem. Arrears appear to influence the system in an ambivalent way: on one hand they seem to operate as a self-protecting device (like anti-bodies created by an organism) against the

pressure for change - the entrenched structures withstand change; on the other hand, they can

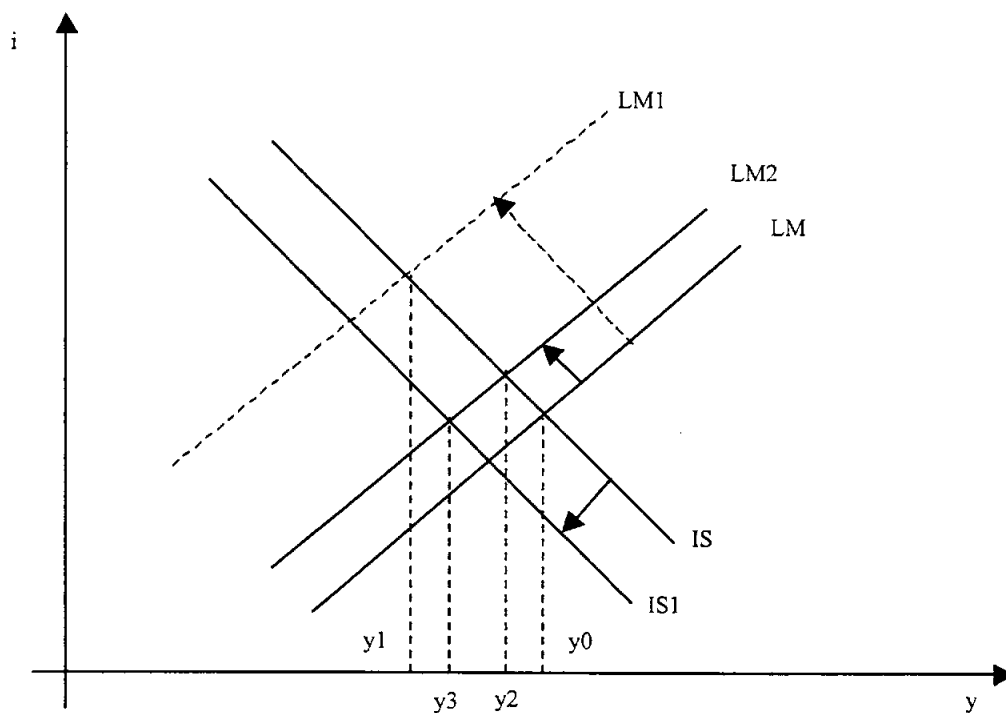


Figure 1: Arrears 'soften' shocks and markets

slow down dangerously the pace of restructuring and adjustment by relaxing financial discipline. In post-command economies arrears help to preserve, essentially, a soft-budget constraint syndrome (J.Kornai, 1980); enterprises have much more bargaining power than in a reformed centrally planned economy whereas soft-budget constraints still operate.¹ In this respect, one can detect a fundamental flaw of the system in transformation, namely the high degree of decision-making power of enterprises when these do not face hard-budget constraints.

Arrears 'soften' markets - in the sense of relaxing market discipline - and, thereby, cushion against the impact of shocks by moderating the decline of output.² The degree of this moderation depends on the dynamic of inflation; the higher inflation is the less will be this moderating effect. On the other hand, arrears help perpetuate soft budget constraints, complicate monetary policy and slow down restructuring(and, thus, preserve resource misallocation). Figure 1, which uses the conventional ISLM diagram, tries to show how arrears moderate output decline once a monetary shock is applied. The tightening of monetary policy would normally mean a shift of LM to LM1, but due to the growth of arrears the shift is considerably smaller - to LM2. Consequently, the decline of output is moderated from Y0 to

Y2 (instead of Y1). How durable the LM shift is depends on to what extent and how inter-enterprise arrears will be accepted (or tolerated) by the system.

A way of portraying the softness of markets during transition is to distinguish between nominal net arrears and real net arrears, when net arrears are viewed as a measure of system inefficiency. Nominal net arrears take as granted fungibility (mutual convertibility) of receivables and payables, which, on a net basis, obscures the degree of loss-making within the system. This is illustrated in Figure 1 by a shift of the IS curve from IS0 to IS1; the real moderation of output decline is smaller than the nominal one, as depicted by the fact that Y3 is smaller than Y2. The netting out of arrears - not through markets - is partially analogous to an attempt at having multilateralized payments inside the former COMECON trading bloc, a move which was resisted by all member countries because of the different 'hardness' of goods exchanged. Nominal net arrears are always smaller than real net arrears since they involve transactions which would not occur were hard budget constraints strictly enforced.

2.2. Arrears as temporary quasi-inside money

Arrears are not money creation since, due to currency-constraint, the economy would be brought, sooner or later, to a standstill should prices rise faster than the decline of output and no financial innovation happened that could affect significantly money velocity. It could be argued that arrears, themselves, form a financial innovation³, but their temporariness as a liquidity means invalidates this argument; arrears are only a temporary substitute for inside money (bank credit). A situation can be imagined where cash and bank credit are used for wage and other currency-demanding payments only, whereas the rest of transactions - which rely on arrears - turn into compensation (barter) deals⁴; it would be a dual monetary system, with a demonetized segment of transactions. But this growing demonetization would still be subjected to currency-constraint and would have to stop at one point when, either there is a new money injection to support additional money-based transactions(or their nominal growth due to wage increases), or inter-enterprise arrears will start increasing again.

Arrears are inflationary because they allow firms to raise prices and wages without fearing immediate consequences. An intended tight monetary policy - with low credit ceilings and high interest rates - would bring about a brutal drop of output should not arrears provide a 'window of opportunity' for enterprises to escape the financial constraint. But, paradoxically, arrears can also have an anti-hyperinflationary potential when they make up a second-worst state of affairs as against a complete accommodative money supply (meant to finance, without restraint, loss-making enterprises and budget deficits). This is, sure, an overstatement for hyperinflation can coexist with growing arrears.

Since they are only a temporary substitute for real money arrears work to 'endogenize' money supply dynamics in a perverse way. Their growth, related, as both a cause and effect - via inflationary expectations - to rises in prices and wages, makes more binding the cash constraint and magnifies a dilemma for policy-makers: either to try to control inflation - seen as an, ultimately, purely monetary phenomenon - by using, onesidedly, monetary policy and,

thus risking to provoke a crash-landing of the economy, or to accommodate money supply to the 'needs' of the economy, a course of action which would maintain the momentum of inflation and would cause hyperinflation.

3. Strain in explaining arrears

There are several major explanations for the growth of arrears during transition. These include: the state of fuzziness concerning property rights and what it means for enterprise behavior (S. van Wijnbergen, 1992; M.Khan and E.Clifton, 1992); the set of incentives that shapes behavior and leads to 'credit market failures' (D.Begg and R.Porter, 1992); financial (institutional) underdevelopment and shortage of information (B.Ickes and R. Ryterman, 1992); the real liquidity crunch, following the much higher than expected rise in prices after their deregulation or liberalization (G.Calvo and F.Coricelli, 1992); and the lack of policy credibility (J.Rostowski, 1992).

Explanations are interlinked and they pinpoint two foremost features and issues in tackling the arrears phenomenon in the transforming economies, namely, structure and resource misallocation. Both have put the system under tremendous strain once the combination of the internally engineered (by reforms) and external shocks occurred; an outcome of strain are arrears

3.1 *Structure*

Structure refers to the network of institutional arrangements (including rules of conduct that are socially ingrained (D.North, 1981)) and of vested interests (based on material/productive interdependencies and the distribution of property rights) that creates a logic of motion of the system and makes individual enterprises its captives. The vested interests are also the result of the configuration of industry (of industrial structure) as a legacy of the command system - the latter was characterized by chain links, as compared to a market economy which as a dynamical complex system relies, essentially, on parallel links. This industrial structure, with its extremely high concentration and reliance on chain links, explains the degree of market monopolization in the transforming economies.

One can talk of a 'power of structure' (a concept quite familiar to business school students), which is well illustrated by the power of debtors over creditors - what Begg and Porter named 'creditor passivity'. This power is not of a conspiratorial nature - the 'cartel' is unconscious -, because it rests on the rules of functioning of the system. In this case, creditors, taken individually, find prohibitively costly to attempt to enforce financial discipline and optimize by desisting from it.

8.III.1.1. Arrears limit 'freedom of choice' and enhance the 'power of structure'

As argued earlier, arrears are a product of structure. At the same time, they form a protecting device for it and enhance its power. This happens since enterprises, which are caught in the web of interlocked receivables and payables, see the room for potential transactions limited to those that involve the acceptance of arrears; companies that ask for real money as payment will avoid non-liquid partners. Thus arrears limit 'freedom of choice' and, consequently, the reduction of variety (K. Lancaster, 1979) and, implicitly, of the quality of inputs affects the quality of output. For certain enterprises - those which do not have a 'defensive survival mentality' - this limitation effect can increase the temptation to escape the trap of arrears and the 'power of structure'⁵.

3.2. *Resource misallocation*

The second feature and issue is the dimension of resource misallocation, i.e. the sheer scale of disequilibria - at the new relative prices - that indicates the magnitude of required structural adjustment as compared to the ability of the system to undergo wide range and quick change.

3.2.1. Spread of profitability and dispersion of inefficient enterprises

Command planning, with its inherent impossibility of rational calculation and through forced industrialization, left a legacy of resource misallocation that was brought, conspicuously, into the open by price liberalization. The new prices show what was, previously, kept hidden by administrative prices and heavy redistribution of income: a very wide spread of profitability rates and very wide dispersion of units fitting several categories: negative value-added enterprises⁶; inefficient, but, yet, positive value-added units which, in turn, can be split into non-viable and, potentially, viable firms; and efficient enterprises.

Wide spread of profitability rates and wide dispersion of highly diverging in performance enterprises mean that, should market (financial) discipline be strictly enforced, a large number of units would have to go under -as a sign of the start of profound reallocation of resources; namely, aggregate output would go down substantially since market destruction is significantly more intense than market construction, in a first stage at least(the so-called J-curve effect). There are two important aspects involved in this process: one is the scope of reallocation (dislocation) and, secondly, the speed required for maintaining a balance between exit and entry. A plausible assumption is that the larger the scope and the faster the desired speed of the process are, the higher the imbalance will be and tension will build up within the economy. Actually, when we talk about "low supply-responsiveness" we point the finger at this imbalance.

The problem of the scope and speed of resource reallocation can be posed for an economy operating at any level of employment; any significant change in relative prices would have to bring about resource reallocation. But it makes sense to presume that, the lower is the level of employment the higher will be the reluctance to undergo change⁷. In this regard, it may be interesting to note the experience with the industrialized countries, which had to absorb the

oil price shock in the seventies. They had the luxury to undergo the required adjustment at a, relatively, leisurely pace owing essentially to the quality of functioning of their economies, their status as world price makers for manufactured goods and the recycling of petro-dollars. Incidentally, monetary policy was also used to delay change, which led to a surge of world inflation.

The post-command economies are fundamentally price takers: they had to absorb a major terms of trade worsening (except the Russian Federation and, probably, Kazakhstan) once world prices started to govern all their trade transactions, and they had to face an almost sudden collapse of eastern trade following the dismantling of the COMECON arrangements. Additionally, there was a sharp compression of domestic trade and, relatedly, of aggregate supply/demand as a result of skyrocketing information and transaction costs for many enterprises - what Calvo and Coricelli named 'trade implosion' (1992, p.1) and what I would call, at a more general level, 'network deconstruction'. Due to the extreme fuzziness concerning property rights, it is not unjustified to surmise that *X-inefficiency* (H. Leibenstein, 1967) was on the rise in many enterprises - a phenomenon accompanied by pervasive asset stripping. For the transforming economies, the strain caused by the magnitude of required resource reallocation, combined with the primitive institutional arrangements and the lack of organizational capital (P.Murrell, 1991), has been compounded by severe exogenous shocks.

3.2.2. Inflation tax and negative real interest rates as implicit subsidies

In a system under substantial strain, there are strong forces that induce a propensity to generate inflation as a way of diffusing tension by spreading out, or putting off, the costs of adjustment. Inflation tax and negative real interest rates are implicit subsidies for those that could not make ends meet financially in a competitive environment. Inefficient enterprises develop a vested interest in raising prices at a faster pace than the dynamics of costs (wages), and, additionally, form a strong lobby in favor of obtaining cheap credit. Their endeavors are made easier since markets are heavily monopolized, a fixed exchange rate - as an anchor and a market disciplining factor - is, almost, a practical impossibility⁸ and the control of money supply is shaky for both technical and political reasons.

The moment stabilization policy is formulated to combat inflation and monetary policy is tightened, arrears form an escape route for enterprises to continue obtaining credit at no cost and, also, enable them to push prices upward relentlessly. Moreover, inefficient enterprises would clearly view even the diminution of negative real interest rates as a major shock, when it means a substantial cut of the implicit subsidy and brings them 'in the red'.

An analogy can be traced with the situation of the oil-importing developing countries which, in the aftermath of the oil-price shocks, became heavily indebted by borrowing at highly negative real interest rates; those rates were virtually identical to an invitation to borrow. When interest rates turned positive in real terms on world capital markets a chain reaction was triggered and the world debt crisis of the eighties started to unfold. The basic difference is, however, that whereas domestic firms (in the transforming economies) can run arrears, nations face, essentially, hard budget constraints and are subjected to financial discipline by the

international community⁹.

3.3. *The size of the problem*

Analysts have highlighted the relatively lower level of arrears in countries like Hungary, Poland and the Czech Republic, as compared to the Russian Federation, or Romania. Nonetheless, the pernicious effects of arrears bother policy-makers in all the transforming economies. It is noteworthy that even where the results of macrostabilization have been remarkable - like in the Czech republic, where the underlying inflation rate was 6% in 1992 - arrears have shown resilience and have also signalled substantial strain in the system.¹⁰ But the question remains: why have the first three countries fared better in this respect? The answer can be pursued by looking at the structure of these economies, their ability to export on western markets and to attract foreign investment their size. Furthermore, structure, is linked with a history of partial changes (that, in some cases, brought about ingredients of market environment), concentration of industry, the existence of a private sector. Policy credibility¹¹ can be singled out as a main explanatory factor (J.Rostowski), but, it, itself, depends on how much structural adjustment the system can undergo in a period covered by the respective policy; and the capacity to adjust depends, basically, on structure and the dimension of resource misallocation as initial premises for policy-making.

A paradox is at play here: those who need to be more credible are not (cannot be) because of the magnitude of needed adjustment and the related costs; whereas those who can afford not to undertake similar painful changes (e.g. Hungary) enjoy more credibility due to the, relatively, smaller scale of needed structural adjustment. Granted, a political element has to be factored in as well.

3.4. *Strain in explaining inter-enterprise arrears - a simple model*

In what follows I will use a very simple model¹² in order to underline *strain*, vis-a-vis *policy credibility*, in explaining inter-enterprise arrears.

Let us suppose that the output of an agent is an increasing function of *market discipline* visualized as a public good¹³, or as a *positive externality* - as a means for easing the efficient allocation of resources. Were market discipline perfect and resource reallocation fast enough, inter-enterprise arrears would not exist; any inefficiency would be promptly penalized. Should inter-enterprise arrears arise however, they would harm creditors, a fact which would be reflected by their output. Taking as a working hypothesis immediate resource reallocation, it can be assumed that the production of agent (i) is:

$$q_i = q + c * g \text{ for the agents who do not cause arrears}$$

$$= q \quad \text{for the agents who do cause arrears}$$

Another assumption is that the level of *financial discipline*, (g), - seen as a positive externality - is determined by $n * t$, where (t) indicates whether agents pay their debts, and (n) refers to those

who do not cause arrears. A final assumption is that $c < 1 < N$, where $N > 1/c$.

Multiple equilibria situations can be imagined depending on agents' behaviour and the existence of financial discipline as a public good. If agents pay their debts in due time their incomes show up as $q + c * g - t$, whereas if they produce arrears, their earnings appear as simply (q) . The decision for an enterprise is: either to cause arrears if $c * g = c * n * t < t$, or $n < 1/c$, i.e., when the number of those who pay in due time is low. A conclusion would follow: when policy credibility is low, and when financial discipline is widely disregarded, agents are tempted to produce arrears. Contrarywise, if $n = N$, agent N is stimulated to pay her debts since $n = N > 1/c$, as our assumption says.

It would seem that everything boils down to *policy credibility*, to the functioning of market discipline. But a critical question arises. What is going to happen, and what can be done if the number of those who do not pay is fairly high and, what is even more important, non-payment is the result of the lack of capacity to pay - and not an opportunistic response to the existing circumstances concerning market (financial) discipline, or the low policy credibility. Consequently, whichever is the determination of decision-makers to pursue a policy course, the sheer number of those who can not pay make $n < 1/c$ - and thus, the vicious circle of arrears comes into being.

Moreover, the working hypothesis should be made more realistic by assuming that resource reallocation is slow. In this case, a *complete exit* of the inefficient but, still, positive value-added enterprises would mean that output is substantially less than if arrears emerge in the system¹⁴. Consequently, the short-run production function of an agent could be redefined as:

$q_i = q + c * g$	no arrears and immediate reallocation
$= q$	arrears and no, or very slow reallocation of resources
$= q - k$	no arrears and no, or very slow reallocation of resources - the case of an efficient agent
$= 0$	no arrears (full exit) and no reallocation - the case of an inefficient agent

where k indicates the fall of output when there is full *exit*. It is clear that, under the circumstances, the second situation (that includes arrears) appears as a preferred solution for the short term. It should be stressed that the choice of agents is influenced by their - in most cases - wage fund-centered objective function.

Therefore, when resource reallocation is very slow and when the number of those who can not pay - because of the lack of capacity to pay - is fairly high, *policy credibility* is not the main factor behind the growth of arrears; the main factor is represented by the large number of enterprises which, at the new equilibrium prices, would have to get out of the economic circuit. And since such a huge *exit* is impossible¹⁵, inter-enterprise arrears emerge as a symptom of *strain* in the system and as a way to diffuse *strain*.

4. Arrears and exports - is there a relationship?

M. Khan and E. Clifton (1992) showed how arrears developed in Romania as one of the most glaring cases in the post-command economies; at the end of 1991, gross arrears amounted to 1,777 Bln lei, which meant cca. 56% of the GDP valued at December of that year prices. The tremendous growth of inter-enterprise credits should not have come as a surprise if one bears in mind that this country had one of the most distorted economies under command planning.¹⁶ There were, also, an industrialization drive that ignored, blatantly, comparative advantages, trade policies that ran counter to the logic of functioning of the domestic economy, and a sui generis shock therapy in the 1980s.

The extent of resource misallocation and the extreme repression of consumption - directly, through the squeeze on domestic absorption and, indirectly, by forced substitutions in consumption - led to a price explosion after their liberalization. This explosion came to a head with the tightening of monetary policy by means of low credit ceilings. After a futile search for other solutions and giving in to political pressure, the Romanian government resorted to a 'global compensation'. Although it was accompanied by sterilization measures aimed at neutralizing the influence of new money injection, the global compensation brought the moral hazard problem to the fore.

Arrears resurfaced immediately the following year (1992), in a climate characterized by the imposition of much higher nominal interest rates - in an attempt to make them positive in real terms; the less inexpensive bank credit raised the attractiveness of arrears as temporary quasi-inside money. Curiously enough, in spite of an annual inflation rate that approached 180%, gross arrears stood at a level of, approximately, 30% of GDP by the end of 1992. In 1993 arrears remained at a similar level in real terms. What lies behind this dynamic of arrears is a justified question, bearing in mind that one can hardly talk about substantial restructuring and a dramatic change of the economic environment.

4.1. Exports as a side-effect of arrears

It can be conjectured that selective money injections (subsidized credit for special sectors) and more prudent behavior on the part of enterprises might have caused arrears to grow less rapidly (to be smaller in relative terms). The money injection was used in an attempt to break the 'solidarity' of debtors by favoring those enterprises whose products enjoyed highest salability (like electricity) and, thus, could exact payment from debtors.

There may be, however, another explanation to the less rapid dynamic of arrears that is linked with the constraint they imposed on the enterprises with growth potential. Arrears, as a temporary substitute for real liquidity, help firms to survive, but do constrain the development of enterprises that have the potential to grow. Specifically, in such instances arrears tend to restrain the evolution of enterprises to a common denominator path, a fact which explains why those that can grow try to escape the currency (real liquidity) constraint. And the way to do it when the economy is starved of domestic liquidity and foreign borrowing is not available, is to push up exports. Even when exports seem unprofitable, a premium on liquidity can more

than compensate the value differential in favor of receipts on domestic sales whose payment is highly uncertain.

As the recent experience of Romania seems to suggest, increased exports can be a side effect of arrears, with the potential to contain their growth. Exports were seen ever more attractive for they enabled growth-oriented companies: to do away with the liquidity constraint and avoid the growth-constraining effect of arrears; to escape the 'network trap' and build new chains of reliable suppliers and customers; and to acquire a much prized asset (i.e., the hard currency), which preserves both high liquidity and value.

This effect, via exports, was enhanced by the freedom enterprises were granted to hold hard currency accounts. In the inflationary and highly uncertain environment, this freedom has facilitated a tendency toward dollarization, which shows similar features to the process encountered in Latin America (P.Guidotti, C .Rodriguez, 1992). 'The Gresham's Law in reverse' has been always present in command economies, but it seems to have gained 'new currency' once traders were allowed to hold foreign exchange accounts. However, a note of caution is called for here: to the extent hard currency is hoarded (seen only as a store of value) and not used to mediate transactions, cumulated with a very high prudence of banks (that apply 100% reserve requirements to their foreign exchange deposits) the dampening effect of exports on gross arrears is reduced.

4.2. Size of economy and its impact

For a small open economy the relationship between arrears and exports should not come up as a surprise: the monetary approach to the balance of payments provides the analytical framework for understanding why arrears can only retard the moment when a reduction in domestic credit would induce an inflow of liquidity (currency) from abroad.¹⁷

This relationship becomes less clear the larger is the size of the economy. A large economy, which is less dependent on foreign trade and whose output is made up to a considerable degree by non-tradeables - like the Russian Federation - acquires features of a closed economy and the open economy model becomes less suitable. In the latter case it is questionable that the stimulus for exports will be similarly strong, and, consequently, the implied constraining effect on arrears will be substantially smaller, or negligible. The closed economy argument can be extended by taking into account the degree of 'softness' of output in the transforming economies¹⁸; this 'softness' impairs their ability to export.

4.3. An additional argument for fighting arrears

Empirical evidence and analytical reasoning show that arrears can have a moderating influence on the decline of output, particularly in the context of a sharp tightening of credit policy. It was underlined, however, that this across the board effect impedes restructuring along the lines of comparative advantages by constraining the room of action of firms that enjoy growth potential. Additionally, arrears increase the 'collective lack of knowledge' (Ickes and Ryterman, 1992, p.4) and make it harder to distinguish between good and bad enterprises; they

further add to uncertainty, and, relatedly, reduce the propensity for long-term (productive) investment. The latter effect should be considered looking, also, at the decumulation caused by excessive wages which, in turn, are made possible by the building up of arrears.¹⁹

If we consider the extremely low investment ratios in the transforming economies - a fact that is not surprising under the circumstances - the negative impact of arrears and their resilience has to be of concern to policy-makers.

5. A framework for containing arrears

Arrears can not be addressed effectively by means of a case-by-case approach that misses the magnitude and the nature of the problem. Moreover, the fight against arrears should not be construed as a campaign in itself; conceptually and operationally it should be integrated into the overall effort to stabilize and restructure the economy.

If one accepts the argument that the roots of arrears are to be sought in structure - so multifaceted - and the strain to which the economy is subjected, a conclusion becomes overriding: both structure and strain have to be targeted by policy. Structure means a focus on the property rights issue, and since it is obvious that 'privatization as the ultimate solution' (M.Khan and E.Clifton, 1992, p.20; S. van Wijnbergen, 1992) is not at hand corporate governance should unavoidably be given an outstandingly high profile. Relatedly, attention has to be paid to the development of proper market institutions and to finding ways for eroding the 'power of structure' and change enterprise behaviour. Strain, which mirrors the size of needed resource reallocation, should be approached starting from the truth that 'structural adjustment is a slow process even in a most advanced market-based economy - even when reform is credible' (M.Bruno, pp.753).

Several working principles need to guide efforts in order to formulate a realistic strategy to deal with arrears:

- first, there is no quick fix to this problem! Arrears are a perverse phenomenon that will persist as a problem as long as the economy will have a flawed mode of functioning (i.e., as long as property rights will not be clearly defined and markets will not be sufficiently competitive); trying to solve the problem, as a realistic way of stating it, is more a matter of arrears-containment, of imagining that there is an moving 'optimum' level that helps the system minimize the costs of structural adjustment and does enhance macrostabilization. Arrears can not be eliminated - they can not disappear completely - since, in a real world, there can be no perfectly competitive markets, which should impose complete hardness of budget constraints; arrears exist in well-functioning market economies as well, and strain increases their likelihood to spread.²⁰

- since the problem is structural, the approach should be holistic, multitrack, looking at the overall mode of functioning of the economy.

- the approach has to be evolutionary, with the dynamic of arrears seen in relationship with the changing nature of the environment: new, market-attuned institutions, a growing private sector and a less inefficient (i.e., better managed) state sector would most likely reduce the amount of arrears. The policy should strive to increase the level of transparency, to remove the

veil on implicit subsidies and enhance the information gathering and generating-capacity of the system; more transparency would help policy both directly, and indirectly (by influencing behavior).

- government has a role to play; a hands-off policy is unwarranted not only by the sheer scale of the problem, which implies social and political consequences, but also because the state is still the owner of most of the assets and, as such, it has to make decisions about their use.²¹ Corporate governance is a code expression for describing the need for a managerial revolution in the state-owned sector.²²

The struggle against arrears - with the caveats underlined above under the guise of guiding principles - involves at least four major domains of action, which all help to deal with both structure and strain:

- (i) trying to 'break up' structure (the solidarity of debtors);
- (ii) imposing a disciplining 'straitjacket' on structure;
- (iii) industrial policy that should reduce strain; and
- (iv) targeted external assistance.

5.1. Trying to 'break up' structure

The goal would be to erode as much as possible the 'power' of structure. At least two options appear to be available:

- a) identifying the largest net debtors which, supposedly, are the critical links in the chain of arrears expansion and attempting to insulate them - annihilate their arrears-spreading around potential;
- b) trying to undermine the debtors' grip on creditors.

A major impediment in doing this is the big number of large net debtors and their dispersion within the economy. Therefore, policy-makers need to restrict the number of firms to those that concentrate a critical mass of net arrears.²³ What such a critical mass means certainly remains a subject for debate. Insulation of the worst offenders would need special banking arrangements. An option could be the setting up (or designation) of a bank with a clear mandate of restructuring and monitoring of performance. Such an arrangement would, presumably, relieve considerably the pressure on the other banks by improving their balance sheets. How such a bank will monitor performance and enforce financial discipline depends much on how determined and politically strong the government is, capable to withstand pressure from the big loss-making units.²⁴

The other way - that was partially attempted by the Stolojan government in Romania, in 1992 - is to try to blow up the debtors' trap by inducing big creditors to form a sort of strategic alliance against debtors. Those creditors, whose products are sine qua non inputs for debtors, would get new finance for their operations to the extent that they force their debtors to pay back by not supplying them with the essential inputs they need.

Hopefully, the improvement of the balance sheets (the stock of bad debts) and the insulation of those that play a key role in triggering arrears (the flow) would help change the

set of incentives for banks and, thereby, their behaviour. It would also help to enhance the activity of banks as agents of restructuring; 'the objection that banks do not have the skills to do that right is less compelling than at first sight. The point is not that banks are good at doing this, but that they are likely to be better than anybody else' (S. Van Wijnbergen, 1992, p.114). The point becomes even stronger if the giant loss-making enterprises will be taken in charge by a special agency²⁵, that would work closely with one (or several) especially designed banking units. Nonetheless, the crucial issue of skills remains, and joint ventures with foreign partners, or direct involvement of foreign banks, are more than welcome.

Breaking the 'power of structure' from within needs to be complemented by outside action, notably by speeding up privatization. Private companies face hard budget constraints and they bear, in general, very heavily the brunt of not being repaid in due time; moreover, they are crowded out from getting credit from state-owned banks. Therefore, the more numerous they will be, the more likely they will exert effective pressure on arrears-producing enterprises.

5.2 Imposing a 'straitjacket' on structure

The idea here consists of modifying the set of rewards and penalties so that agents optimize in congruence with the thrust of transformation; the 'straitjacket' would be a disciplining device for an economy that lacks a proper structure of property rights. The set of measures should include:

- trying to achieve low²⁶ **positive** real interest rates;
- turning implicit into explicit subsidies and setting a tight leash on enterprises (hardening budget constraints);
- imposing interest on outstanding debt and taxation of this income;
- penalties for creditors who tolerate non-payment;- penalties for those who hold hard-currency in their accounts, but run deeply into arrears;
- bonuses and equity-related incentives to those managers who improve significantly the financial state of their enterprises.²⁷
- closing several negative value-added enterprises, by using the bankruptcy procedure, in order to show that the government 'means serious business'; the demonstration effect can be very powerful for it would signal the resoluteness of policy-makers (and, thereby, increase policy credibility) and it would highlight a side neglected in the public debate about bankruptcy, namely, that it does not necessarily entail the physical demise of assets and destruction of jobs.

Such measures need to be embedded in a drive for recapitalizing banks and deserving enterprises. At the same time, an incomes-control policy should be a basic component of the 'straitjacket' since labor markets are heavily monopsonized.

5.2.1 Recapitalization

There are several avenues which can be used simultaneously:

- cleaning up the books of banks by converting their bad debts into government bonds, or by

transferring bad debts into a special bank set up to deal with the large loss-making firms;

- debt-equity swaps that turn banks into core owners, or powerful stakeholders, with clear incentives and a comparative ability to restructure an ailing company and turn it around in the right direction;
- selling equity in domestic banks to foreign banks, which would, automatically improve the level of skills in the banking sector and would, furthermore, help restructuring and privatization.

Recapitalization of viable enterprises can be made by using domestic funds (resulted from privatization proceeds), foreign direct investment, or external assistance targeted to restructuring.

Recapitalization means that government takes explicitly over bad debts. When external support is not available, it can cause difficulties for the financing of the budget deficit. This becomes more acute when claims on the budget grow (due to rising unemployment, as well) and the tax base diminishes. Therefore, recapitalization should be undertaken in conjunction with a proper evaluation of how much the budget deficit can be financed in a non-aggravating inflationary way.

5.2.2. Turning implicit into explicit subsidies

A major benefit of this endeavor would be unburdening of monetary policy to pursue its fundamental goal of preserving the soundness of domestic money. Additionally, more pressure would be put on enterprises to trim down their expenditure by knowing that there is a clear financial constraint indicated by the explicit subsidies envisaged by state budget. The goal would be to put into place a combination of ex ante (explicit) and some, unavoidable, ex post (implicit) subsidies that will increase transparency and help enterprise reform.²⁸

A technical issue is 'programming' the dynamic of explicit subsidies when there is a time horizon covering the period of restructuring, or liquidation of various enterprises. This issue is closely connected with reducing strain within the system by a gradual phasing out of non-viable enterprises.

5.2.3 Incomes control policy

The control of incomes (wages) is vital in order to be able to control inflation²⁹ and, thereby, maintain real balances at a level that reduces the propensity of enterprises to run arrears. How to attain it? Technically, in addition to conventional schemes(like the tax-based incomes), something resembling M.Weitzman's 'profit sharing' scheme (1984) - which would link wages with the dynamics of saleable output - could be thought of. The trouble with profit-sharing is that one meets an asymmetry of behaviour on the part of workers: they would share in positive profits, but not in negative profits - the latter signifying lower wages. A way out can be privatization, with employees' getting a substantial stake in the fate of enterprises. Moreover, a Social Pact, like the one concluded in Poland at the beginning of 1993, can involve workers in the management of enterprises - and reduce, thereby, considerably, the temptation to raise

wages uncoupled of saleable output dynamics.

In order to implement macroeconomic stabilization a consensus has to be found on how to distribute the costs of adjustment. The endowment with resources, as legacy of command planning and hastened industrialization, can bring fortune to some and misery to others; it lies at the roots of what can be construed as a 'distributional contest' within society. The very wide range of profitability rates can show us 'who is who' in this contest. In so heavily monopolized and monopsonized economies inflation seems to be practically unstoppable, and a vicious circle can be at work: because of external and internal shocks real national income shrinks, pressure groups ask for and obtain higher nominal wages to keep pace with rising prices, the wage-price spiral is given a further twist, monetary and fiscal policies become tighter, output shrinks further and the vicious circle goes on. This scenario is more plausible the less mobile resources and the less competitive markets are, and when governments are weak and likely to give in easily to pressure from trade-unions. 'Stabilization will come when everybody agrees to share the burden of stabilization, rather than when a particular group concedes and bears the entire cost' (J.de Gregorio, 1991, p.146). Thus, achieving a consensus becomes urgent, particularly when market reforms entail wide and increasing income discrepancies.

5.3. Industrial policy

Industrial policy can be a major tool for reducing strain in transforming economies. Its goal can be described as follows: a gradual phasing out of unprofitable activities in keeping with the capacity of the system to adjust. This capacity is to be related to maintaining a balance between job creation and job destruction, the functioning of a social safety-net and adequate retraining programs.

Under the circumstances of transition from command to market economies industrial policy has been given too low a profile, or has even been neglected, a fact which has crippled economic policy, in general, and stabilization in particular. Industrial policy can reduce the costs of stabilization, can help decision-makers deal more effectively with the three major constraints (the foreign exchange gap, the budget deficit, and the low level of savings) in making choices about the trade-off between external imbalance and internal disequilibrium (understood in a broad sense, namely as the degree of unemployment of resources). It can also help in dealing with the 'Big Trade-off' (A.Okun, 1975) that has come into the open in the transforming economies: efficiency versus equality.

It is noteworthy that even the experience of frontrunner countries (e.g. Hungary) suggests the need for such a policy (G.Szapary, 1992). There are many and strong reasons to have reservations about industrial policy seen as a means to 'pick winners and losers', especially in an environment with so much uncertainty and lack of transparency. However, in the peculiar conditions of transforming economies, industrial policy should rather be viewed as a damage control device, aimed at allowing a breathing space needed to cope with the high degree of uncertainty and fuzziness about property rights, with the question 'which are the truly non-viable enterprises?', and at mitigating the costs of restructuring and resource reallocation; under the circumstances, industrial policy is about picking losers among losers.³⁰

On this line of reasoning industrial policy is tightly linked with the action of making subsidies explicit and establishing a time horizon for their ultimate removal. There are two kinds of subsidies involved depending on which enterprises are targeted: those which are clearly non-viable and their keeping afloat is related to a public budget (resource) constraint; those that are potentially viable and for which some time is needed to ascertain their actual prospects; in the latter case the same resource-constraint applies. Negative value-added units should be closed without delay for it is less costly to pay workers unemployment benefits and retrain them than to keep such enterprises running.³¹ Non-viable enterprises would be programmed for a gradual elimination so that unemployment be attenuated and its cost redistributed over time. At the same time, authorities would have an easier time in securing resources for a social safety-net and for facilitating labor reallocation through training programs. The time horizon for phasing out non-viable enterprises is related to the advance of privatization and in securing adequate levels of capital inflows; the more intense is privatization and the larger are capital inflows (especially those used for long-term direct investments), the easier is the phasing out of inefficient activities.

It can be argued that industrial policy slows down restructuring, that is a worthy to consider statement if social and political constraints are dismissed. But for the sake of sustaining the process there is solid ground for advocating industrial policy as a way of easing structural adjustment - and at the same time keeping check on arrears.

5.4. External assistance

Assistance can be direct and indirect. Direct assistance can be split into three major categories:

- aid that reduces strain: for example, financial support that helps the functioning of an effective social safety-net for those affected by economic restructuring;
- aid that improves structure, the market-attuned institutional framework of the economy; main areas for action should be the banking system, the management of large (still, state-owned) enterprises, the tax collection system;
- aid that focuses on structure by helping markets grow through restructuring and privatization. This aid should target specific companies and sectors (for instance, agriculture in Romania, or the oil industry in the Russian Federation), and provide seed capital for private sector undertakings.

Indirect assistance refers to the evolving international environment. It is unquestionable that rising nationalism in international policy-making, growing protectionism, global economic recession, the level of real interest rates on world capital markets do not facilitate post-communist transition and add to the strain in the transforming economies. It is very unfortunate that transformation is undertaken in an unfavorable international context whose dynamic at present does not give much hope for a substantial change to the better.³² A concrete example of the distance between myth and reality in the rhetoric of support is the extent of access eastern European producers have on EEC markets for most of their main export items. Here there is a relationship between needed sectoral adjustment in Western Europe³³ and trade as a weapon for systemic adjustment (transformation) in post-communist Europe. Reducing strain

in the latter involves increasing short-term difficulties in the former, and the decision on how to deal with such a trade-off can not be but political. But in a western Europe still stunned economically by the German reunification blow and with weak governments, prospects for gaining significantly more access on EEC markets are not very encouraging at this point in time.

6. Concluding remarks

Inter-enterprise arrears mirror the tremendous strain under which post-command economies are. The existence of arrears is not a surprise for they can be detected in all real economies, the relatively well-functioning advanced market economies included. What is unusual in the transforming (post-command) economies are the magnitude and the effects of arrears, which make up a structural trap for stabilization. In this context, and unless there is a proper embeddedness of monetary policy within the overall policy-mix the *time inconsistency problem* is much magnified.

The fight against arrears means, essentially, trying to contain them to a level that does not undermine efforts to stabilize the economy. Setting up a clearing house, securitization of inter-enterprise credits are only temporary, or partial solutions; they do not focus on the main (primary) sources of arrears, which are structure and the size of required structural adjustment (resource misallocation). Since dealing with their primary roots will take time it makes sense to presume that containing arrears can not be a one shot policy; it is a process that will overlap in time and reflect an evolving environment acquiring ever more traits of a fully fledged market system.³⁴ The more quickly restructuring and privatization will proceed, the more competitive markets become and the more mobile labor will be, the less menacing inter-enterprise arrears will be for stabilization policy and the functioning of the economy.

Containing arrears will help ‘ stabilize ‘ stabilization policy. Stabilization, itself, would have to be understood as a process, most likely, to evince a stop and go dynamic (including setbacks). It can be surmised that the control of disequilibria during transition, will reveal a stabilization policy path moving in tandem with the speed of change of the domestic environment.

Notes

* Presented at the Conference of the European Association of Comparative Economics, Budapest, 8-10 September, 1994. This is a slightly revised form of a paper written during the author's stay as a visiting scholar in the Research Department of the International Monetary Fund. That paper appeared as IMF Working Paper 94/54.

1. ‘...the soft budget constraint did change its dynamics because individual firms in general strengthened their positions vis-a-vis other economic agents as well as the

authorities. They no longer have to bargain for new credits or subsidies, or tax reliefs. Their behaviour can be rather described in terms of *fait accompli*. They do not pay, but non payment is not their problem; it is the problem of those who do not receive their due' (P. Jasinski, 1992, p.32)

2. The moderating influence of arrears on the decline of output can, itself, be moderated by an increase of the demand for transactionary balances. However, this counter-moderating effect has to be judged in conjunction with the reduction of the demand for speculative and precautionary balances.
3. If the equation of exchange($PY=MV$) is put in a dynamic form by using logarithms: $p + y = m + v$; where p, y, m and v are the rates of change of prices, output, money supply and money velocity, respectively. When monetary policy is tightened, $m = 0$, and $(p + y)$ is above zero, v needs to be positive in order to alleviate the expected decline of output. In this case arrears appear as if they modify money velocity. If arrears are considered temporary quasi-inside money and velocity is kept constant, the relationship becomes: $p + y = m(c,a)$, where c is cash and bank credit and a represents arrears. When $c=0$ because of the dear money policy, $p + y = a$.
4. Aside from new money injection, this would be the only way to make durable the shift of LM to LM1.
5. This idea is developed in section four which argues that exports can be viewed as a side-effect of arrears and as a constraining factor on them.
6. See C.Senik-Leygonie and G.Hughes (1992) for an investigation of the size of negative value-added sectors in the former Soviet Union. In Romania, copper and lead mines in the northern part of the country, are notoriously known to be negative value-added activities.
7. One reason, for instance, is the smaller tax base for subsidizing those who lost their jobs; therefore, this base has to be taxed more heavily.
8. Due to the highly inflationary domestic environment, in particular, and the very likely scarcity of foreign exchange reserves. In Poland, the temporary relative success in using the exchange rate as a nominal anchor relied on a very substantial devaluation (overshooting).
9. There were signs of a systemic problem and the Brady Plan was, partially, a policy response to those signs. Almost all major banks needed recapitalization because of their bad loans to Latin America, in particular. But the overall policy response remained, essentially, a case by case approach.

10. In the Czech republic 'Many companies are locked in a circle of bad debt caused by unpaid bills from customers... Officials fear that many other companies could be affected if major companies are allowed to go bankrupt (P.Blum, 1993, p.2).
11. Defining policy credibility in post-command economies needs qualification since, with the exception of Poland and Hungary, there is no history of stabilization attempts. Without such a history agents react according to entrenched behavioral patterns, and not on the basis of learning about past policy intentions and their eventual reversal. Certainly, when wide range bail-outs make up a policy goal reversal stabilization history starts on the wrong foot and policy credibility is impaired from the very beginning. But still, one can pose the question : under what circumstances policy credibility is a realistic policy trait and what policy choices favor its attainment?
12. Sachs makes use of such models in trying to depict the system (institutional) dissolution in the former Soviet Union (1994).
13. Market (financial) discipline emerges as a public good and as a positive externality because of good collective (generalized) behaviour. The state does not supply it, though it can influence its production by the enforcement of bankruptcy procedures and the provision of other institutional means. Nonetheless, the state action (policy) of enforcement becomes irrelevant when good collective behaviour is impossible for various reasons, and as it is our contention, because of strain in the main.
14. In this case, the damaging effect of inter-enterprise arrears on efficiency is more than counterbalanced by their mitigating effect on the drop of output.
15. Theoretically, a level of foreign aid (or external financing) can be thought of, which should enable a 'big bang exit'. Practically, however, this is more than unrealistic as a policy option, and may not even be the best choice.
16. The Romanian economy was 'one of the most tightly controlled and centralized in Eastern Europe. The Ceausescu regime deprived the country of the experience of any significant economic reform, leaving the administration tied to a Stalinist model that had by that time been abandoned by almost all other countries in the region'. (D.G.Demekas, M.S.Khan, 1991, p.8).
17. Arrears, as temporary quasi-inside money, can compensate the reduction of domestic bank credit for a while only; over time, however, arrears become ever more constraining and an inflow of real liquidity (foreign exchange) is triggered.
18. This 'softness' can be looked at as a relative 'absence of ability to transform goods into

one another in world markets at the initial world prices' (P. Desai and J. Bhagwati, 1979, p.359). Often, low exportability (specific for 'soft' goods) can turn into no exportability because of technology and quality-related constraints.

19. As was argued in subsection 2.2, arrears can, in fact, dichotomize the payment system and make wage disbursement the main (or the only one) money-based transaction; this helps enterprises cope with the upward pressure of wages.
20. Recession-hit companies now speak of a crisis within a business community unable or unwilling to break free from a vicious circle of overdue debt...The European Commission has just launched an investigation into late payment, which is spreading contagiously throughout the Community ' (M. Cassell, 1993, p.17).
21. Romania's experience is telling in this respect: Law 15 of August 1990, on 'Restructuring of State Economic Units' devolved power by creating confusion as to the owners of enterprise assets. In this way collusion phenomena were encouraged, management contracts were easily avoided by managers and, ultimately, the attributes of the state - as the owner of the still unprivatized property - were devoid of substance.
22. The 'managerial revolution' that took place in the publicly owned companies (regies autonomes) in France, in the 80s, may suggest avenues for action, though the scale and problematique in post-command economies are, comparatively overwhelming because of the different surrounding environment for the individual companies.
23. In the case of Romania, for instance, a McKinsey study found that the concentration of bad debts is fairly significant within the troubled industrial sectors. The metallurgy, chemical/petrochemical and machine-building industries are dominated by large vertically integrated companies accounting for the majority of the problem. The study found that, for the three industrial sectors mentioned, 112 large companies account for 77% of bad debts. And the three industrial sectors account for 45% of the bad asset problem of all commercial companies, though they comprise only 24% of the lending.
24. The Polish experience is relevant as to this political dimension and the pitfalls of concentrating the tasks into a single agency.
25. Like the State Ownership Fund(SOF) in Romania.
26. Reasons as to why high positive real interest rates are to be avoided are provided by G. Calvo (1991), and A.Bennett and S. Schadler (1992).
27. There are frequent cases when managers favor a worsening of the way enterprises function so that an eventual management buyout be much eased financially. But there

is enough ground to assume that members of the workforce would not stay idle seeing this and would force them out of power; workers operate, actually, as 'managers-monitors'. Therefore, it seems that it would pay to managers to accept a deal (with the state as the owner of the enterprise) which would reward them with concrete stakes in the future of the company to the extent they improve its financial standing. Put in a nutshell this philosophy sounds like this: 'why running down a company in order to buy it for nothing and risking to lose all (including reputation) by being ousted, instead of turning into an important share-holder (stake-holder) of a, possibly, prosperous company'?

28. A problem could emerge with this conversion. Implicit subsidies are ex post and their size is an uncertain quantity, potentially unlimited. Explicit subsidies are ex ante so they are a known, limited, quantity. There is a danger, that if the economy gets less stable - because of various shocks, including politically-motivated policy decisions - the mix of subsidies could mean both a substantially higher fiscal deficit and very high inflation.
29. 'Controls are more likely to be useful, the larger is the desired reduction in inflation, and the more serious is the credibility problem' (P.Persson, S. van Wijnbergen, 1993, p.81).
30. Industrial policy is critical for bridging the gap between the effectiveness of controlling demand and that of stimulating supply. Supply responsiveness is pretty low endangering the sustainability of stabilization efforts. Industrial policy should correlate incomes-control measures with industrial restructuring (including privatization) undertaken by authorities which process information provided by markets.
31. One qualification is, however, necessary in this respect. When these units, are represented by producers of intermediate goods, the switching to other suppliers could involve non-insignificant costs to certain customers of those producers. But these costs are a one-time affair, as against the flow of subsidizing the negative value-added activities.
32. One can compare it with the turnaround of several Latin American countries (Mexico, Argentina, especially) in the 80s, or the progress of Turkey over the same period. One should not downplay, however, the role of surging world markets, driven by a consumption-led recovery of the US economy, in facilitating that transition. This contrasts strongly with the exogenous shocks that have struck the transforming economies.
33. The cases of steel processing industry and of agriculture make the big headlines.

34. ‘...where distortions have been long-standing, the process of correction can only be gradual...for a long-run control over inflation there is no substitute for a comprehensive package aimed at eradicating structural and macroeconomic distortions’ (C. Borio, 1990, p.27).

References

- Agenor P. R., ‘Credible Disinflation Programs’, IMF, PPAA/93/9
- Aghion P. and Blanchard O.(1993), ‘On the speed of transition in Eastern Europe’, mimeo, March.
- Blum, P. (1993), ‘Czechs set to act on bankruptcy’, Financial Times, 17 February, p.2.
- Borio. C. (1990), ‘Financial Arrangements, Soft Budget Constraints and Inflation: Lessons from the Yugoslav Experience’, BIS Working Papers, No.15, November.
- Bruno M. (1992), ‘Stabilization and Reform in Eastern Europe: A Preliminary Evaluation’, IMF Staff Papers, vol.39, 4, December, pp.741-777.
- Begg D., and Portes R. (1992), ‘Enterprise Debt and Economic Transformation: Financial Restructuring of the State Sector in Central and Eastern Europe’, Center for Economic Policy Research, Discussion Paper No.695, June.
- Bennett A. and Schadler S. (1992), ‘Interest Rate Policy in Central and Eastern Europe: The Influence of Monetary Overhangs and Weak Financial Discipline’, IMF Working Paper, August.
- Cassell M., (1993), ‘The Dangers that lurk in delay’, Financial Times, 23 February, p.17.
- Calvo G. (1991), ‘Are High Interest Rates Effective for Stopping High Inflation? Some Skeptical Notes’, The World Bank Economic Review, vol.4, No.1.
- Calvo, G. and Coricelli F. (1992), ‘Output Collapse in Eastern Europe: The Role of Credit’, IMF Working Paper, August.
- Demekas D. G. and Khan S. M. (1991), ‘The Romanian Economic Reform Program’, IMF Occasional Paper, No.89, November.

Desai, P. and Bhagwati J. (1979), 'Three Alternative Concepts of Foreign Exchange Difficulties in Centrally Planned Economies', Oxford Economic Papers, 3, November.

Gregorio J. (1991), 'Comment' in Rudiger Dornbusch and Sebastian Edwards (eds), 'The Macroeconomics of Populism in Latin America', Chicago: The Chicago University Press, pp.145-149.

Guidotti, E. P. and Rodriguez C.A., 'Dollarization in Latin America', IMF Staff Papers, vol.39, No.3, September, pp. 518-544.

Ickes W. B. and Ryterman R., ' Inter-enterprise Arrears and Financial Underdevelopment in Russia ', Mimeo, September 1992.

Jasinski, Piotr, ' The Soft Budget Constraint under Central Planning, under Market Socialism, and in the Post-communist Economies ', Mimeo, September 1992.

Kornai, Janos, ' The Economics of Shortage ', Amsterdam, North-Holland, 1980

Khan S. M. and Eric V. Clifton (1992), 'Inter-enterprise Arrears in Transforming Economies: The Case of Romania', IMF Paper on Policy Analysis and Assessment, July.

Lancaster K. (1979), 'Variety, Equity and Efficiency', Oxford, Blackwell.

Lane T. (1992) 'Market Discipline', IMF Working Paper, June.

Leibenstein H., 'Allocative Efficiency vs. X-Efficiency', American Economic Review, vol.56, 3, pp.392-410.

McKinnon R. (1992), 'The Order of Economic Liberalization', Baltimore: John Hopkins University Press.

Murrell P. (1991), 'Evolution in Economics and in the Economic Reform of the Centrally Planned Economies', Mimeo.

Mussa M. (1993), 'Government policy and the adjustment policy', in J. Bhagwati (ed), 'Import competition and response', Chicago: Chicago University Press, pp.73-120.

North D. (1981), 'Structure and Change in Economic History', New York: Norton.

Okun A. (1975), 'The Big Trade-Off: Efficiency vs. Equality', Washington DC: Brookings Institution.

Persson T. and S. van Wijnbergen, (1993), 'Signalling, Wage Controls and Monetary Disinflation Policy', The Economic Journal, 103, January, pp. 79-97.

Rostowski J. (1992), 'The Inter-Enterprise Debt Explosion in the Former Soviet Union: Causes, Consequences, Cures', Mimeo.

_____ (1993), 'Creating stable monetary systems in post-communist economies', mimeo.

Sachs J. and W. Thye Woo (1993), 'Structural factors in the economic reforms of China, Eastern Europe and the former Soviet Union', October, manuscript.

Sachs J. (1994), 'Russia's struggle with stabilization; conceptual issues and evidence', paper prepared for the World Bank's Annual Conference on Development Economics, 28-30 April.

Szapary G. (1992), 'Transition Issues: A Case Study of Hungary', IMF Departmental Memoranda Series, October.

Senik-Leygonie C. and Hughes G. (1992), 'Industrial Profitability and Trade among the Former Soviet Republics', Economic Policy, October, pp.355-376.

Tanzi V., (1993), 'Fiscal policy and the economic restructuring of economies in transition', IMF Staff Papers, September, pp. 697-707.

Weitzman M. (1984), 'The Share Economy', Cambridge: Harvard University Press, 1984.

Wijnbergen S. van (1992), 'Enterprise Reform in Eastern Europe', Center for Economic Policy Research, Discussion Paper No.738.