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STRUCTURE, *STRAIN* AND MACROECONOMIC DYNAMIC IN ROMANIA

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Almost ten years of post-Communist transition have elapsed. Much of the initial euphoria and illusions have gone. People, including academic professionals, realize that this historical endeavor is a very complex and complicated affair. The state of transition compels one to scrutinize the process of change more carefully, to go beyond stereotypes, myths, and oversimplifications. As a World Bank official working on post-Communist countries stated a few years ago, one should judge a policy on its own merits by skewing intellectual prejudices.[1] This prodding was strongly reinforced by J. Stiglitz recently. He remarked that the failures of reforms "are not just due to sound policies being poorly implemented…[F]ailures go deeper, to a misunderstanding of the foundations of a market economy as well as a misunderstanding of the basics of an institutional reform process."[2] One need not fully agree with Stiglitz to see that he makes a valid point.

This paper discusses the macroeconomic dynamic in Romania in the last decade and links it to two major issues: the legacy of resource misallocation and *institutional fragility*. The legacy of resource misallocation leads to very intense *strain* in the system when there is a brutal and dramatic change of relative prices to market-clearing levels. At the new prices, resources should flow from low to high productivity areas, a process which can generate much pain in a real economy. The strain or tension involved explains why there is much opposition to change, and why coalitions of interests emerge to hinder deep restructuring. *Strain* also explains why large quasi-fiscal deficits are a feature of post-command economies, which creates an endemic proclivity for high inflation.

Institutional fragility is another dimension of the transformation process which underlines the complicated nature of change, including restructuring. The lack of institutions, of organized markets, hinders a smooth reallocation of resources and has a negative effect on performance at both the micro and macroeconomic levels. It also helps to explain the intense *friction* in the system, especially rising transaction costs, that arises during the passage between two regimes. This line of reasoning finds substantial analytical support in recent work done by Olivier Blanchard.[3]

Some analysts relate disequilibria, including inflation, primarily to the breakdown of the political process and rent-seeking activities by old elites.[4] While this is plausible, the approach adopted in this paper emphasizes the magnitude of the required resource reallocation and friction, which are sometimes so large that they undermine attempts to achieve durable stabilization. It is arguable that the success of the leading transition economies is primarily due to the ability of policy to deal with the magnitude of required

[1]A. Gelb. "From Plan to Market: A Twenty Eight Country Adventure." Transition. Vol. 7, No. 5-6 (1996), p.2.

[2]Joseph Stiglitz. "Whither Reform? Ten Years of Transition." Paper prepared for the Annual World Bank Conference on Development Economics. Washington DC, 28-30 April, 1999.

[3]Blanchard elaborates on what he calls *disorganization* in *The Economics of Post-communist Transition* (Oxford: Clarendon Press)(year of publication required). See also O. Blanchard and M. Kremer, "Disorganization,"Quarterly Journal of Economics, 112 (is this the volume or the number?)(1997), pp.109-126. An early paper on transition which can be related to Blanchard's line of reasoning is Guillermo Calvo and Fabrizio Coricelli, "Stagflationary Effects of Stabilization Programs in Reforming Socialist Countries: Enterprise-Side and Household-Side Factors," World Bank Review, Vol.6, No.1, pp.71-90. This needs a year of publication.

[4]The competition among rent-seekers, and its impact on output is stressed by Andrei Shleifer and R. Vishny, "Corruption," Quarterly Journal of Economics, Vol.108, No.3, pp.461-488. This needs a year of publication. See also Boone, P. and J. Hoerder, "Inflation: Causes, Consequences, and Cures," in P. Boone, S. Gomulka and R. Layard (eds), Emerging from Communism. Lessons from Russia, China and Eastern Europe (1998), pp. 42-72. (publication information required)

resource reallocation and friction, while not being "captured" by vested interests.

Together with *strain*, institutional fragility helps to explain stop-go policies (*boom and bust cycles*), as well as many of the setbacks and inconsistencies in the transition process. Fuzziness and lack of transparency characterize the realm of public finance. For example, banks are frequently the vehicle for granting subsidies. Primitive banking systems, which are "captives"' of entrenched structures, are likely to perpetuate much of the old pattern of resource allocation or misallocation, and to engage in significant quasi-fiscal operations, with the latter showing up in high rates of inflation or of bank failures. Romania's experience is a highly relevant example of how *strain* and institutional fragility condition macroeconomic stabilization.

Romania started transition at a disadvantage, with significantly worse initial conditions than those prevailing in the leading reform countries,[5] which suggests that her policy-makers have also had less room to maneuver.[6] The end result is that they have not yet been able to find a clear way forward to a well-functioning market economy. Under the current unfavorable conditions in the world economy, it will be increasingly difficult for the Romanian economy to escape from this '"path dependency."'

In the following analysis of economic developments during 1990-1999, stop-go policies, resurgent inflation, macro-disequilibria, and bank failures emerge as the inevitable outcomes of insufficient restructuring and fragile institutions. It is submitted that without large inflows of foreign direct investment (FDI) and creation of appropriate institutions, the economy is unlikely to be able to escape from the grip of entrenched structures. It is also submitted that more privatization would help to increase the inflow of foreign capital. The slow pace of restructuring has maintained intense strain in the system and has led to a bad path dependency.

Part One deals with two major underplayed issues: institutional fragility, and the magnitude of the required resource reallocation that engenders *strain.* Part Two focuses on economic developments in Romania between 1990—1999 and takes a brief look ahead. Part Three is a summing up of the main tenets of the paper.

1. Two major underplayed issues

There are two important issues linked with the reality of post-Communist transformation which, in this author's view, have been largely underestimated. One issue regards the institutional fragility of post-command systems and the implications of systemic regime change;[7] the other issue refers to the magnitude of required resource reallocation in relation to the new relative prices dictated by liberalization and opening of the economy.

[5]Romania practiced late Stalinism until the very end of the Communist regime. Initial conditions can be related to the magnitude of resource misallocation, the institutional ingredients of a market environment, the existence of a private sector, to a certain industrial culture, etc.

[6] See also S. Estrin, M. Dimitrov, and X. Richet, "State Enterprise Restructuring in Bulgaria, Albania and Romania," Economic Analysis, Vol.1, No.3 (1998), pp. 239-255. The authors conclude that "when one looks at differences in terms of progress of restructuring it seems likely that these can best be explained by preconditions than current progress in reforms" (p.250).

[7] A basic message of conferences debating the experience of ten years of post-Communist transition is that institutions are essential in explaining economic performance. But it is clear, that, only a few years ago, there were many who still held a pretty simplified view of what it takes to create a market economy, who thought about institutional change through the glasses of "voodoo economics."

1.1 Institutional fragility

The post-Communist societies of Europe are entities that show common structural traits, but also major discrepancies. The latter can be linked with the different pre-Communist legacies (the former Czechoslovakia, as a leading industrial country during the inter-war period, is the most conspicuous example) and the different brands of national central planning, in terms of relaxation of direct controls and economic policy choices. The different histories explain widely different incomes per capita, why market institutions vary qualitatively among the national environments, and why macro- and micro-disequilibria differed among them on the eve of 1989. Undoubtedly, Hungary, the former Czechoslovakia, Poland, and Slovenia had a substantial competitive edge after 1989, at the start of transition. Unsurprisingly, all these countries have fared better than the rest in their stabilization and reform programs, although, as some would argue, their recipes were not similar. The common thread that explains their performance has been the functioning of their institutions, including better public governance.

In a superb article a few years ago, Mancur Olson emphasized the role of institutions in explaining economic performance.[8] In economies in transition, the functioning of institutions can be linked with (a) the overall legacy of the command system, the lack of knowledge of individuals and organizations, or what one can call *organizational and institutional capital*; and (b) with "co-ordination failures"' entailed by systemic change, in the vein of Blanchard's analysis.[9] Regarding these "co-ordination failures," there is need to consider that "[i]mperfect and costly information, imperfect capital markets, imperfect competition: these are the realities of market economies – aspects that must be taken into account by those countries embarking on the choice of an economic system."'[10] The implication is that one needs to consider how market economies actually function.

On the one hand, institutional backwardness points at the lack of specific knowledge of individuals and of society as a whole and at the constraints for genuine institutional change. On the other hand, it suggests that there is much scope for a system to get outside what can be conceived as an ideal tunnel of evolution. In Romania, there is much talk about the weakness of institutions, which affects the formulation and implementation of public policy; by this is meant a very *weak state*.

The stress put on the burden of the past is meant to warn against its dragging effects and an unfavorable *path dependency*, from which it may not be easy to break away. The burden of the past makes it harder to overcome the fragility of the emerging market institutions, and enhances the potential for the dynamics of change to get out of control. Institutional fragility was much underestimated by policymakers and their advisers.[11]

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[8] Mancur Olson, "Big Bills Left on the Sidewalk: Why Some Nations Are Rich and Others Are Poor." Journal of Economic Perspectives. Vol. 10, No.2 This needs a year of publication.

[9] According to Blanchard, "the evidence from those Central European countries which are doing less well suggests a larger role for *disorganization.* In Bulgaria and Romania, two of the countries with the largest drop in output, supply shortages sill played an important role more than two years after the beginning of transition."(Ibid., p.45). By implication, the history of partial reforms lies behind the amount of *disorganization*.

[10] Stiglitz. Whither Socialism? Cambridge, MA: MIT Press (1995), p. 267.

[11] As Peter Rutland rightly points out, '"in a travesty of Hayekian logic, it was assumed that market institutions would be self-generating." "Has Democracy failed Russia?,"The National Interest, Winter (1994-1995), p. 11.

Similarly inadequate is the neglect of the extreme complexity of the process under way. Gross oversimplifications and "black versus white" reductionism, as well as the lack of understanding of how interests are socially articulated – particularly in a transition period – cannot but obscure real processes and lead to hasty and inadequate decisions. "The elite failed to understand that society was a far more complex organism than what they had thought, that simple, well-meaning declarations were not effective in politics, that ideas and programs would have to be sold to the public, and that institutions were necessary for the routinized exercise of power." [12]

Apart from the insufficient analytical attention paid to the institutional build-up in the transforming societies in Europe, one has to consider the seeds of instability produced by this fragility. The poor performance capacity of immature institutions needs to be mentioned in this context. For example, the debate on universal vs. narrow banks -- on whether and how banks should be involved in resource allocation -- is quite relevant for the concern created by immature market institutions in terms of enhancing instability and uncertainty in the system.[13] From a broader perspective, one can pose the issue of the *governance capabilities* of the political and economic elites – to what extent these elites can induce and manage change when so much fuzziness, volatility, and uncertainty prevails. One can also assume that institutional fragility will bear significantly on the nature of local capitalism.

1.2 The magnitude of resource reallocation: the emergence of *strain*

Another issue which has not been sufficiently highlighted in the professional[14] and public debate is the dimension of the inherited misallocation of resources – that is, the sheer scale of disequilibria, at the new relative prices, that indicates the magnitude of required restructuring as compared to the ability of the system to undergo wide-ranging and quick change. Once the combination of internal shocks – engineered by reforms or triggered by the uncontrolled processes of system dissolution – and external shocks occurred, the structure of the economy and the legacy of resource misallocation put the system under exceptional *strain.* Appendix 1 provides an analytical explanation of strain, which is buttressed by an empirical analysis done by OECD experts; this analysis confirms that Romania started transition at a comparative disadvantage.

At the dramatically changed relative prices, and should financial discipline be strictly imposed, many inefficient enterprises would be out of the economic circuit. They may try to survive by reducing X-inefficiency,[15] but in the end, should potential efficiency gains be evenly distributed, they would have to bow out. In short, the array of structurally inefficient enterprises forms a silent '"conspiracy" against change; it represents entrenched personal stakes, which oppose restructuring for obvious reasons. Together with other factors, including insufficient policy credibility, the lack of capacity to pay triggers a chain reaction of inter-enterprise debt, of

[12] G. Schopflin. "Post-Communism: The Problems of Democratic Construction." Daedalus. Vol. 123, No. 3 (1994), p. 130.

[13] One can talk about an enhanced "financial instability hypothesis," in the vein of H. Minsky's "A Theory of Systemic Fragility," in E.I.Altman and A.W.Semetz (eds.) Financial Crises: Institutions and Markets in a Fragile Environment New York, NY: John Wiley and Sons. This needs a year of publication.

[14] Among those who tackled this issue analytically are Ph. Aghion, O. Blanchard, J. Flemming, R. Mc Kinnon, G. Roland, etc.

[15] H. Leibenstein. "Allocative Efficiency vs. X-Efficiency." American Economic Review. Vol. 56, No. 3, (1966), pp. 392-410.

arrears in general, when the latter include non-payments to the state budget. Arrears reduce the relevance of low official budget deficits when quasi-fiscal deficits are large. It should be said that quasi-fiscal deficits have been looming ominously over economic policy in Romania in the years of transformation.

Arrears can be seen as *temporary quasi-inside money,*[16] which conditions the effectiveness of monetary policy (Appendix 2 uses a simple model in order to illustrate how arrears affect stabilization policy).[17] In an interesting study, C. Carare and E. Perotti conclude that, in Romania, arrears are a result of inconsistent reform policies and the underdevelopment of financial markets.[18] Consequently, they argue in favor of hardening budget constraints, which is an unquestionable objective. But, like other analysts, they do not explain why reform policy has been inconsistent and the structure of incentives for banks so hard to change. Thence, the relevance of *strain.*[19]

What are the major implications of *strain*? One is that these economies can easily become exceedingly unstable and that their capacity to absorb shocks is quite low; these economies have a high degree of vulnerability.[20] Another implication is that policymakers face extremely painful trade-offs and that, in most cases, unless policy is clever and sufficient external support is available, the room to maneuver is quite limited. Finally, macroeconomic stabilization in certain countries hides deeply seated tensions, which, sooner or later, come into the open unless deep restructuring takes place.

Strain needs to be seen in relation to unemployment. Current unemployment rates in the transforming economies are not exceedingly high in comparison with the European levels of the mid-nineties, and this could assuage the perception of *strain*. However, the yardstick used is itself questionable, taking into account the unemployment problem in Western Europe. Secondly, the weakness of safety nets acquires particular significance in the poorer post-Communist countries, where the consequences of a '"new type"' of poverty could be extremely serious.[21] And another issue is the fact that restructuring of large companies –

[16] The role of arrears as a money substitute is pointed out by Emilian Dobrescu in Macromodels of the Romanian Transition EconomyBucharest: Expert Publishing House (1998), p. 36.

[17] If the equation of exchange (PY=MV) is put in a dynamic form by using logarithms: $\dot{p} + \dot{y} = \dot{m} + \dot{v}$; where $\dot{p}, \dot{y}, \dot{m}$ and $\dot{v}$ are the rates of change of prices, output, money supply and money velocity, respectively. When monetary policy is tightened, $\dot{m} = 0$, and $(\dot{p} + \dot{y})$ is above zero, $\dot{v}$ 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 $\dot{p} + \dot{y} = \dot{m}$ (c, a), where c is cash and bank credit and (a) represents arrears. When $\dot{c} = 0$ because of the dear money policy, $\dot{p} + \dot{y} = \dot{a}$. See D.Daianu,), "Inter-enterprise Arrears in a Post-command Economy. Thoughts from a Romanian Perspective," *IMF Working Paper* 94/54 (1994). Dalia Marin and Monika Schnitzer link the *credit crunch* explanation (Calvo & Coricelli) and *disorganization* in order to explain the spread of barter in transition economies ("Disorganisation and Financial Collapse," Fifth Nobel Symposium in Economics, 10-12 September, 1999, Stockholm; they do, however, underestimate the role of loss-making companies in triggering the chain of arrears.

[18] C. Carare and Enrico Perotti, "The Evolution of Bank Credit Quality in Romania since 1991," in S. Zecchini (ed.), Lessons from the Economic Transition, Dordrecht: Kluwer Academic (1997), p. 301-314. A similar view is held by Lucian Croitoru (quoted by Em. Dobrescu, p.25).

[19] For the history of arrears in Romania, see also E.V. Clifton and M. S. Khan, "Inter-enterprise Arrears in Transforming Economies: The Case of Romania." IMF Staff Papers. Vol. 40, No. 3 (1993), pp.680-696.

[20] *Vulnerability*, which reflects unsustainable imbalances, can coexist with primitive financial markets.

[21] About labor *hysteresis* and its implications for Romania, see J.S. Earle and C. Pauna, "Incidence andDuration of Unemployment in Romania." European Economic Review. Vol. 40, (1996), pp.829-837 (the issue number is required)

which mostly need to shed labor in order to become profitable – is slow or not taking place; this means that potential unemployment increases are still very significant. A big threat in this respect is the development of a "culture of unemployment."

Strain should be linked also with an intense *distribution struggle*, and an erosion of the consensus for societal change when many individuals appear as losers – once market forces start to reward people in accordance with merit, effort, good ideas, and inspiration, but also as a result of some workers' misfortune to have jobs in unprofitable enterprises. This also explains why some governments see inflation as a redistribution device when *strain* is extreme.

There is another dimension to this distribution struggle which needs to be highlighted for its exceptional character in human history, and for its effects on system transformation. It is privatization, which means a total redistribution of state assets. As we know, economic textbooks take as a *given* the initial distribution of assets among individual private owners; this distribution is almost God given, and it underpins the whole reasoning on how best to allocate resources and achieve Pareto optimality, or highest welfare. In the case of post-Communist countries, "God" has decided to come down from heaven – for what we are witnessing currently is an extraordinary process, without precedent in the history of mankind. In the next few years, much of the fate of tens, if not hundreds, of millions of living individuals, and of their descendants, is going to be shaped by the mechanics and dynamics of privatization. What took many hundreds of years in the advanced capitalist countries is supposed to occur in the post-Communist countries, through various procedures that are more or less legal, in a snapshot on the scale of history. It is therefore not surprising that everything surrounding this process is so emotionally charged– why so many hopes, dreams, reckless and ruthless actions, misbehavior, and delusions are linked to it. All individuals want to be on the winning side, but markets cannot make them all happy. The nature of capitalism in the post-Communist countries will be decisively influenced by the actual results of privatization as a process. If privatization results in the development of a strong middle class as the social backbone of the new economic system, stability and vigor will be secured, and democratic institutions will develop. Otherwise, the new system in the making will be inherently unstable. This is why one needs to be careful in applying the logic of the *Coase Theorem* to transition economies.[22]

There is a feature of Communism that needs to be emphasized in order to understand better the social tension engendered by post-Communist transformation, and the intensity of the distribution struggle. As an economic system, Communism functioned as a kind of poor and steadily declining "premature welfare state,"'[23] suffering from *economic euthanasia*. As in Western countries, where powerful vested interests oppose economic adjustment, those in post-Communist countries who cannot compete on the markets have turned into a coalition of interests that can slow down, or even arrest, reforms. This mass of individuals is most likely to fall prey to populist slogans. Robert Gilpin's observation, that adjustment is very difficult in welfare states, applies *mutatis mutandis* in the case of post-Communist countries.[24]

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[22] This theorem asserts that an optimal allocation of resources can always be achieved through market forces, irrespective of the legal liability assignment, if information is perfect and transactions are cost-less (Ronald Coase. "The Problem of Social Cost." Journal of Law and Economics. Vol. 1 (1960), pp. 1-44 [the issue number is required]). A glaring refutation of this theorem is the mass privatization program in Russia. This author would add that both the initial distribution of assets and their redistribution matter.

[23] J. Kornai. "Lasting Growth as a Top Priority." Discussion Paper No.7. Budapest: Collegium, Insitute for Advanced Study. the date of publication is required.

[24] R. Gilpin. The Political Economy of International Relations. Princeton, NJ: Princeton University Press

2. Judging Romania's economic transition

2. 1 The burden of the past

In comparative analyses of the transition economies, insufficient attention has been paid to the initial conditions prevailing when the transformation process got under way.[25] Communist Romania, particularly in the 1970s and 1980s, provides an interesting and instructive case of *immiserizing-growth* which was caused by the logic of the system – in particular, the rush to speed up industrial growth and to increase ties with market economies on a very weak functional basis, by totally ignoring market mechanisms. In the literature, this phenomenon is explained by the existence of various price distortions which harm resource allocation, worsen the terms of trade, and lower welfare.[26] But it can also be argued that it was the way the economy functioned as a whole, including the genesis of wrong industrial choices, which constituted *the* distortion that led to *immiserizing growth*. It has been shown that the inner dynamics of the system – its incapacity to cope with increasing complexity and its inability to assimilate and generate technological progress – led to a "softening" of output, characterized by its expansion with a strong bias towards low value-added industrial goods, which led to a steady deterioration of the terms of trade.[27]

Since *immiserizing growth* limited the potential to increase exports, the targeted trade surpluses in the 1980s – required to pay back the external debt – were achieved through very large cuts in hard currency imports. Apart from the reduced level of investment, growth possibilities were also impaired by a sharp reduction in imports of machinery and equipment from the Western countries. The heavy overtaxation of domestic absorption that took place during this period subsequently resulted in lower growth rates of production, reduced welfare, and bigger domestic imbalances, both visible and hidden. In addition, shortages were rising in both production and consumption. The immiserizing nature of "growth" in Communist Romania is well illustrated by its income per capita, which has remained one of the lowest in Europe, and the very high energy intensity of its GDP.[28] Another telling fact is that whereas the GDP allegedly grew by almost 28 per cent during the 1980s, exports decreased over the same period.

The structure of industry also revealed a strong bias towards the creation of gigantic units, with no regard for the important sources of flexibility in an economy – namely, the small and medium-sized enterprises. Thus, in 1989, 1,075 enterprises with more than 1,000 employees each represented more than 51 per cent of all units, provided jobs for 87 per cent of all industrial workers, and supplied almost 85 per cent of all industrial output; enterprises with over 3,000 workers, which accounted for about 16 per cent of the total, supplied over 50 per cent of total industrial output and provided jobs for 53 per cent of all employees in industry. At the

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(1987).

[25] An IMF report of 1997 acknowledges that "Romania emerged from Communism with an economy that was suffering from considerably more deep-seated structural problems than most former Communist countries in the region". '"Romania – Recent Economic Developments." IMF Staff Country Reports. No. 97/46 (1997), p. 7.

[26] J. Bhagwati. "Immiserizing Growth – a Geometrical Note." Review of Economic Studies. June 25, pp. 201-205. H. Johnson. "The Possibility of Income Losses from Increased Efficiency of Factor Accumulation in the Presence of Tariffs." Economic Journal. Vol. 77, pp. 151-154. date of publication required for both citations, issue number required for second citation.

[27] D. Daianu. "A Case of Immiserizing Growth." Revista Economica. Vol. 20 (1985). In Romanian. Issue number required.

[28] The energy consumption per unit of GDP in Romania is twice as high as in Hungary, and more than 4 times larger than the OECD average (EBRD, Transition Report, 1995, London, p.77).

same time, the small and medium-sized enterprises, with less than 500 employees, accounted for 4 per cent of all workers and 6 per cent of total industrial output.

The forced reduction of the external debt in the 1980s, actually a *sui generis* shock-therapy, accentuated the decline in the competitiveness of the economy, exacerbated imbalances among sectors, increased shortages, and generally lowered the welfare of the people.

2.2 Output decline and high inflation period (1990-1993[29]): "The first *transformational recession*"[30]

The early years of post-Communism in Romania were marred by severe economic difficulties, including a very large fall in output (Table 1), an institutional interregnum,[31] and "systematic" policy incoherence. "Institutional interregnum" refers to the melting down of much of the old institutional structures without a rapid build up of market-based institutions (this hiatus explains the implosion of public revenues as well – see table 2). This, obviously, contributed to increasing uncertainty, fuzziness, and volatility in the national economic environment. At this stage the inherited structures are being broken, which means that the quantity of friction in the system goes up considerably and important resources are consumed in order to accommodate change. A lot boils down to a change of the organizational behavior of actors, to the build-up of new organizational capital. In this phase of transition, there exists a territory over which market co-ordination failures combine with an "abandoned child" feeling of many enterprises, which are no longer able to rely on central allocation of resources and customers.[32] For these enterprises, information and transaction costs skyrocketed.[33]

In spite of its tortuous path, some institutional change did take place during those years, through spontaneous processes such as massive land privatization and the emergence of a private sector, which preceded Law 54 in 1990 on the setting up of private enterprises,[34] as well as through measures "from above" initiated by the Government. Among the latter were the start of the two-tiered banking system in 1990, the commercialization of state-owned enterprises by Law 15 in 1990, and the privatization Law 58 in 1991, which aimed to give 30 per cent of the equity of commercial companies to Romanian citizens.[35] What happened with the privatization law is symptomatic of the vacillations and inconsistencies of reform policies during that period; Law 58 in 1991 created much confusion regarding the actual structure of property rights and the need for better management of assets.

Overall, and in a formal sense, it can be said that policy-makers practiced a sort of

[29]Actually, output started to grow in 1993, when inflation was still very high. That was proof that structural factors were at the origin of the first "transformational recession," as in other post-Communist economies.

[30]This term was introduced by Janos Kornai.

[31]See also R. Kozul-Wright and P. Rayment, "The institutional hiatus in economies in transition and its policy consequences." Cambridge Journal of Economics. Vol. 21, No. 5 (1997), pp. 641-661.

[32]External shocks, like the collapse of Eastern markets, played a major role. G. Calvo and F. Coricelli use the notion of "trade implosion" in this respect.

[33]D. Daianu. "The Changing Mix of Disequilibria during Transition. A Romanian Background." IMF Working Paper. No.94/73 (1994). See also S. Estrin et. al. (ibid., p. 249) and Blanchard (1997).

[34]In 1991, the number of private companies rose quickly to 72,277; they operated mainly in trade and services. By the end of 1995, the number had risen to almost half a million. It should be recalled that, in contrast with Hungary or Poland, the Communist regime in Romania did not allow any form of private property.

[35]It should be said that commercial companies represented only 60 per cent of state assets; the rest belonged to the so called "*régies autonomes,*" which were created according to the French model.

"institutional mimicking" by trying to adopt, although in a highly inconsistent way, institutions found in the Western world. A problem with institutional mimicking, however, is that it cannot deal with the fine print of reforms and institutional change, and frequently lacks substance, since the real functioning of institutions is driven by vested interests.

After December 1989, there was tremendous *pressure from below* to consume tradables, to reduce exports and boost imports of both consumer and intermediate goods after the years of severe deprivation in the 1980s. The switch in favor of tradables was almost instantaneous and virtually unstoppable; it was also strengthened by a "shunning of domestic goods" syndrome. In 1990 the boost in consumption was financed primarily by dissaving, or the depletion of foreign exchange reserves.

However, there is another side of the story that needs to be highlighted – namely, that policy-makers complicated the state of the economy both by commission and omission. By commission, since they faltered in the face of pressures from below and were influenced also by the prospect of elections in May 1990. This resulted in the concession of large wage rises[36] and the introduction of the five-day work week, despite the fact that output was plummeting, together with the maintenance of wide-ranging price controls, a greatly overvalued exchange rate, and mismanagement of the foreign exchange reserves. By omission, for there were no serious attempts to deal with macroeconomic imbalances before November 1990. Events during that year revealed a fundamental flaw in the transformation process, namely, the considerable decision-making power of enterprises when they do not face hard-budget constraints.

Confronted with a rapid deterioration of the economy and unable to contain growing disequilibria, including unsustainable trade deficits, rising prices, and vanishing investment, a stabilization plan supported by the International Monetary Fund (IMF) was introduced at the start of 1991.[37] The middle-of-the-road, gradualistic stabilization program that took shape included a tightening of fiscal and monetary policy, although real interest rates remained highly negative; a tax-based incomes policy; a new devaluation; and the introduction of a two-tier exchange rate system through the initiation of an inter-bank foreign exchange auction system in February 1991. The program failed to stop inflation.

At the end of 1991, there were growing tensions in the system: an overvalued official exchange rate; artificially low prices for energy and raw materials which encouraged their over-consumption; and insufficient inflows of foreign capital to compensate for the low levels of domestic saving and the weakness of fixed investment. Many exporters and importers found a way out of the *impasse* in making barter deals, which introduced an *implicit* exchange rate into the functioning of the economy; this rate mitigated the pernicious effects of overvaluation, but entailed considerable information and transaction costs. However, capital flight and insufficient exports were becoming matters of major concern.

In the spring of 1992, policy-makers were compelled to act. Interest rates were raised considerably and the refinance rate of the National Bank reached 80 percent; the exchange rate was devalued substantially and exporters were granted full retention rights in the hope of overcoming their mistrust of policy-makers and encouraging the repatriation of capital. The full retention measure was thought necessary, since enterprises still had a vivid memory of the

[36]This development should be seen in the context of the elections in May 1990. Measured real wages rose by 11 per cent between December 1989 and October 1990, while output continued to fall. The removal of price controls began in November of that year.

[37]See also D. G. Demakas and M. S. Khan, "The Romanian Economic Reform Program." IMF Occasional Paper. No. 89 (1991).

"confiscation" of their hard-currency holdings at the end of 1991. But the policy turnaround was incomplete, and interest rates remained negative as a result of a large array of preferential credits and very low deposit rates, the latter maintaining a high propensity to shun the domestic currency in favor of the dollar. Political factors, resulting from the elections of September 1992, also weakened the determination of the government to pursue a consistent policy.

Table 1 Macroeconomic Indicators, 1990-99

Indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999+
1.GDP (annual change)	-5.6	-12.9	-8.8	1.5	3.9	7.1	3.9	-6.6	- 7..3	- 4.5
2. Unemployment rate (end of period)	-	3	8.2	10.4	10.9	9.5	6.6	8.8	10.3	11.5
3.Inflation										
-average	5.1	170.2	210.4	256.1	136.7	32.3	38.8	154.8	59.1	
-Dec./Dec.	37.7	222.8	199.2	295.5	61.7	27.8	56.9	151.4	40.6	44
4.M_2 (end of period)-growth rate	22	101.2	79.6	141	138.1	71.6	66	104.9	48..9	
5. Nominal devaluation										
-average	50.3	240.5	303.1	146.8	117.8	22.8	51.6	132.5	23.8	
-Dec./Dec.	140.4	444.5	143.3	177.4	38.4	45.9	56.5	98.8	36.5	
6.M_2/GDP	55.7	27.4	20.1	13.8	13.3	18.1	20.5	18.1		
7.Budget deficit/GDP	1.0	3.3	-4.6	-0.4	-1.9	-2.6	- 3.9	-3.7	- 3..3	- 4.0
8.Current account/GDP	-8.5	-3.5	-8	-4.5	-1.4	-5	-7.2	-6.7	- 7.5	- 6.0
9.Real wage index	5.1	-18.3	-13.0	-16.7	0.4	2.6	9.5	-22.2	6	

* Consolidated budget +estimates

** Exchange rate variation deflated by the ratio between Romanian PPI and USA PPI

Source: National Bank of Romania

Table 2 : Government Revenues (Total Revenue) for Several Transition Economies, 1990-1996

In percent of GDP

	1990	1991	1992	1993	1994	1995	1996
ROMANIA	39.7	41.9	37.4	33.9	32.1	31.9	29.6
ALBANIA	46.8	31.5	23.5	25.6	24.5	24.0	...
BULGARIA	52.9	40.4	38.4	37.2	39.9	36.2	33.6
CZECH REPUBLIC	...	...	48.2	50.5	49.4	48.4	...
HUNGARY	52.1	50.9	50.0	50.7	49.6	46.6	45.8
POLAND	45.4	42.4	43.9	47.6	47.2	47.2	45.7
SLOVAK REPUBLIC	...	...	46.1	44.2	46.3	46.8	...

Sources: Country authorities; and IMF estimates.

2. 3 A policy breakthrough, 1993-1994: "the interest rate shock"

Rising inflation and the persistence of a large trade imbalance eventually forced a reconsideration of policies. A breakthrough occurred in the last quarter of 1993, when several key decisions were made in order to contain and reverse the dynamics of inflationary expectations, to start the remonetization of the economy, and to create a transparent, functioning foreign exchange market. A major omission in the strategy, however, was a more clear definition of property rights under privatization, which could have had a major influence on the size of capital inflows and on the scope and intensity of restructuring.

The main decision, a dramatic rise in nominal interest rates, led to positive real interest rates. Thus, the National Bank's average refinancing rate rose from an annual rate of 59.1 per cent in September 1993 to 136.3 per cent in January 1994, and remained at that level for another three months. Commercial banks' lending rates followed suit with a two-month lag. This measure had two major consequences: first, it stemmed the flight from the leu and started a rapid rate of remonetization, and second, it greatly helped the formation of a transparent foreign exchange market and thereby strengthened the potential for an export drive. The scale of remonetization explains why the policy shock of 1994 did not lead to a decline of output, as was the case in 1997, when the economy was subject to a credit crunch. Another key decision was the substantial devaluation in several stages of the official inter-bank market exchange rate, which lowered it to more or less the rate prevailing on the gray market; this also increased the transparency of the foreign exchange market, which in turn considerably reduced the entry costs for those in need of foreign exchange. The third measure involved a stricter control of base money, and, consequently, a reduced rate of money creation. And finally, the fiscal stance was tightened to aim toward a lower budget deficit, when corrected for the removal of some explicit and implicit subsidies.[38]

The results of this policy breakthrough were much as expected. Inflation fell to an annual rate of 62 per cent (December on December) in 1994, and there was a large reduction in the trade deficit to $411 million.[39] The economy absorbed the shock of high positive real interest rates and of the exchange rate unification – which meant the suppression of some implicit and explicit subsidies to inefficient producers – and there was no decline of output. The removal of implicit subsidies explains why the budget deficit went up to 4.3 per cent in 1994, with a large part of its financing being obtained from external sources.

The export drive played a major role in the recovery, but it cannot explain why so many enterprises in the weak sectors also did well in 1993, especially as arrears did not "appear" to be rising sharply in 1994.[40] Several explanations can be suggested. One is the existence of important market imperfections, such as monopolies that can extract rents and which operate in the less efficient sectors. Another is that there are huge amounts of "X-inefficiency" in the system. This means that potential micro-efficiency gains are ubiquitous and that, when under pressure, even firms in the backward sectors can realize some of them and cope with the situation. But accepting this explanation requires an evaluation of the resilience of *organizational routines* in the system. An implication of the X-inefficiency explanation is that

[38]The budget deficit was actually higher in 1994 (4.3 per cent) than in 1993 (1.7 per cent), but many implicit and explicit subsidies had been removed, which was a key objective.

[39]It can be argued, however, that the *ceteris paribus* condition does not apply in this assessment since there were favorable external '"shocks"' as well.

[40]Caution is required with the numbers since arrears can be obscured by inefficient activities being kept afloat by bank lending (via rollovers). Ultimately, these "hidden" arrears will show up in a deterioration in the portfolios of the banks. This is what appears to have happened in 1996 and thereafter.

the pressure for fundamental restructuring begins to bite only when most of the efficiency reserves are exhausted. A third explanation is that there was more reliance on self-financing, although in fact many companies were plagued by a lack of working capital. Last, but not least, unwarranted bank lending, such as rollover of loans, may have played a significant role in supporting the weaker enterprises.

2. 4 Fragile growth and relapse into inflation, 1995-1996

There was a rapid growth of GDP in Romania in 1995: 7.1 per cent as against just under 4 per cent in 1994 and under 2 per cent in 1993. At the same time, the inflation rate at the end of 1995 was about 28 per cent. The remonetization of the economy continued, as indicated by the 71 per cent expansion of the money supply, far exceeding the rate of inflation (Table 1). While exports continued to grow rapidly, by over 20 per cent, imports increased by more than 30 per cent, causing the trade imbalance to increase again to more than $1,200 million and putting pressure on the foreign exchange inter-bank market.

What caused the trade imbalance to deteriorate again, bearing in mind that the real exchange rate did not appreciate in 1995, and that there were no major changes in the terms of trade in this period? One explanation is that an import and consumer spending boom started in the last months of 1994, which, arguably, might have been encouraged by perceptions that the exchange rate was unsustainable. But this explanation would have to be reconciled with the fact that in 1994 the trade and current account imbalances improved dramatically and the foreign exchange reserves of the banking system, including the Central Bank, increased substantially, which might have suggested that the exchange rate was in fact sustainable. It is also possible that the various economic agents were unused to the stability of the nominal exchange rate and therefore anticipated an inevitable depreciation, which, paradoxically, may not have been justified by the economic fundamentals. Another conjecture is that some of the improvement in the trade balance in 1994 was caused by temporary factors; their removal in the following year then put additional pressure on an exchange rate that was already overvalued. Without dismissing these factors, the more important explanation is probably that the higher growth rate of the economy, driven by highly import-dependent branches, led to overheating and the rapid growth of imports.

There was a clear link between inflation and the way the budget deficit was financed in 1996. Whereas the target for the consolidated budget deficit was 2.2 per cent, it turned out to be 5.7 per cent, on an accrual basis. More significant was that its financing was inflationary. The scale of inflationary financing was augmented by the injection of base money in order to cover the quasi-fiscal deficit that arose because of the losses of agriculture and of the *régies autonomes*. Together with the quasi-fiscal deficit, the fiscal imbalance reached 8.4 per cent on an accrual basis in 1996 (Table 3).

Remonetization had supported the efforts to subdue inflation in 1994 and 1995. Regarding remonetization, several aspects should be emphasized:

a) it facilitated the subsidization of various sectors of the economy, including agriculture and energy, from the Central Bank's resources, allowing the Central Bank to simultaneously pursue the reduction of inflation. The sectoral financing mirrored the existence of major structural disequilibria in the economy.

b) it "helped" put off dealing resolutely with the two failed banks, Dacia Felix and Credit Bank. More then 1,700 billion lei (c. $400 million) were injected in both through special credits during 1995-1996. If money demand had not grown for most of 1995 and 1996, the size of special credits would have certainly fuelled inflation. The reason for this injection was that there was no insurance scheme for small depositors, and so it was felt necessary to forestall a run on the banks and a possible systemic crisis.

c) it involved the expansion of base money through the increase of net domestic assets, and not through the accumulation of net foreign assets. Ideally, remonetization should have taken place as an outcome of a rise in net foreign assets – that is, as a result of capital inflows or of net exports, and not, primarily, via base money injections which supported the expansion of domestic credit.

d) it can be argued that this remonetization slowed down the development of monetary policy instruments, namely open market operations. This is because the Central Bank did not face the pressure to cope with a surge of liquidity as would have been the case with substantial capital inflows. The main reasons why such inflows did not occur are the feeble pace of privatization during 1994-1996, the primitive domestic capital markets, and the credibility problem surrounding domestic policies.

By the end of 1996 several worrying tendencies had emerged: a very sharp rise in the monthly inflation rate which was in double-digits in the last quarter of the year; the sharp rise in the trade and current account deficits, although the growth rate of GDP was lower than in 1995, at3.9 per cent as against 7.1 per cent; and still greater distortions in relative prices, due especially to the delay in adjusting energy prices and to the administrative control of the exchange rate. As the remonetization process came to a halt in the latter half of 1996, maintaining subsidies without igniting inflation was to prove an impossible endeavor. Overall, the macroeconomic stabilization program was losing steam. The inflation rate at the end of the year was 57 per cent. Furthermore, in spite of heavy borrowing (over $1.5 billion) on the international capital markets,[41] the foreign exchange reserves of the National Bank stood at about $700 million at the end of 1996. The external debt of the country was rising rapidly, with peak payments looming in the following years. In addition, the policy mix being pursued by the Government – multiple exchange rates, price controls, subsidies, and so on – was making it unlikely that it would be possible to reach a new arrangement with the IMF. Such developments were clearly leading to a dead-end and a policy change was urgently required.

The events of 1995 and 1996 underscored both the importance of privatization for inducing autonomous capital inflows and for enhancing restructuring, as well as the danger of "populist macroeconomics".[42]

[41]During 1995, Romania was rated BB- by the principal Western rating agencies (and BB+ by JCRA), which helped the raising of money on the international capital markets. These accommodating capital inflows fended off a major balance of payments crisis in 1996.

[42]The elections of 1996 clearly had an impact on macroeconomic policy, and, subsequently, on the performance of the economy.

Table 3. Fiscal and Quasi-Fiscal Deficits

As per cent share in GDP

	1993	1994	1995	1996	1997
Budget balance					
Total					
Cash	-0.4	-1.9	-2.6	-3.9	-4.5
Accruals	-0.4	-1.9	-3.0	-5.8	-3.5
Primary					
Cash	80.6	-0.5	-1.2	-2.2	-0.5
Accruals	0.6	-0.5	-1.6	-4.1	0.5
Quasi-fiscal deficit NBR refinancing	-3.1	-3.6	-0.3	-2.6	0.0
Budget balance including quasi-fiscal deficit					
Total					
Cash	-3.5	2-5.5	-2.9	-6.5	-4.5
Accruals	-3.5	-5.5	-3.3	-8.4	-3.5
Primary					
Cash	-2.5	-4.1	-1.5	-4.8	-0.5
Accruals	-2.5	-4.1	-1.9	-6.7	0.5
Memorandum item: Interest payment	0.9	1.4	1.4	1.7	2 4

Source: National Bank of Romania

2. 5 The "policy shock" of 1997 (the second "transformational recession")

The new government's first step was to liberalize the foreign exchange market and other prices which were still administratively regulated. Paradoxically, in a year when renewed efforts were made to achieve macroeconomic stabilization, the expected annual inflation rate of 90 per cent was much higher than that of 1996 (57 per cent). The explanation is in the magnitude of the effect of liberalizing prices and the anticipated devaluation of the leu.[43] The assault upon several of the major imbalances led to some positive results: the foreign exchange market began to function adequately; the consolidated budget deficit, including formerly quasi-fiscal operations, was reduced to 3.7 per cent of GDP;[44] the current account deficit shrank a little, from 7.2 per cent to 6.6 per cent of GDP; and the Central Bank's foreign exchange reserves soared to about $2.6 billion.[45] The size of the fiscal adjustment should also be seen against the backdrop of the sharp fall in output, which reduced the tax base considerably.

But there was a dark side to the story : the actual inflation rate was 151 per cent and the GDP fell by much more than expected (-6.6 per cent as against -2 per cent). Policy-induced demand and supply shocks lie behind the plunge of the economy; they explain the start of the

[43]From some 4,000 lei/$1 at the end of December 1996, the rate rose sharply to about 9,000 lei/$1 in late February 1997, after which a nominal appreciation took place and the rate stabilized at around 7,000 lei/$1.

[44]This is an overstatement to the extent that arrears stood at a high level. The bail-out of Banca Agricola and Bancorex in 1997 indicated how serious the problem of arrears was, and how they can obscure quasi-fiscal deficits.

[45]Significant amounts of portfolio capital entered the country, which tested the ability of the Central Bank to sterilize them when base money represented no more then 4.6-4.7 per cent of GDP.

second "transformational recession."

Another consequence of the program was its severe impact on the emerging private sector. The large contraction of real credit considerably lowered the prospects for many small and medium-sized companies, and was a major factor in the fall of output. Thus, total real credit (in domestic and foreign currency) declined by 52.5 per cent, and its non-government component by as much as 61.3 per cent. This should be set against the growth of real credit in previous years, when the non-government component increased by 19.7 per cent, 35.6 per cent, and 4.1 per cent in 1994, 1995, and 1996 respectively.[46] In many sectors sales fell by 20-25 per cent. This development was the reason behind the growing chorus of demands in the private sector for fiscal relaxation, demands that became very intense during 1998. Ironically, a program that was meant to advance reforms negatively affected the emerging entrepreneurial class, and encouraged the expansion of the underground economy because of the degree of austerity involved. Appendix 3 illustrates how both over-regulation and under-regulation are bad for the economy; just as over-regulation stimulates the underground sector, in a similar way it can impact a sharp decline of the economy, for many firms will try to get in the "shady area" of business for the sake of preserving some revenue streams. The expansion of the underground economy would be a response to a powerful shock. As thermodynamics tells us, "nothing gets lost in the universe".

There are several factors that explain the high inflation. First, the corrective component of inflation – price de-control, plus a rise in some administered prices – came strongly into play in March, when inflation reached almost 30 per cent. Secondly, there was a substantial overshooting of the leu. Thirdly, the program underestimated the role of monopolies and the slow response of supply as sources of inflation. Another factor lay in the economic policy slippage in the latter half of the year, when there was a premature relaxation of monetary policy: there was an extensive and abrupt wage indexation, redundancy payments were granted to laid-off workers, and large amounts of money were pumped into banks that were in difficulty. It was obvious that the macroeconomic policy mix was not well balanced, and that the supply side response had been greatly overestimated.

The restructuring of major "producers" of arrears was inadequate. The delay was due to the inherent problems of such an operation when the economy was in steep decline; on the one hand, the overall measures aimed at restructuring implied the need for layoffs, but on the other hand, the troubles confronting the small and medium-sized enterprises in the private sector, a direct consequence of the austerity measures, were discouraging the creation of new job opportunities. Privatization of large enterprises dragged and bank privatization was left in abeyance. Such a situation could not provide incentives for foreign direct investment nor promote restructuring.

In the last quarter of the year, the Central Bank and the Ministry of Finance converted 8,000 billion lei ($1 billion) of poor credits granted by the Agricultural Bank and Bancorex into government bonds as a way of recapitalizing the two banks. While the Dacia Felix and the Credit Bank failures were caused by large-scale fraud and embezzlement, the failure of the state banks was the result of a chronic misallocation of resources and of poor performance in a number of large economic sectors, which in turn was due to slow restructuring and feeble capital inflows.[47]

[46]National Bank of Romania data.

[47]Behind these developments was the slow pace of privatization, which therefore failed to attract capital inflows and help restructuring.

The GDP continued its decline in 1998, falling by 7.3 percent, and, at year-end, unemployment stood at about 10 per cent as against 6.6 per cent in December 1996. Inflation year-on-year fell to 40.6 per cent, and the consolidated budget deficit, including privatization revenues, was 3.3 per cent. The latter should be seen against the background of a further reduction of the tax base because of the fall in output, and the implications for government spending of the rescue package for the two state-owned banks. Actually, the budget deficit was kept under control by a very severe cut in public expenditure which was undertaken in August.

Although they came down during the year, real interest rates stayed high in 1998,[48] as a result of tight monetary conditions and a lack of sufficient policy credibility. Their level indicated how little room to maneuver was available to policy-makers. Interestingly, real credit started to grow again in 1998, although output did not. Between December 1997 and November 1998, real domestic credit rose by some 24 per cent, with the non-government component increasing even more. A note of caution is needed here, however, since over the same period, the net foreign assets of the banking system fell by almost one half and the real money supply shrank (see Table 1), which indicates no resumption of remonetization.

Based on consumer prices, the exchange rate appreciated in real terms by about 30 per cent since mid-1997, after the sharp devaluation at the start of that year, which helps to explain the rising trade and current account deficits in 1998. The foreign exchange reserves of the National Bank declined to less than $1.9 billion at the end of the year, a result of its interventions to stem the fall of the leu. Excessively lax income policy also helps to explain the size of domestic absorption in a year when there was a further contraction of output. Real wages actually grew by about 6 per cent in the year to December (Table 1).

The fallout from the financial crisis in Russia led to the postponement of new external bond issues, and cast doubt on the possibility of rolling over a portion of the external debt in 1999. Because of the size of payments due in 1999, about $2.9 billion, there was threat of a financial crisis and default. This threat explains the considerable efforts to conclude privatization deals at the end of 1998 – for example, Romtelecom and Romanian Development Bank – and the attempt to close down large loss-making companies.

2.6 A comparison of two stabilization programs: 1994-1995 and 1997-1998

There are several features which differentiate the two attempts at macroeconomic stabilization in 1994-1995 (hereafter policy A) and in 1997-1998 (policy B). These differences help to explain why output grew, albeit on a very fragile basis, during the first attempt, whereas it declined in 1997 and 1998. It should be stressed that in both cases the pace of restructuring was inadequate. However, policy B tried explicitly to combine measures aiming at reducing macroeconomic disequilibria with structural reforms, which explains the pains and difficulties of the program.

Both policies were accompanied by interest-rate shocks. However, policy A did not involve a credit crunch; on the contrary, M2 grew rapidly and so did lending. This was due to the rapid remonetization of the economy, which was enhanced by a psychological factor: for the first time, because of positive real interest rates, people found it worthwhile to put their savings

[48] In the second half of the year, *ex post* US dollar returns on three-month T-bills hovered at about 50 per cent.

into banks. Consequently, bank deposits grew rapidly. The psychological-cum-savings reorientation factors were no longer strong in the second period, and the sharp rise in interest rates in 1997 could not be accompanied by remonetization. Policy B, as a matter of fact, involved a major credit crunch.

Since remonetization came to a halt in the second half of 1996 this created a major constraint for policy in 1997. The increase in the velocity of money forced policy-makers to consider a much tighter monetary policy. The issue at stake was how much tighter it should be.

Policy B involved exchange rate unification via a large overshooting of the leu, which magnified inflation and the decline of real money balances; it also contained a sharp rise in the price of energy as a key relative price, which affected heavily energy-guzzling sectors. Policy A included multiple exchange rates and controls on key prices such as energy.

Policy B involved a major fiscal adjustment, including a large reduction in explicit and implicit subsidies, which affected certain sectors more heavily than others; in the budget, subsidies went down from over 6 percent in 1996 to 2.5 percent in 1997.

Policy B used as a nominal anchor base money, which actually recovered its 1996 December level in the second quarter of 1997. Policy A was quite eclectic, relying on both the control of the money supply and a certain degree of stability in the exchange rate[49] during the phase of intense remonetization.

Macroeconomic imbalances persisted, or even developed, over the 1994-1996 period. Arrears rose to over 34 per cent of GDP in 1996, from an average of 22-23 per cent in previous years. This was increasingly worrisome, since, as the economy had been growing, restructuring should have been encouraged. Policy-makers underestimated the need for a restructuring policy, an industrial policy conceived as a damage-control device.[50] The growth of arrears indicated the unsound basis of economic growth. The rising trade deficits in 1995 and 1996 were financed by substantial compensating capital inflows, which created a dangerous situation for the following years. With the benefit of hindsight, one can imagine various scenarios against the backdrop of the world financial crisis.

Policy B tried to speed up privatization and used the Stock Market to this end. This explains the large inflows of portfolio capital in the first half of 1997 and the accumulation of foreign exchange reserves by the Central Bank. In 1997 Romania, for the first time, received substantial autonomous capital inflows, which tested the sterilization capacity of the central bank. These flows later subsided as policy ran into an impasse.

An apparent puzzle comes out of comparing the two programs. During 1994-1996, the trade and the current account deficits rose in the wake of the expanding economy. With the very severe compression of domestic absorption in 1997 and 1998, an improvement in the current account deficit might have been expected. There was a slight reduction of the deficit in 1997 (as against 1996), but it started to grow again in 1998. The immediate explanation is linked with the real appreciation of the exchange rate and lax income policy in 1998.

[49]The plural "exchange rates" is emphasized, since a *de facto* quasi-unification of the rates occurred during 1994. The relative stability of the rates helped the stabilization effort at that time.

[50]An industrial policy, seen as managing the gradual phasing-out of chronically inefficient companies, was advocated in D. Daianu, "Transformation and the Legacy of Backwardness." Économies et Sociétés. No.44 (1992), pp. 181-206. the volume number is required.

Whether the fall in output could have been smaller, or even avoided, in 1997 can only be a matter for speculation. It is clear nonetheless that, owing to very tight credit conditions, a continuation of growth was hardly possible and this is why the program anticipated a decline of 2 per cent in GDP. One policy issue for analysis is the appropriateness of the nominal reduction of base money in the first quarter of 1997, instead, for instance, of keeping Mo fixed for a while. The reasons for this reduction – a rising money velocity and the desire to mitigate the size of the correction in the price level – are plausible, but not indisputable. In addition, the appropriateness of moving at the same time on two tracks – the cut in Mo and floating the exchange rate – can be questioned. Thus, the floating of the exchange rate could have followed the correction of the inflationary surge that had been set off by the too rapid expansion of base money in late 1996. There might also have been a closer and more critical look at the size of tariff reductions proposed for agriculture. The conclusion is that policy-makers underestimated the scale and extent of supply rigidities in the economy.

As for the 1994-1995 program, it should again be emphasized that the slow pace of privatization and restructuring damaged its effectiveness. A faster rate of privatization, and consequently more capital inflows, especially of FDI, could have significantly changed the structure of the economy. Even if the then Government had not allowed the official exchange rate to float, a dual system – a commercial rate with rationing, and a free rate for financial transactions – could have created an exit window for potential foreign investors in the local equity market. The Government could have used the favorable circumstances of an expanding economy to deal with large loss-making units.

2.7 What next?

The year 1999 highlighted three major interlinked threats and policy challenges: the risk of external payment default;[51] the danger of a banking crisis, owing to the scale of bad loans in the banking system and the size of the foreign exchange reserves of the central bank, which were less than base money and insufficient to stem a run on banks;[52] and a possible financial crisis as a result of persistently high real interest rates and the consequences of bail-outs in the banking system. Other important constraints on policy were *social and policy fatigue*,[53] and an increasingly unfavorable external environment.

The stand-by agreement with the IMF, signed in August, validates a deficit of 3.8 percent, including privatization revenues of 1 percent. The big unknown in the whole picture, however, is the real quasi-fiscal deficit in the economy, which is obscured by arrears and the accumulation of bad loans to enterprises. What happened with Bancorex and Banca Agricola is an illustration of the result of years of weak restructuring, which shows up in the balance sheets of the banks[54] and, ultimately, in the consolidated budget deficit – when the "day of reckoning" cannot be postponed any longer.

[51]Despite its moderate level (of about 25 per cent of GDP), the external debt has nevertheless been increasing rapidly.

[52]At the start of 1998, the $500 limit to the purchase of hard currency by individuals was lifted. This measure can enhance a run on the banking system. However, the lack of a collective experience of a banking system collapse can act as a cushion against such a run.

[53]The result of an austerity policy underway for almost three years, in which GDP has fallen by more than 18 percent.

[54]According to data made public by the National Bank, non-performing loans were above 60 percent of total outstanding loans in June 1998, with much of it belonging to the large state owned banks.

The Government was able to cope with the peak payments of May and June and avoided an external default. Since the end of July, the reserves of the National Bank have been on the rise, which is a positive development that needs to be judged in conjunction with a considerable reduction of the trade imbalance. In this context, one has to highlight the considerable reduction of the share of energy-intensive products in the structure of exports; this suggests that the rise in the relative price of energy, in 1997, has had positive reverberations.

The pains for the Government of implementing its economic program stem from the requirements to keep the consolidated budget deficit under control, as well as to find resources to finance substantial restructuring in the banking sector in a year when the GDP is expected to fall again. The tension in the execution of the budget is illustrated by the dynamic of interest payments, which climbed to almost 6 percent of GDP in 1999, or 1/3 of the state budget expenditure, –whereas a few years ago interest payments stood below 2 percent (see Table 4). A substantial part of this debt service is due to recent banks' bailouts. Comparing this number with the targeted budget deficit shows that only a rising primary surplus helped to keep the budget deficit under control.

A major objective of macroeconomic policy for the next period, the year 2000 included, is to bring real interest rates down; this would reduce the debt service dramatically. As a matter of fact, a reduction of the debt service by 1/3 could help further reduce the budget deficit, simultaneously with increasing capital expenditure, which would signal a significant change in budget policy. To this end, the Ministry of Finance and the National Bank, using, *inter alia*, external finance, need to find ways to fight the "rent" commercial banks extract from financing the budget deficit.

Table 5: Public Debt Service Strains the Budget

	1997	1998	1999*
Consolidated budget	-3.6	-3.3	-3.8
Interest payments	3.4	5.4	6.1
Balance net of privatization revenues	-4.6	-5.6	-6.3
Primary balance	-0.1	2.1	2.8

Source: National Statistics'; * MOF estimates

The policy fight to reduce real interest rates can be viewed from several perspectives: the need *per se* to cut the deficit in order to reduce *crowding-out* and stimulate the expansion of the private sector; the need to resume growth on a sustainable basis; the need to assign resources for restructuring the banking sector; and the need to allocate resources for pension sector reform

Growth resumption can happen next year, and it can last should macroeconomic policy be sensible and not succumb to populistic temptations; this turnaround is important for arresting a steady decline of national gross saving; which was about 8 percent in 1998 and, it is estimated, goes down to below 5 percent this year.[55] This reduction of saving was mirrored by a dramatic diminution of gross national investment: a decline to 17.7 percent in 1998 and, it is estimated, to about 10 percent in 1999. Certainly one has to offer a caveat in this respect in view of the major changes in relative prices in 1997, which must have influenced investment decisions. But it is obvious that the compression of economic activity had an impact on gross saving and

[55]This jump is mirrored by the rise of the share of final consumption in the GDP in the last couple of years. Actually, such big changes in the shares of consumption and investment occurred only in 1990, when formerly repressed consumption came into the open.

investment. Since running very large current account deficits is not a realistic option for the future, the way to achieve a higher rate of capital formation is to enhance a higher saving ratio – and this hinges on sustainable growth resumption which, further, depends on export orientation.

It is urgent that a public debt strategy be put in place. On one hand, Romania needs it under any circumstances. On the other hand, the external payments coming due in 1999 ask for a coherent policy in order to attract financial resources from abroad. There are possibilities that the Government does not appear to have sufficiently explored, particularly at a time when one should try to find a collateral in order to reduce the spreads Romania meets on capital markets. Such possibilities are convertible bonds, pre-financing schemes, and *credit enhancement*. This author does not see, for instance, how the World Bank could reject a demand for credit enhancement by the Romanian government, or by a Romanian commercial entity such as Petrom. These possibilities could bring in hundreds of millions of USD, at a more reasonable cost, in a period of continuing pressure exerted by due external payments.

One needs to break a vicious circle currently at play in the Romanian economy. Thus, economic decline plus the reduction of investment, including the slow pace of capital inflows, do not favor upgrading the structure of output and of exports, and they also badly damage public investment in human capital. Likewise, the export barrier and the demand for resources for restructuring in the banking sector and for pension reform in turn maintain a precarious financing of external imbalances, and entail a rapidly growing public debt. This further saps growth prospects. Instead, should economic growth resume against the background of lower budget deficits, lower quasi-fiscal deficits, lower real interest rates, more capital inflows, and a competitive exchange rate, it could bring about a virtuous circle. Further privatization plays an essential role to this end.

3. Conclusion

The freeing of prices and the functional opening of the economy put the latter under tremendous *strain* when resource reallocation cannot take place quickly enough and without friction. *Strain* is augmented by congenital institutional fragility.

The magnitude of the required resource reallocation (*strain*) and *disorganization* can seriously undermine the attempt to pursue a low inflation rate in the short run – particularly if the lack of capital markets, the presence of large and growing budget deficits, low savings rates, and meager foreign capital inflows and external aid are taken into account. In a system subject to substantial *strain*, there are strong forces that create a high propensity to generate inflation as a way of diffusing tension, by spreading out, or putting off, the costs of adjustment; other effects of strain are massive inter-enterprise rrears, which appear as a *sui generis* and unintended financial innovation, creating a structural trap for stabilization policy. The *inflation tax* and *negative real interest rates* are implicit subsidies for those that are unable to make ends meet financially in a competitive environment.

Analysts have frequently highlighted the better financial discipline in countries such as Hungary, Poland and the Czech Republic, as compared with the Russian Federation, Ukraine, or Romania. It is suggested here that an explanation is provided by looking at the *structure* of the former economies,[56] their ability to export to Western markets and to attract foreign investment,

[56]A World Bank study shows the median number of employees in a sample of firms in Romania to be 1,327,

their size, their economic policies, and not least, their geography. Furthermore, *structure* is influenced by whether or not there was a history of partial reforms that, in some cases, brought about several of the ingredients of a market environment, the degree of concentration of industry, and the prior existence of a private sector.[57]

Policy credibility can be singled out as a major explanatory factor, but credibility itself depends on how much structural adjustment can be brought about by that policy over a stated period. The *capacity to adjust* is influenced in turn by the initial *structure* and the scale of *resource misallocation* that it contains.

If it is accepted that the roots of financial in-discipline and economic performance are to be sought in *structure* – however multifaceted – and the *strain* to which the economy is subjected, the obvious conclusion is that both *structure* and *strain* have to be targeted by policy. Dealing with *structure* includes a focus on both property rights and corporate *governance*. Also, attention must be paid to the development of appropriate and effective market institutions, and to finding ways to erode the existing economic power structure and to change enterprise behavior. *Strain,* which reflects the scale of the required resource reallocation, should be approached by starting with the simple truth that structural adjustment is always difficult, even in an advanced market-based economy and even when reform is credible.[58]

The Romanian experience is a glaring example of the importance of structural reforms, of reducing the structural distortions of the economy for durable macroeconomic stabilization. At the same time, it is proof of the pains of such reforms. Unless financial discipline is imposed in the form of hard budget constraints, the pressure on the central bank, and on the banking sector in general, becomes a constant feature of the way the system does function, which proliferates into wide-ranging rent-seeking and demands for cheap credit. Here one sees the combination of the pressures exerted by those who cannot pay at the new relative prices, with that of those who do not wish to pay, since '"it pays not to pay."' Another lesson of this experience is the link between privatization, capital inflows in the form of foreign direct investment, and restructuring. With the benefit of hindsight, it can be asserted that the magnitude of required resource reallocation assigns a special role to foreign capital in helping reallocate resources and in imposing financial discipline in the system.

Where policy is inconsistent, privatization is slow, and foreign direct investment is non-significant, high strain persists; it undermines macroeconomic stabilization and preserves the *flow problem* of the banking industry. Here, a dangerous vicious circle can be at work between macroeconomic policy and the state of the banking system. Thus, unless there is deep restructuring of the economy, both tightening and expansionary policies can be ambivalent as to their impact on banks; expansions can be accompanied by poor lending and unsustainable trade imbalances, as happened in the second half of 1995 and in 1996, whereas high real interest rates, as during 1997-1999, can damage the payment capacity of banks and enterprises, unleashing mounting pressure for forgiveness.

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whereas in other countries it was very low: Slovenia, 213; Poland, 820; Hungary, 241; Bulgaria, 291.

[57]E. Borensztein, A. Berg, R. Sahay, and J. Zettelmeyer emphasize the role of structural reforms in explaining the speed of economic recovery in various transition countries ("The Evolution of Output in Transition Economies: Explaining the Differences." Paper prepared for The Fifth Nobel Symposium in Economics. Stockholm, 10-12 September, 1999). But one could claim that the quality of institutions (ability to undertake structural reforms) is rooted in the history of partial reforms, in initial conditions.

[58]M. Bruno. "Stabilization and Reform in Eastern Europe: A Preliminary Evaluation." IMF Staff Papers. Vol. 39, No. 4 (1992) pp. 753.

Unless authorities can create and maintain a momentum of policy steadiness, the feeling of overall uncertainty and volatility is unlikely to be mitigated. Although stop and go measures can hardly be avoided under the circumstances, large policy fluctuations are detrimental to the economy; they entail large income transfers among economic sectors and groups of populations, and unnerve expectations instead of stabilizing them. Think only about the dynamic of inflation in recent years: from about 200 percent and 295 percent in 1992 and 1993 respectively, to cca. 62 percent in 1994, 28 percent in 1995, 57 percent in 1996,[59] 151 percent in 1997, and 40.6 percent in 1998. This dynamic was accompanied by dramatic shifts in interest rates – from highly negative during 1990-1993 to highly positive levels in 1994 and in subsequent years.

If the level of positive real interest rates continues to be quite high, in the absence of substantial restructuring and of the reduction of the fuzziness of the environment, this will be detrimental to long-term investments and would skew the composition of foreign capital inflows in favor of portfolio capital. It would also damage the longer-term prospects for banks, since high spreads do not help their clients and intensify *adverse selection.*

Without deep restructuring, high real interest rates will maintain intense strain in the system and make it prone to instability. In this context, the situation of potentially viable enterprises that are burdened with heavy debts should be considered more creatively. It should be kept in mind that many companies are heavily in debt because they were under-capitalized by design, and not by choice, as was the case of firms in South East Asia. The fact is that tight monetary conditions and high real interest rates can kill even potentially viable companies. One way of reducing this risk would be to distinguish between past and current payments. On past debts, the interest rate paid could be composed of two elements, the registered inflation rate and the real interest prevailing on international markets, whereas current interest rates could apply only to current payments.[60] Something along this line could mitigate the plight of many potentially sound companies.

Apart from the extraordinary pressure exerted by strain, the *fuzziness* of the environment impacts people's behavior and causes short-termism. *Fuzziness* and uncertainty explain also why banks have a very low propensity to provide long-term credit, a phenomenon enhanced by low domestic savings[61].

Large policy fluctuations can easily lead to a *boom and bust* evolution of the economy. The economic dynamics in post-Communist Romania show the difficulty the policy-maker has had in setting a corridor of policy steadiness, and its reactive stance most of the time.

Institutions ultimately determine economic performance. Institutions, understood as socially accepted rules and procedures, determine the quality of economic policy and of its choices as well. However, institutions cannot be created by "hocus pocus economics"; particularly in the case of post-Communist economies, one can detect the tension between constructivism and organicism in fostering institutional change.

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[59]Inflation rates are recorded at the end of the year.

[60]See D. Daianu, "What to do about high real interest rates?" Ziarul Financiar (1999). There should be a page number, and volume and number of the journal. Martin Feldstein has proposed something similar for Asian companies hurt by the high real interest rates resulting from austerity measures in "All is not lost for the won," *Wall Street Journal*, June 4, 1998. There should be a page number for this article.

[61]Aggregate savings (national gross saving) was 8 percent of GDP in Romania, in 1998. This number marked a sharp decline from 15 percent in 1997 and cca. 19 percent in 1996. This evolution can be linked with the decline of the GDP.

Romania's experience shows that *natura non facit saltus*,-- that making institutions function properly takes time, and that there is a grip of *structure*, as the product of history, that is hard to loosen. It would be naive to assume that the institutions of the post-Communist economies can quickly and easily perform according to the various role models in the West; they need time to develop in order to perform effectively. Realism is needed not only in designing policies, but also in making balanced judgments as to "what constitutes good performance" and "what is to be done next."

Appendix 1

Strain in a transforming economy. A formal analysis

In a transforming economy, the origin of strain can be traced to two main sources: the fragility of institutions in the making, and the magnitude of the required reallocation of resources (Daianu, 1994, 1997). In what follows, the focus is put on the second factor – namely, the ability of the system to react rapidly, via resource reallocation, to the new set of market-clearing prices.

The magnitude of the required resource reallocation can be illustrated by the ratio:

$$(2)\ J = \frac{\sum p_i^* \left| q_i^* - q_i \right|}{\sum p_i^* q_i^*} 0$$

where (p*) and (q*) refer to equilibrium values, whereas (p) and (q) correspond to the current (distorted) resource allocation. J can be viewed as a measure of aggregate disequilibrium in the system, as against the vector of equilibrium prices and quantities.

The size of the above ratio measures the *strain* within the system and reflects the magnitude of aggregate disequilibrium. It can be assumed that the possible level of unemployment is related to the degree of *strain* in the system: the higher the *strain* (resource misallocation), the higher the unemployment that would be brought about by the required resource reallocation – when job creation is not intense. This is a major reason behind the temptation to tolerate high inflation rates as a way to diffuse the tension within a system. S*train* can be mitigated by: inter-enterprise arrears, monopoly pricing, explicit and implicit subsidies, spill-over effects, the elimination of negative value-added activities, *learning*, and last, but not least, the efficiency reserves of producers. The more numerous are those who would lose their jobs because of the needed resource reallocation, the more intense the opposition against restructuring.

Another way of portraying *strain* is to focus on the scope of the required process of overall income readjustment, which should fit the new market-clearing prices. The modified form of J' that builds on wages is:

$$(2)\ J' = \frac{\sum n_i \left| w_i^* - w_i \right|}{\sum n_i w_i} 0$$

where n denotes labor in sector (i), and w_i^* and w_i refer to equilibrium and actual wage, respectively, for the sector (i). $\Sigma n_i = N$, where N refers to all labor resources. For the inefficient, subsidized (explicitly, or implicitly) sectors, actual wage exceeds the marginal productivity of labor: $w_i > dq_i / dn_i$. The higher is J', i.e., the higher is strain, the more fierce would be the distribution struggle. The difference between equilibrium and actual wages reflects the resource transfer subsidies practiced by the system; the higher this difference, the stronger the forces that oppose change.

In an OECD study,[62] the level of *strain* in labor market adjustment is compared with other countries (see Table 4). The equilibrium level was defined, in a somewhat arbitrary way, as the structure of relative wages, on the price side, and employment, on the quantity side, in the U.K. for the year 1994 (latest data available). Another benchmark country could be used; the essential results do not change dramatically if, for example, France is chosen instead of the U.K. The results suggest four main points:

i) As expected, the distance between the U.K. and the transition countries, in particular Romania, is much higher than the distance vis-à-vis a country like France. It is important to confirm this basic and intuitive result before pursuing further the interpretation of the indicator.

ii) The level of strain in Romania is much higher for the employment structure than for relative wages. Somewhat surprisingly, Romania had by 1995 a much closer relative wage structure to the UK than other countries in transition.

iii) However, the overall required adjustment (combining the price and quantity sides) is the highest in Romania.

iv) Finally, without the agricultural sector, the structure of the Romanian economy would appear much closer to the other countries in transition.

This indicator confirms some of the features of the Romanian economy. Notably, the legacy of the previous economic structure appears to be particularly heavy in Romania, at least when compared with other transition countries in central and Eastern Europe. This may explain why there has been so much resistance to structural change. It may also explain why inflation and inter-enterprise arrears have become a way of diffusing the pressure in the system when, for political reasons, unemployment was not allowed to exceed a certain upper limit, and when non-inflationary means for financing the budget were hardly available.

[62] "Romania: Macroeconomic stabilization and restructuring, social policy." OECD Economic Surveys. Paris (1998), pp.169-172

Table 4 Levels of *Strain* in Labor Market Adjustment

	Romania		Hungary		Poland		Czech Rep.		Slovakia		Slovenia		*Franc*	*UK*
	1990	1995	1992	1995	1992	1995	1991	1995	1991	1995	1993	1995	*1992*	*1994*
Relative wages (average monthly earnings = 100)														
Agriculture and forestry	**104.2**	**81.6**	68.9	76.8	82.3	90.6	97.2	84.2	99.7	81.7	105.3	95.5	*72.5*	*77.9*
Industry	**98.6**	**107.6**	99.0	104.0	98.7	108.9	104.5	99.2	101.4	104.3	84.9	85.0	*111.1*	*116.5*
Constructions	**110.9**	**106.4**	90.2	84.4	106.1	92.5	106.2	108.0	102.4	104.8	83.0	82.5	*98.6*	*109.2*
Trade, hotel and restaurant	**86.1**	**78.2**	97.0	90.0	90.3	88.9	85.8	88.2	89.3	94.0	102.2	99.8	*90.9*	*69.9*
Transport, communications	**108.5**	**121.0**	105.8	106.5	102.1	101.2	102.1	100.7	102.1	108.4	115.0	110.9	*105.4*	*144.6*
Financial banking and insurance, real estate and other services	**109.3**	**126.8**	144.7	137.4	147.7	137.3	99.9	130.7	103.9	131.4	143.8	124.6	*128.0*	*136.8*
Education, health and social assistance	**96.5**	**85.3**	93.5	86.5	86.9	81.7	93.2	91.2	97.6	87.2	111.8	109.6	*75.8*	*53.0*
Public adm. And defense, other	**88.9**	**88.6**	118.	111.	115.	108.	88.5	103.	103.	102.	127.	132.	*91.0*	*93.6*
Index of "strain" on prices	**23.0**	**9.8**	24.1	19.7	18.3	17.0	21.1	19.1	23.8	17.2	33.9	33.1	*11.7*	
(excluding agriculture)	**21.2**	**12.9**	26.0	21.3	22.9	18.1	21.2	20.0	24.0	18.6	34.5	34.8	*12.0*	
Employment shares (%)														
Agriculture and forestry	**29.0**	**34.4**	11.4	8.1	25.5	22.6	12.1	6.6	15.8	9.2	10.7	10.4	*5.2*	*2.0*
Industry	**36.9**	**28.6**	30.2	27.1	25.2	25.9	41.0	33.2	35.9	30.3	38.7	38.0	*20.6*	*20.2*
Constructions	**6.5**	**5.0**	5.4	6.0	6.6	6.1	5.7	9.2	8.2	8.6	5.4	5.1	*7.2*	*6.4*
Trade, hotel and restaurant	**6.87**	**10.4**	14.8	15.9	10.7	13.6	7.8	15.7	8.1	13.1	14.6	15.4	*17.4*	*20.8*

Transport, communications2	**7.0**	**5.9**	8.6	8.8	5.5	5.8	9.0	7.7	5.5	7.8	6.5	5.9	*5.8*	*5.8*
Financial banking and insurance, Real estate and other services	**3.9**	**4.2**	5.2	5.9	1.3	2.0	5.4	6.7	5.4	5.8	4.6	6.1	*10.8*	*12.5*
Education, health and social assistance	**6.7**	**8.1**	13.6	15.6	13.1	13.3	13.8	12.1	16.5	14.5	10.2	11.4	*6.9*	*14.5*
Public adm. And defense, other branches	**3.1**	**3.4**	10.6	12.5	12.1	10.7	5.1	8.8	4.6	10.7	9.2	7.6	*26.2*	*17.9*
Index of "strain" on quantities	**91.4**	**76.6**	47.6	37.2	60.4	56.7	68.1	47.1	68.7	45.9	62.2	56.7	*13.8*	
(excluding agriculture)	**76.4**	**57.5**	41.5	33.7	46.0	42.4	63.1	44.4	63.4	43.2	52.9	48.3	*21.8*	
Indicator of total "strain"	**94.2**	**77.2**	53.3	42.1	63.1	59.2	71.3	50.8	72.6	49.0	70.9	65.6	18.1	
(excluding agriculture)	**79.3**	**59.0**	49.0	39.9	51.4	46.1	66.6	48.7	67.8	47.0	63.2	59.5	24.9	

Source: OECD Economic Surveys, Romania, Paris, 1998, pp.171

Appendix 2

A Symptom of *Systemic Strain:* Inter-Enterprise Arrears

Inter-enterprise arrears reflect *strain i*n a post-command economy. As *temporary quasi-inside money*, inter-enterprise arrears endogenize the money supply growth in a perverse way, and emasculate monetary policy to a significant extent. Concerning inter-enterprise arrears in post-command economies, there are other explanations to highlight: the fuzzy state of property rights (Khan and Clifton, 1993), the primitive state of the financial system (Ickes and Rytermann, 1992), the real credit squeeze (Calvo and Coricelli there should be a year of publication included), the lack of policy credibility (Rostowski, 1994), disorganization (Marin and Schitzer, 1999). In what follows, a very simple model will be used in order to underline *strain* 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 good, or as a *positive externality* – as a means for easing the efficient allocation of resources. *Market discipline* emerges as a public good and as a *positive externality* because of collective (generalized) good behavior. 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 policy of enforcement becomes irrelevant when collective good behavior is impossible for various reasons, and, as is our contention, because of *strain* in the main.

Were market disciplines 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 *immediate resource allocation* as a working hypothesis, it can be assumed that the production of agent (i) is:

$q_i = q + c \cdot g$ for the agents who do not cause arrears

$= q$ for the agents who 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 equilibrium situations can be imagined depending on agents' behavior 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 to cause arrears if $c \cdot g = c \cdot nt<t$ 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. Instead, if n=N, agent N is stimulated to pay 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. However, a critical question arises. What is going to happen, and what can be done if the number of those who do not pay is high and, what is even more important, non-

payment is the result of the lack of capacity to pay. This means that non-payment is not an opportunistic response to the existing circumstances concerning 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 cannot pay makes $n<1/c$ – 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 system. Consequently, the short-run production function of an agent could be redefined as:

$q_i = q + c \cdot g$ no arrears and immediate resource 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 resource 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 – in most cases – by their wage fund-centered goal function.

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

Appendix 3

From Supply-Constraints to Tax-Evasion

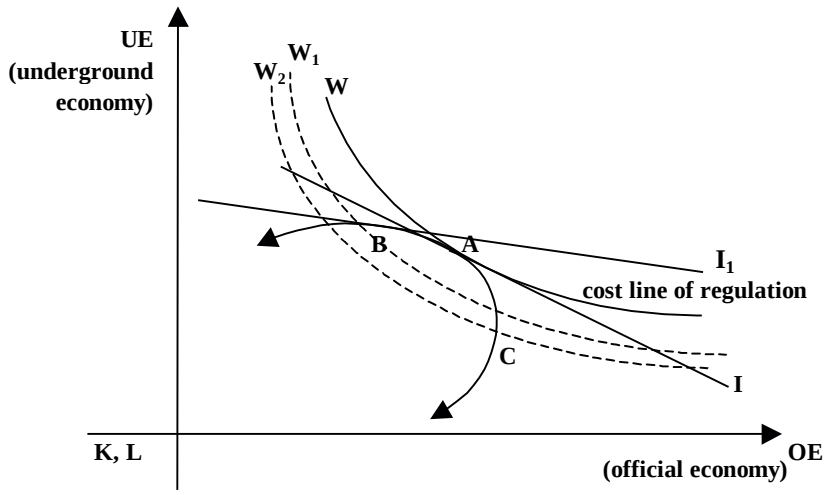

Figure 1: Over-regulation (taxation) and the distribution of activities between the official and the underground sector

It can be submitted that, the more regulated (and taxed) an economy is, the more induced agents are to operate in the underground sector. It can be also admitted that there exists an optimal *structure* and *level* of regulation of the economy which maximizes societal welfare; clearly, the optimal structure and level of regulation depend on social norms, values and principles which validate what people at large appreciate as being positive and, particularly, negative externalities.

Figure 1 tries to illustrate this optimality by dividing the economy into two sectors: the official and unofficial sectors, which both consume factors of production (labor and capital). Point A, which signals the optimal composition of the economy, is tangent to the highest welfare curve, W. Both over-regulation and under-regulation lead to inferior compositions of the economy in terms of societal welfare. Thus, over-regulation means an expansion of the underground economy against the background of reduced overall efficiency; in Figure 1 the effect of over-regulation is indicated by the lower welfare curve, W_1, which goes through point B. Likewise, an under-regulated system (as in the case of environmental protection) entails an 'official' expansion of socially pernicious activities, which also reduces societal welfare; point C indicates this lower welfare level, W_2. The shape of the combination curve indicates that both hyper-regulation, as in a command system, and the lack of regulation, where there are no rules, can lead to an implosion of the economy.

When regulations. or taxes, rise – when the cost line of regulations moves from I to I_1 — there is a shift of the price line in favor of the unofficial sector in the sense of stimulating its expansion. This happens because the goods produced in the official sector become more expensive. Another effect is an increase of the nominal prices of the goods and services in the underground economy, although they become relatively cheaper, which can be only partially

mitigated by its expansion. This expansion puts downward pressure on prices in the unofficial economy.