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The Problem of Transition from a Socialist to a Free Market Economy: The Case of Poland

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This paper deals with problems arising from the economic transformation to a market economy in post-Communist Poland during which macro-stabilization policy is of great importance. The authors examine the response of the real sphere of the economy toward the shock stabilization program and market oriented institutional changes. Poland's recent economic turn-around has been spectacular, but vestiges of the old-order still exist, parallelling the problems faced in other post-Communist countries in East and Central Europe. However, in the Polish case, there is very deep recession following stabilization efforts, which has been accompanied by rising unemployment.

This paper gives new insight into the time lag between these two phenomena and provides comprehensive explanations of the various forces - both economic and political - behind macro-stabilization, micro-adjustment, and institutional changes on the road to a market economy.

The transition from a socialist centralized system which has been taking place in Central and Eastern Europe since 1989 is an event of historical significance, but one which is full of changes. The political and economic move toward European political and economic unity also creates problems as well as offers potential economic benefits.

The current transition from authoritarian socialism in Poland is particularly interesting because Poland decided to undergo a shock therapy, often called a "cold turkey" approach to transition, as distinct from the gradual approach chosen in Hungary and Czechoslovakia. This paper analyzes the first results of Poland's stabilization plan as implemented in January 1990, backed as it is by various international institutions. We focus on the contrast between expectations and reality in output, wages, prices and employment, and try to explain the reason for these huge differences. Section 2 deals with the results of the program to date, while section 3 compares stabilization with a broader context of systemic transformation to a market economy. It is against this background that, in section 4, an attempt is made to explain the causes of the huge divergences between the assumed targets and the achieved results.

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Section 5 addresses the puzzle of the Polish labor market, namely the difference between the drop in output and the drop in employment. Finally, section 6 compares the relative merits of a "cold-turkey" treatment and provides concluding remarks and perspectives.

Results of the Program

The results of Poland's stabilization program have surprised observers. If the program's goals as formally stated were adopted as evaluation criteria, we would be obliged to conclude that it had failed. The program had anticipated a 5 percent drop in industrial production in comparison with 1989, which was to be accompanied by an increase in the unemployment rate of about 2 percent of the total work force (400,000 people). In fact, industrial production dropped by 25 percent and unemployment reached 6.3 percent in December 1990 (1.1 million people) and by mid-1991 about 8 percent and 1.5 million respectively. Program estimates had also assumed that some unemployment would be due to the reallocation of resources across sectors, while in reality, despite a ferocious demand squeeze, bankruptcies and restructuring did not occur on any significant scale; most of the unemployment created during 1990 was, in fact, related to an aggregate shock. This happened with an inflation rate of 580 percent combined with an increase in nominal wages of 430 percent, both much higher than the government's expectations. Incomes policy, based on tax penalties for excessive increases in wages, was to be a main tool for forcing down real wages. However, incomes policy was never binding, as in the first months of 1990 wages were well below the estimated maximum, while in the second half of the year they were much above the norm, although the indexation scheme was based on monthly norms. Finally, when viewed in comparison with the actual slump in industrial production, rather than with expectations, layoffs were modest and employment in the state sector dropped only 10 percent. Information on anticipated and actual results of the stabilization program are provided in Table 1.

Table 1
Stabilization Program in Poland in 1990: Assumptions and Results

Rates of Growth (in percent)	Assumptions	Results
Industrial Production	-5	-25
Unemployment Rate	2	6.3
Inflation (consumer price index, "point to point")	60	580
Gross National Product	-3	-18
Real Earnings	-20	-30
Trade balance (billions of dollars)	-0.8	+2.2

Source: Central Statistical Office and National Bank of Poland.

Moreover, not only were the announced goals not achieved, but what was achieved was obtained at a much higher cost than that originally foreseen in exchange for better results. In particular, the scale of decline in the standard of living and in real wages has been much larger than originally announced by the government, since real wages fell by as much as 30 percent[2], while government anticipated a fall of between 15 to 20 percent at most. The real money balances of the households was reduced on a still larger scale.

It's therefore no wonder that in the presidential election of November 1990 the incumbent prime minister running for president got a poor 18 percent of the votes. The Polish people voiced their negative evaluation of the economic situation. It is just because his stabilization program failed that Mazowiecki's government was impelled to resign, and not the other way around. It is not true that the destabilizing effect of the election made the program implementation impossible; it was this program that determined the results of the election. This is an extremely important fact, as an accurate assessment of the Polish experience is essential from the point of view of other post-communist economies which will have to undergo similar anti-inflationary and stabilizing therapy.

Stabilization Versus Transition to a Market Economy

The stabilization program in Poland included five main facets: fiscal adjustment, price liberalization and adjustment, tough monetary policy, wage control, and exchange rate unification.

An assessment of stabilization program results should not be separated from the broader context of systemic transformation oriented towards creation of a market economy, otherwise it would be one-sided and over simplified. The stabilization package being implemented in Poland must be perceived in the broader perspective of the complex market-oriented transition process. A hypothesis can be framed that, in reality, stabilization has been subordinated to transition in so far as transition is the primary strategic goal, to be attained even at the cost of failure of the stabilization policy, inclusive of further destabilization.

Moreover, the transition process is to a certain extent forcing further destabilization, this being especially visible in those post-communist countries of Central and Eastern Europe in which, before the acceleration of the market-oriented systematic transformation, inflationary processes were little developed (Czechoslovakia, Bulgaria, Romania, Baltic republics of the USSR i.e., Lithuania, Latvia and Estonia). This results from the simple fact that a market-oriented transition requires, among other things, policy measures such as price liberalization, subsidies reduction, devaluation, significant rises in interest rates, etc. Consequently, in the initial period, orientation towards a market economy brings about an acceleration of inflationary processes rather than the reverse.

In Poland's case, at the moment of stabilization program initiation, the market-oriented economic reforms were already considerably advanced; in 1989 the Polish economy was in the forefront of the Eastern European countries - then, not yet called post-communist (post-socialist) - which were progressing towards a market economy. In theory, a stabilization

[2] This fact is still overlooked by one of the foreign experts who had foretold a decline in the inflation rate of 1 percent at most for the first month following the package initiation. Jeffrey Sachs (1990) declares: "There has been a persistent - and certainly erroneous - forecast of a 20 percent unemployment rate, though the unemployment rate stands at 5.5 percent, lower than in the United States. Similarly, fears of plummeting take-home pay abound, though the average industrial worker earned the equivalent of $131 in October, compared with $108 in October 1989." As we mentioned above, government forecasts of the unemployment rate spoke of 2% and not 20%. Besides, comparing the unemployment rule in Poland, which within one year has grown from zero to over 6 percent, with unemployment rates in the United States cannot be taken seriously. Finally, suggesting a more than 20 percent wage rise by converting wages into dollars, in a situation where in real terms wages really have fallen by almost 30 percent, is an utter misrepresentation.

policy different from that actually chosen - and similar to the attempt undertaken in 1982 - could have been adopted. However, in 1987, it was inflation stabilization, with simultaneous reform of the socialist economy without any infringement of its fundamental principles, that was intended. It was a stabilization after which the State was to remain the dominating agent in almost all spheres, and the scope of economic liberalization, including price liberalization, was limited (Kolodko 1989).

Whereas the 1990 stabilization constituted not only a fight for internal and external equilibrium of the economy, but also creation of a different economic mechanism, it was supported by numerous policy instruments typical of the market economy.

Thus, when looking at the Polish stabilization program in this perspective, the negative assessment formulated in the preceding section requires relativization. It is true that the stabilization policy of the first post-communist government led to the deepest recession in postwar Poland and in contemporary Europe, attaining the highest level of inflation in Europe in 1990. But it is equally true that the Polish economy has already approached closer to a market economy than any other post-communist country. Subsidies have been markedly cut, the budget is balanced and any possible deficit may now, by law, not be monetized. Prices are to a very large extent liberalized, internal currency convertibility has been introduced, the privatization process has been set in motion, and elements of financial markets are being developed.

In these circumstances, one must ask whether certain positive effects achieved in respect of the transition to a market economy do not unavoidably have a cost, which finds its expression in a consistent decline in the standard of living. The costs have been high indeed, and any attempt to belittle the cost, not backed by any factual argumentation (Sachs 1990), does not change the facts; at most such arguments merely present them in a false light. However, detailed analyses show that the huge cost of the institutional transformation of the market and the accompanying stabilization policy has not been unavoidable. Its magnitude could have been much less if the numerous errors contained in the stabilization package had been avoided and the target had not been overshot.

Overshooting

One of the basic errors of the stabilization package was the expectation of a quick positive supply response on the part of the business sector. Enterprises behaved - and this inertia is still present - differently than they would have done in a market economy (Jorgensen - Gelb - Singh 1990). The response to supply was very low, and the enterprises generally responded to shock reduction in internal demand not by improving their efficiency but by maximizing prices - which, this time, in the case of a radical departure from the shortage economy, was limited by an effective demand barrier - as well as by a reduced absolute output level. One can see also a sort of time lag in the adjustment of employment to falling output, since the difference between these two rates cannot be fully explained by the factors we consider in the next section, and that are also discussed elsewhere (Rutkowski 1991).

Wrong assumptions with respect to reality were rooted in the naive belief that output would automatically rise without stimulation from appropriate macroeconomic policy. Some rate interventionist attempts were too late and badly sequenced. The post-communist economy is not yet a market economy (though not a planned economy any more). It is in a "systemic vacuum" period in which traditional fiscal and monetary policy instruments are functioning somewhat differently than in a developed market economy. The problem consists not only in using an appropriate set of policy instruments, but also in applying it at the right time. And this has not occurred, since we have had -on the one hand - a general overshooting of the program, and - on the other hand - wrong responses resulting from undue insistence on the automatic functioning of certain mechanisms. In other words, a kind of "over-liberalization" of the economy has taken place here in the context of its over-bureaucratization in the past.

The above-mentioned overshooting has resulted, in particular, in an excessive reduction in household incomes (among other things, in real wages) as well as the excessive limitation of the liquidity of enterprises due to faulty sequencing of the monetary policy. As far as the former is concerned, the adoption of the indexation coefficient permitting a wage growth by only 0.2 of the price rise has led to a drastic drop in household demand, and in consequence, a decline in sales and in production induced by lack of demand. Whereas the desired stabilization effect could have been achieved through a much smaller -20 percent - reduction in real wages, the real reduction in the first two months of the stabilization amounted to more than twice that much.

What is more important, the mechanism for controlling the pace of the nominal wage rise was constructed in such a way that any utilized limit of the admissible wage rise can be utilized in the following months (upon exceeding this limit, the enterprise has to pay a prohibitive tax ranging from 200 to 500 percent, depending on the scale of overstepping the limit.) And this is what has happened, especially in the latter half of the year. This mechanism, together with a very short (monthly) indexation period, led to the inflationary pressure in the second half of the year. The whole incomes policy was thus recessionary (through reduction in effective demand, and consequently, in sales and production), at the beginning of 1990. Since then, its action has been inflationary, since an acceleration of wages has not led automatically to output growth but rather, in the first place, to an acceleration of inflationary processes. This has been particularly visible since September 1990. Thus, the statistical indices of real wage changes cannot be averaged, since the excessive drop at the beginning of the year is not neutralized by the excessive rise in its latter half. Because the former brought about recession which need not have been so severe, the latter has not been able to reverse the situation.

Further, the drastic rise in interest in January, and the subsequent restrictive and pro-recessionary levels till the end of February, almost provoked a collapse in the real sphere. It was mainly during these two months that the huge recession – in the order of 30 percent - took place. Since then, the economy has remained in recession. Whereas the explosion of the so-called corrective inflation took place mainly in the former half of January, the high interest rates exerted a mainly pro-recessionary rather than anti-inflationary influence - since its real negative level with respect to deposits did not exceed the inflationary expectations of the household sector. The administrative regulation of interest rates in monthly cycles - which has little in common with real cycles of economic and financial processes - was not flexible enough. Appropriate modifications to the interest rate policy were made only in November. Interest on household deposits has risen - though they are still negative in real terms. This rise especially related to medium-term (three and six months) deposits - which under stabilization conditions are long term - but the move was made too late. By now the rate of inflation, of interest rates and of inflationary expectations are all growing. The increase in interest rates by the central bank and commercial banks only authenticates and strengthens the inflationary expectations of the public. In such a situation, raising interest to its real positive level can bring about a perverse effect in accelerating rather than checking inflation. If interest rates on deposits had been set at a high real level beginning with the 7th or 8th stabilization week, this might have overcome the strong inflationary expectations. This could still be done in the 3rd to 5th month of the package implementation, but by November-December it was a right move at the wrong moment, and thus an ineffective one.

The third basic aspect of overshooting has been the devaluation scale. The official exchange rate was reduced too much - even below the market (parallel) rate level. In this way it anticipated the so-called corrective inflation, and this was what really happened - although the inflation scale was much higher than expected because of the negative feed-back between the scale of devaluation and the devaluation accelerated inflation. The exchange rate has been maintained over the whole year (initially, a three-month period only was assumed), but, this sudden, deep exchange rate devaluation - with simultaneous additional charges imposed on imports - was an additional impulse stimulating both the corrective inflation and the recession. In the latter case the impulse arose from a reduction in imports, which in turn lead to a still deeper drop in production.

A particular kind of overshooting also took place not in the economic sphere but in the political one. The fundamental political breakthrough in Poland in 1989, which led to the takeover of power by "Solidarity," was accompanied by vast popular support for the new government. This fact - as well as a fundamental change in the West's attitude toward Poland -permitted the government to undertake the extremely difficult and socially painful economic program, inclusive of its stabilization aspects. However, its awareness of vast popular support -as confirmed by all public opinion polls - convinced some of the politicians that the limit of social resistance to radical change was very remote and that even a severe blow in the form of a shock stabilization program was feasible. While in previous periods stabilization measures did not go far enough, this time a clear abuse of social confidence took place and the restrictive-ness of the fiscal, monetary and income policies was overshot far beyond the level of social acceptance. This was a fundamental political mistake. The damage done to the public's confidence in economic change has been an irreversible loss.

Surprise in the Labor Market?

The labor market trend is often viewed as particularly surprising, namely, the relatively modest drop of employment, as compared to the drop in output. Yet, are the facts really obvious? Prior to 1990, it was a shortage economy which was slipping into hyperinflation and was experiencing so-called "shortageflation" (Kolodko and McMahon 1987) due to excess aggregate demand ("overheating" typical of socialist economies) with a widespread lack of financial discipline including a budget deficit and a loose control of the money supply. Basically, open unemployment did not exist, although many vacancies were advertized. Instead of open unemployment, a substantial labor hoarding (concealed unemployment) existed, estimated at up to 25 percent of the labor force (Gora and Rutkowski 1990). There were signs of increasing mismatch: having included labor hoarding into the overall rate of unemployment, the Beveridge curve was shifting outward (Rutkowski 1990).

What might have been expected to happen in the labor market when the tough stabilization policy was implemented against such a background? Can we analyze an overall hypothetical fall in employment by 25 percent (1:1 with production) into its component parts, and then attribute each of these to different factors? Can we satisfactorily explain why employment did not fall by 25 percent?

First of all, there is no reason to expect that a fall in output would bring a commensurate fall in employment, since productivity, no matter how it is measured, is procyclical. Evidence for this assertion seems to be strong (see Rotemberg and Summers 1990). It is difficult to estimate precisely how procyclical it might have been in Poland during the recession in 1990, but evidence from other countries shows that, on average, output rises (or falls) by about 1.25 percent when man-hours employed rises (or falls) by 1 percent. Allowing for differences between the labor input measured by man-hours and the number of employees, let us assume that in the Polish case this coefficient was between 1.2 and 1.3. This means that during a 25 percent drop in output we might have expected a 19-21 percent drop in employment - or, in other words, that a 4-6 percent less drop in employment than in output should have occurred.[3]

Secondly, putting aside sectorial aspects, a demand shock is going to produce a drop in employment due to demand deficiency resulting from a fall in real wages. This is the macro-effect. But, at the same time, a fall in real wages can be expected to produce an increase in labor demand through the substitution of labor for capital - that is to say, in the short run more labor with the fixed capital stock. This is the micro-effect.

Both are well known and described extensively in the literature: the macro effect is a typical Keynes-Kalecki effect, while the micro effect is described in very basic macroeconomic textbooks. In the context of adjustment and stabilization in various countries, extensive comments on both effects have been provided recently (Horton, Kanbur and Mazumdar 1991). The net outcome will thus depend on the relative strength of the macro- and micro- effects.

What happened in Poland in 1990? Real wages dropped heavily, increasing the share of profits and negatively affecting aggregate demand. At the same time, the drop in real wages encouraged firms to hire more labor. Could they alone have offset the macro-effect and explained, why employment dropped only by 10 percent, while output fell by 25 percent, with existing labor hoarding and - allowing for procyclical behavior of productivity as explained earlier - when there were reasons to anticipate a 19-21 percent drop in employment?

But this only partially explains the situation. What matters is certainly the elasticity of labor demand. In Poland, the fraction of total costs that constitute payments to labor are low - below 20 percent. Assuming an elasticity of 0.15-0.2, had real wages fallen by 30 percent, an increase in labor demand due to the micro-effect could not have been more than 4.5-6 percent. This cannot explain the reality fully. We are still left with a 5 percent fall in employment that "should" have occurred. Moreover, if we assume that labor hoarding should have decreased in 1990, due to a micro-adjustment in the firms, even more has to be explained. Could this be explained by a standard theory of adjustment if we include sectoral shifts?

The answer seems to be negative. The anticipated effect of adjustment to the labor market would be a reallocation of employment from non-tradables to tradables - a result of devaluation and tight monetary policy that would force firms to find new sales outlets. If we take into account that labor intensity in Poland is higher in the tradables sector than in the non-tradables sector, we may expect that wage-driven sectorial shifts toward the tradables sector would offset the standard macro-effect and explain why employment decreased by a relatively small fraction. The problem is that the data do not seem to confirm the above hypothesis: the decline in employment in exporting sectors was not smaller than elsewhere (see Table 2).

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[3] The coefficient for Poland could be even higher than 1.3 due to labor hoarding at the starting point. Rotembergand Summers (1990) showed that firms that hoard more labor also have more procyclical productivity. The reason is that firms that hoard large quantities of labor have lower marginal costs than those that do not. Hence the wedge between price and marginal cost is larger, and productivity is more procyclical.

Table 2
Sectoral Data on Employment, Production and Export 1990 (1989 = 100), real terms

Sector	Prod.	Employ.	Rank	Exp.	Rank
Fuels & Energy	80	96	2	129	6
Metallurgy	77	91	4	168	1
Elec. machinery	79	90	5	114	7
Chemical	80	94	3	155	3
Wood & Paper	76	89	6	167	2
Light	65	87	7	145	5
Food Processing	74	97	1	150	4
Rank correlation coefficient (export & employment)				- 0.2	

Source: Statistical Bulletins of the Central Statistical Office, Warsaw.

Let us now look at some findings of the theory of a shortage economy and its explanatory power. The fundamental work in this field (Kornai 1980) offers some insights which may partly explain the gap we seek to fill.

The basic problem stands as follows: what is the effect on actual employment of a decrease in capacity utilization, if at the starting point this capacity utilization exceeds the "welfare optimum"? (defined in Kornai 1980, p. 281-282). There should be no doubt that before 1990 the Polish economy was overheated, that is, the attempted capacity utilization was above the "tolerance limit" defined as a point where the marginal social cost begins to exceed the marginal social benefit. "Overheating" has many dimensions. For the labor market, the following two are the most important:

(i) An attempt to maximize capacity utilization creates (in a socialist economy) a famous coexistence of shortage and slack. Striving to achieve the maximum capacity utilization can increase measurable output and productivity, but at the same time it leads to bottlenecks, a forced substitution of inputs, a forced intertemporal reallocation of labor, a decrease in quality and widespread shortages. The more frequent and intensive the shortage, including labor shortage, the greater will be the internal slack, including labor slack.

(ii) Capacity utilization above the "welfare optimum," due to bottlenecks, increases the demand for finance, particularly for working capital. This is, in particular, the case in countries where capital markets are far from being perfect; where the availability of cash or savings within the firms becomes critical. It decreases investment and in that way the actual utilization of labor.

Table 3
Employment Effects of the Fall in Output by 25 percent in 1990 in Poland (Totals in Percent)

Actual fall in employment (Keynes-Kalecki macro effect)	10
Why employment did not fall more:	
- Procyclical behavior of productivity (coefficient 1.2 - 1.3 assumed)	4-6
- Increase in the demand for labor due to the fall in real wages (standard micro effect, elasticity 0.15 - 0.2 assumed)	4.5 - 6
- Decrease in labor slack due to the fall in capacity utilization (Kornai's shortage removal effect)	1 - 1.5
- Decrease in vacancies	2.5
TOTAL	22 - 26

Source: Own estimates.

The demand shock which took place in Poland in 1990 sharply decreased the degree of capacity utilization. Exact data are not known but given the high degree of monopolization, when firms applied the "mark-up" pricing rule, as the mark-up increased, the degree of capital utilization fell. Our hypothesis is that a part of this fall produced an increase in actual employment and thus generated an effect working in the opposite direction to the standard macro-effect of falling demand. How great this effect was depends on the previous "overheating," that is, the capacity utilization above the "welfare optimum." Disappearance of a shortage implies that employees (who used to be subsequently overworked and idle in short intervals due to widespread bottlenecks and forced substitution in the pre-reformed economy) have actually been better utilized after the demand shock and so a decrease in the attempted capacity utilization has occurred. Their work has become more smooth and better organized. Labor slack and unemployment-on-the-job have decreased since shortage and "overheating" disappeared.

Certainly this perverse effect could have been working only in relation to a small portion of the decline in capacity utilization from the "welfare optimum". The size of this portion is extremely difficult to estimate since, due to measurement problems, we know very little about the slack created by shortage in the "overheated" economy. Assuming very roughly that *n* percent rate of shortage creates *n/4* percent "rate of slack" (on the basis of some micro-observations about behavior of raw materials' stocks in state enterprises), we can determine estimates of the rate of shortages. Such an estimate for 1986 was calculated based on forced savings and brought a result of 6 percent (Kolodko and McMahon 1987). Casual observation indicates that in the second half of 1989 the labor shortage might have been slightly lower compared to 1986 (due to a partial replacing of the repressed inflation by an open one (Kolodko 1991)). This suggests results within the range 1-1.5 percent of the decrease in labor slack (a quarter of 4-6 percent).

Finally, in a shortage economy, vacancies had constituted an important part of labor demand. Hence we have to take into account a sharp drop in vacancies advertised from 250,000 in December 1990 to 50,000 a year later. It allows us to account for 2.5 percent of the fall in employment which "should" have occurred and this almost bridges the gap.

Table 3 presents the results of our rough estimates. They rest on arbitrary assumptions, but we believe they illustrate important phenomena which help us to understand labor market adjustment in a post-communist economy. The basic message is that the Polish adjustment is not so surprising if some less frequently discussed issues are taken into account.

Cold Turkey Versus Gradualism: Conclusion and Perspectives

What can be said about the pace of transition to a market economy? There are many arguments for the superiority of a cold-turkey-type approach over gradualism. Dornbusch and Fischer (1990) stress that a shock therapy is the only one which can gain the necessary credibility with respect to stabilization policy. After the initial shock - by its very nature, extremely painful for the population - there is the possibility of spectacular short-term effects in the fight against inflation. If so, the shock therapy can be effective - if it is not followed by a too-early loosening of financial restrictions. For example, in Yugoslavia, after a period of high inflation (64 percent) in December 1989, this was reduced to zero in the second quarter of the following year. This was a spectacular effect which authenticated the cold-turkey approach (Kolodko/Gotz-Kozier-kiewicz/Skrzeszewska-Paczek 1991). But soon afterwards, a renewed acceleration of inflationary processes took place (up to 4.6 percent monthly in the last quarter of 1990) which diminished the credibility of the program.

In Poland, in effect the program failed to gain the necessary credibility because the inflation rate did not fall - even temporarily - to the level foretold by the government. After December 1989, when the inflation rate was reduced from 55 percent in October to somewhat less than 18 percent, it bounced up to 80 percent in January 1990 and then down to 23 percent in February. Eventually, a stabilization of inflation took place at a level several times higher than that announced by the government and - as a result of these announcements - than that expected by the population. The correct conclusions were not drawn from this fact, and implementation of false program assumptions continued in the illusory conviction that overcoming the inflation was - under the given institutional, structural and political conditions - only a function of time. So, the cold-turkey approach did not succeed. This however does not in itself testify to the superiority of the gradualism approach. It must be clearly stated that, in the face of the economic disequilibrium and inflation which existed in Poland in 1989, a policy of shock therapy was the only justifiable course. The fault lay in the wrong implementation of the methodologically right shock approach. The unique chance was wasted.

Another aspect of the cold-turkey versus gradualism dilemma is the necessity to distinguish the three plains on which economic processes take place, particularly those bearing on the transition from a socialist to a market economy. These plains are: stabilization, transformation, and restructuring of the real sphere. The shock approach is applicable to stabilization only. In cases of especially severe inflationary process it is frequently the most appropriate policy. Such was Poland's case. With respect to systematic transformation - that is to say, with institutional systemic changes - although there is a desire for possible rapid progress here too - the cold-turkey approach is not applicable. We note one exception, however, of which we take no account here, namely the absorption of the former German Democratic Republic into the powerful West German economy.

There is nothing like a Polish Big Bang in the systematic sphere. The transformation process in this area was subject to an evident acceleration in the framework of the general historic process of changes spreading over the whole post-communist world, and even was feeding back into these changes. Here we have not to do with a shock approach but with a gradualism natural for such cases, although the transformation itself is of revolutionary character. It is of key importance that the institutional change process perceived in the above way must be attached to a proper sequencing of correcting measures. (Nuti 1991).

Shock policy is even further out of the question with respect to structural changes, since these by their very nature require a longer-term perspective. Against this background it must be concluded that the rather widespread talk about the Polish Big Bang is exaggerated, since it can at most refer to stabilization and not to the whole institutional and structural market-oriented transformation of the economy. The latter is a long-lasting, gradually evolving process with extremely complex implications.

When talking about perspectives, the problem of time horizons arises at once. Over a longer period - estimated at many years - there is no reason why relatively optimistic forecasts and scenarios should not be framed. But over a short period, progress in macroeconomic stabilization is hardly to be expected. The "shortageflation" syndrome is replaced by "slumpflation," involving a very high rate of both inflation and recession. The inflationary-versus-shortage trade-off has been replaced by an inflation-versus-recession trade-off.

Moreover, the adverse impact of the external situation must not be overlooked. In the first place, price inflation was exacerbated by the change in settlement principles between post-communist countries which began with 1991 as well as by the rise in the prices of energy, in particular oil. It is to be added that the latter had to a certain extent already been accommodated during the last months of 1990. However, uncertainty is still inherent in possible international conditions. Some could and should have been foreseen (a transition from settlements in rubles to settlements in U.S. dollars and the resulting pro-inflationary and pro-recessionary effects), while others (e.g. the oil shock caused by the Middle East conflict) complicated the situation in an unforeseeable way.

But there is also is a feedback between the political situation - on the one hand - and stabilization and transition processes on the other. One can hardly expect this situation to be as favorable in the future as it was in the initial period of stabilization program implementation. Therefore, successive attempts at stabilization - whose necessity is beyond any doubt - may prove even more difficult.

The lesson of the Polish experience in the implementation of stabilization policy should be particularly useful to other post-communist countries. These will face - or are already facing -many dilemmas which Poland has tried to solve - for better or for worse. Now that the so-called Polish experiment has entailed such high social costs, it would be well if lessons learned from it were widely studied by other countries.

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