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FISCAL ADJUSTMENT AND STABILIZATION POLICIES: THE POLISH EXPERIENCE

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I. INTRODUCTION

For post-socialist economies in transition, economic stabilization has been one of the three main challenges faced during the comprehensive adjustment programmes they have undertaken in recent years. The other two have been to introduce fundamental systemic and structural changes conducive to the development of a market economy.

To an extent at least, economic stabilization must come first. This is the case both because high inflation—if it exists—is so destructive that no policy-maker, recognizing its effects, could accept the continuation of inflationary pressure without

taking measures to fight it, and from the evident truth that systemic and structural changes need a relatively long time to be accomplished. The priority given to economic stabilization means imposing significant constraints on the form of the adjustment programme and on the way it is implemented.

In view of these constraints, it is often necessary to accept second-best options. This is especially true in the case of fiscal policy during transition. Typically, fiscal policy is assigned, second only to compliance with the rules of sound monetary policy, a fundamental role in macroeconomic stabilization policy. The objective of fiscal policy, at its most basic, is usually formulated as the elimination or at

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least the considerable reduction of the fiscal deficit. This can, of course, be no more than a point of departure: a more comprehensive formulation of the objectives of fiscal adjustment must take into account a large number of qualifications, familiar from practice in market economies as well as the specific circumstances found in post-socialist economies in transition. In the latter, the situation differs considerably from the well-known cases of stabilization in the face of extreme monetary instability characteristic of some developing countries (Dornbusch, 1990).

In the next section, we discuss the problem of the mutual links between the budget deficit and inflation. Our main concern is the extent to which the conventional wisdom about these links is appropriate for post-socialist economies undergoing transition. In section III, some of the theoretical and practical difficulties of fiscal adjustment are considered. The main focus is on the relationships between the financial and real spheres of the economy. The specific problems of post-socialist economies need to be taken into account if potential instability is to be avoided.

Section IV can be seen as a special case study since it discusses recent Polish experience with fiscal adjustment and macroeconomic stabilization. Poland's experience is not unique—though it is the most spectacular—and the lessons from Poland are of more general relevance to the problems of transition in Eastern Europe. Finally, Section V presents some general comments and conclusions. There is little doubt that, in the longer run, a balanced budget contributes to macroeconomic stabilization and to control over public finance. But there are trade-offs involved and, moreover, the deficit itself is highly endogenous and interacts with other aspects of policy. There is a risk of instability and, especially during transition, the deficit itself cannot be the sole overriding target of economic policy.

II. THE BUDGET DEFICIT AND INFLATION

The fiscal balance is one of the most commonly used synthetic indicators or measures of the role of the government sector and of the stance of fiscal policy. It is hard to deny that, in the longer term,

large and persistent fiscal deficits would have adverse effects on macroeconomic stabilization. There are, however, many dangers in a simplistic or mechanical approach to deficit reduction during stabilization and it is necessary to take account of a number of complexities and interactions in designing a stabilization package.

The most obvious point is that fiscal balance may be achieved at different levels and with different patterns of government revenue and expenditure: different structures of the budget would have markedly different effects on the economy. A further difficulty is that there is no necessary, automatic and reliable link between a budget deficit and inflation. This is true generally but is especially important in the case of an economy moving from central planning to a more market-oriented structure. The role of the state budget and the indicative value of the deficit are significantly different under planning and attention needs to be paid to the qualitative changes that occur during the process of transition.

Among the most important reasons for the lack of an automatic link between budget deficits and inflation are the following (Fischer and Easterly, 1990):

- (i) The scale of a fiscal deficit which should be regarded as inflationary depends on other factors such as economic growth and monetary policy. (Typically a low growth rate and restrictive monetary policy mean that deficits need to be smaller.)
- (ii) The significance of a given deficit depends upon the financing channels available (currency issue or the banking system, external sources, or, eventually, the domestic bond market) as well as monetary policy variables.
- (iii) A low correlation between deficits and inflation may also result from time lags and from changes in expectations about policy. The sequencing of stabilization measures also affects the observed relationship (for example, the elimination of subsidies will raise measured inflation and lower the deficit).

The lack of a clear link between deficits and inflation seems particularly true of planned (or modified

planned) economies. However, some of the reasons for this are different from those in a market economy. In particular, the role of public finance has been quite different from that in market oriented systems (Kopits, 1990). The state budget assumes the role of a planning instrument, used to transfer financial resources amongst enterprises as part of the allocative processes of the state. This integration of the budget with economic activity implies a completely different role for fiscal policy.

A different approach is also required in assessing the equilibrium, or otherwise, of the public sector. The indicative significance of the deficit in terms of its links to stabilization or to inflationary pressure is much more limited. One reason for this is the contribution of the budget to the financing of state enterprises and the operation of the so-called 'soft budget constraint' (Kornai, 1990). More importantly, assessment is made difficult by the presence of open and suppressed (or hidden) inflation occurring at the same time—a situation which has been termed 'shortage-flation' (Kolodko and McMahon, 1987). The financial counterpart to this has been a stock of 'empty money', or an inflationary overhang, created as a result of the cumulation of inflationary financial flows over successive periods. The inflationary overhang constitutes a kind of non-formal internal public debt which, together with the quasi-fiscal deficit of the banking system and the deficit itself, should be treated as an important indicator of economic disequilibrium.

These caveats do not mean, however, that phenomena, such as the Oliviera-Tanzi effect (Tanzi, 1977), identified for market economies, could not appear in planned economies undergoing transition. A marked rise in the rate of inflation, leading, for example, to lags in revenue collection, could contribute to the budget deficit, in turn leading to pressures to increase the money supply and further inflation.

Generally, however, it is not possible simply to translate the experience of stabilization in market economies—where a central role is typically assigned to budgetary disequilibrium as the root cause of monetary expansion and inflationary pressure—to the case of planned economies in transi-

tion. Upward pressure on the money supply may be more direct—voluntary or even intended—and the budget deficit *per se* may be of little significance. In any case, the deficit is, as argued, an extremely poor indicator of the extent of underlying structural disequilibrium.

One of the most important consequences of this is that, unless great care is taken, it is easy, during a stabilization programme, to make the mistake of introducing an over-restrictive policy of fiscal adjustment. A policy designed to eliminate the open fiscal deficit may actually lead to a dramatic reduction in public-sector activity. Equally, an apparently more moderate policy of deficit reduction—or even of keeping the deficit unchanged—could nevertheless involve a strongly stabilizing fiscal policy. The problems of measuring the initial fiscal disequilibrium and of assessing the needed fiscal correction have also been acute in many developing countries' adjustment programmes (the inadequacy of most existing measures is stressed by Tanzi, 1990). The difficulties and dangers are even more severe in the case of post-socialist economies.

To sum up, the first point is that the budgetary balance is, to a large extent, endogenous. Whilst the budgetary position affects the economy and has an impact on stabilization, the processes set in train during stabilization affect the budget position. This endogeneity must be taken into account in the design of stabilization policy. The choice of appropriate criteria for assessing the initial structural disequilibrium in the economy and the needed degree and type of fiscal adjustment is of fundamental importance if errors are to be avoided.

Second, the objective of deficit reduction needs to be seen in proportion: there are trade-offs and, in particular, the impact of policy on the real processes of production and employment needs to be taken into account. Third, in the case of post-socialist economies undergoing transition, there are circumstances which make deficit reduction particularly difficult: equally, however, control over the deficit is the more necessary. Decreases in real production during transition as well as foreign indebtedness can easily cause deficits, if unchecked, to have a destabilizing impact on the economy.

III. FISCAL ADJUSTMENT: CHALLENGES AND CONSTRAINTS

The roots of inflation in a modified planned economy arise from an economic structure typical of central planning systems as well as from a financial policy which was, in the past, subordinated to real processes rather than treated as an instrument to affect those processes. Structural changes, however, though required, must, as noted above, take time. In the short run, the essential task consists of elimination of the direct and to some extent measurable sources of inflationary pressure. These are: the inflationary overhang in terms of an excessive stock of money; inflationary disequilibrium flows of expenditure (which will depend upon the policies chosen); and the necessity of servicing international debt, which, with almost no foreign capital inflow at the start of the stabilization programme, requires a reduction in real domestic expenditure. The methods chosen to tackle each of these would have different implications for economic performance and the state budget.

Elimination of the external disequilibrium is often regarded as a primary objective of stabilization: maintaining debt service and reduction of the debt itself would require a substantial adjustment of macroeconomic policy. In Eastern Europe, in practice, an alternative approach of postponing external adjustment—via rescheduling and the like—and concentrating on the requirements of internal equilibrium has typically been adopted (Gotz-Kozierkiewicz, 1989). This may ease adjustment problems in the short run (though depending on the debt situation, may worsen them over the longer term). It may, moreover, make sense since the budgetary implications of debt service are likely to be artificially high at the start of a stabilization programme due to (temporary) undervaluation of the exchange rate.

Absorption of a monetary overhang can take place through a monetary reform (effectively a reduction

of liquidity through direct confiscation), through so-called corrective inflation—which is tantamount to a tax on liquid assets, or by increasing the attractiveness of domestic liquid assets by raising interest rates on deposits (Calvo and Frenkel, 1991). The explicit nature of the monetary reform route makes it politically difficult and there is a risk of highly adverse effects on savings propensities in the short term. There are limits to how far interest rates can be adjusted and, in any case, there may be adverse consequences for other aspects of the stabilization programme.² In practice, if the overhang is large—as was the case in Poland—there may be little alternative to reliance on corrective inflation to reduce the disequilibrium in the starting situation: the effects depend crucially on the government's ability to limit the price rises to a once-and-for-all adjustment.³

Turning to the adjustment of the flows of budgetary expenditure and revenue, the inflation tax, though not usually computed in the official statistics, is likely to be relatively large in the initial stages of a stabilization programme. During stabilization, not only will the inflation tax fall but also other distributional consequences of fiscal policy are likely to change markedly, especially due to the elimination of the many subsidies characteristic of the previous system.

In centrally planned economies, subsidies to consumption and to production played an enormous role in supporting real incomes, especially in the urban areas. (According to estimates by B. Milanovic for the World Bank, during the mid-1980s their share in Poland amounted to about 40 per cent.) Elimination of subsidies as part of the adjustment package is bound—unless compensated by other changes—to lead to a considerable reduction in household real expenditures, which in turn will feed back to budget revenues through the tax system. This is, however, only part of the picture. Even more important, is the question of the effect of changes in subsidies and other forms of subvention

² For example, bank profits, arising from high interest rates on loans not matched by high rates on deposits (high spreads) were an important source of profits and revenue during the early phases of the Polish stabilization programme.

³ According to most evaluations, the absorption of the liquidity overhang in Poland took place largely in the last months of 1989 when inflation was very high and real interest rates strongly negative. There was also a relatively high tax on deposits in January 1990 when the 80 per cent price rise was not matched by equivalently high nominal interest rates.

given to the state-owned enterprises—which are also mostly eliminated as part of the new policy framework.

The effects of changes in subsidies on enterprises needs to be seen in the context of the crucial role, in the former centrally planned countries, of the state-owned sector in the generation of government revenue and of the need to maintain the tax base during the transition to a more market-oriented system. In Poland, the share of socialized sector payments in budget revenue was about 80 per cent in 1989 and 1990. On a net basis—that is net of subsidies—the importance of socialized sector payments in the budget increased dramatically, from 48 per cent in 1989 to 65 per cent in 1990 (Bolkowiak, 1991). The reduction in subsidies together with other changes tend, moreover, to generate strong inflationary pressure of a structural or cost-push character which, combined with demand restraint, tends to lead to a relatively large reduction in output. The pressure on enterprises is compounded by changes in monetary policy: the introduction of positive real interest rates can be seen as the withdrawal of one of the former subventions to the state-owned enterprise sector. With their own working capital share traditionally very low, and faced with sharply increased prices for some of their major inputs, many enterprises are put into a position where they have little room for manoeuvre to increase their efficiency and hence have little prospect of improving their financial viability.

What this means is that there may be a case for a moderation of the restrictive fiscal policy with some alteration in the incidence of taxes and subsidies. There may, for example, be scope for reducing social security contributions or, in the Polish case, for lowering the so-called 'dividend tax' which is an extremely arbitrary form of property tax levied on enterprises. Of course, such a policy would amount to accepting, *ex ante*, less revenue and/or more expenditure. Because of the importance of the state enterprises in the tax base and because of the strong endogeneities involved, however, the end result for the fiscal balance could actually be an improvement. Put another way, there is a clear danger if very restrictive fiscal policies are followed of going beyond the critical point on the

well-known 'Laffer curve' with dangerous consequences for the real economy and a deterioration of the state budget itself. Instability would result if the pursuit of mechanical targets for the deficit led to further fiscal tightening and yet further falls in revenue. Thus, it cannot be stressed enough that, in the design of fiscal adjustment and stabilization policies, it is necessary to take a realistic view of the role of the state enterprise sector (which includes taking a realistic view of the rate at which privatization is likely to proceed). An excessive degree of pressure on state enterprises risks destabilizing the budget.

In the short run it is probably inevitable that post-socialist economies in transition will suffer some decrease in real output, with important consequences for the dynamics of the budget. There will be an automatic reduction in taxation, worsening the budget position (Anand and van Wijnbergen, 1989). This phenomenon, characteristic of any economy, is particularly strong in the case of post-socialist economies because of the above-mentioned high share of taxes which come from the state enterprise sector. In the longer term, of course, there is an objective of widening and changing the tax base. It needs to be emphasized, however, that the initial tax structure is distant from that appropriate to a market economy and that the introduction of comprehensive tax reform is bound to be slow. It requires, for example, a relatively long time to design and introduce the necessary legislation as well as to develop the administrative capacity to deal with the new tasks (Tanzi, 1991). It is also true that, in the early stages of stabilization and structural adjustment, the circumstances may be particularly unfavourable for the introduction of new taxes—the difficulties of introducing a value added tax (VAT) may provide a good example.

On the expenditure side there are also many difficulties which are particularly acute in the context of post-socialist economies. One problem is public investment and, above all, investment to 'rehabilitate decaying infrastructure' (Allen, 1991): there are strong arguments not only that these expenditures should be maintained but, beyond that, that they should be increased during transition. Expenditures on public goods, such as health and education, and, especially important, on the social safety

net (such as income maintenance for the unemployed) also need to be kept up. Cutting such expenditures beyond certain limits, especially in the first stages of a stabilization programme, would be extremely short-sighted and dangerous and would threaten longer-term objectives.

These pressures mean that a mechanical attitude to deficit reduction can be extremely dangerous and that *ex ante* plans for fiscal stabilization must not be too rigid. It is necessary to recognize that, particularly if forecasts for budget revenue and expenditure have proved over-optimistic, a mechanical approach of keeping to earlier targets can develop, involving dramatic government endeavours and a readiness to sacrifice a relatively large part of public expenditure even if such policies are evidently damaging to the real economy and to society. Such attitudes would lead, first, to excessive cuts in areas of expenditure essential to the functioning of the economy and to the maintenance of a necessary minimum of provision for social protection and for human capital development (health, education, and training). Second, the excessive attention to the targets may lead to delays in the financing of certain types of expenditure with the spurious appearance of fiscal equilibrium or even a surplus in the short term. Third, the cumulation of deferred expenditure to the end of the budgetary period may lead to the arbitrary cancellation of some expenditures in order to try to meet the annual targets. All three phenomena are characteristic of the Polish experience of fiscal adjustment discussed in the next section.

In broad terms, we have argued that the conventional wisdom that fiscal policy is a fundamental component of stabilization policy is correct. With deficits of the order of 5–7 per cent of GDP at the start of a programme the only reasonable objective is a reduction in public expenditure going beyond the likely reduction in revenue. But the reality of transition needs to be taken into account. In the early stages of stabilization it is likely that there will be a change from 'shortage-flation' into stagflation (Kolodko 1991a) with the latter reflecting, so to speak, the scale of inefficiency brought to light during reorientation towards the market. Domestic

output is almost bound to fall, with adverse consequences for the fiscal position. At the same time the special characteristics of post-socialist economies in transition mean that it is extraordinarily difficult to determine in advance the desirable evolution of expenditures, revenue, and the deficit. This means that fiscal policy must be pursued in a flexible manner. Rigid targets for the actual or *ex post* balance of the budget should be avoided and the endeavour to reduce or eliminate fiscal deficits must not lead to the attitude that fiscal deficits must be reduced at any cost. In the latter case there is a real danger of instability arising from a kind of vicious circle as expenditure reductions and tax increases, bearing especially on state enterprises, further reduce the tax base and worsen the *ex post* position of the budget.

This means that policy may need to concentrate on finding ways of financing fiscal deficits in non-inflationary ways. With relatively underdeveloped financial markets, the scope for domestic financing, e.g. via government bonds, is likely to be limited in the short term. Against monetary targets, finance through the banking system would constrain the implied amount of credit available to the non-government sector. In practice, this means that in the early stages of transformation there may be a strong need for (and case for) transitory aid from abroad to help overcome the gap between budgetary revenues and expenditures which is likely still to persist (in the short and probably also in the medium term) even when all reasonable attempts to curtail the deficit have been put in place.

IV. THE CASE OF POLAND

Until quite recently, there was great optimism about Poland's 'shock therapy' and Polish policy has often been put forward as a model for other countries. It is true that there have been many achievements. As far as macroeconomic policy is concerned, however, difficulties, especially with the budget, have emerged. These difficulties exemplify many of the issues discussed above. In particular, there is a danger of instability if budgetary balance is pursued in an inflexible manner.

(i) Background

In looking at the Polish inflation of the 1980s, several distinct phases can be distinguished. After rising in 1980–2, inflation slowed down after the 1982 stabilization measures and fell further until 1985. The scale of shortages was also somewhat reduced. Then, from 1986 until the middle of 1989, there was a renewed rise in inflation from about 15 per cent in 1985 to about 160 per cent in the first half of 1989. The scale of shortages also rose dramatically.

The essence of the problem of 'shortage-inflation' is that, with the intensification of both open and repressed inflation above a critical level the problems cannot be overcome without comprehensive price liberalization. Partial price liberalization, not supported by other necessary measures such as the tightening of all budget constraints facing economic agents through appropriate monetary, fiscal, and incomes policies, leads only to an acceleration of the process of open inflation without elimination of shortages.

It was against the above background that the transition from rapid inflation with shortages to quasi-hyperinflation took place in Poland, beginning in August 1989. Until the initiation of the stabilization package, this hyperinflation was accompanied by shortages ('hypershorteage-inflation') which resulted from the only partial liberalization—namely the liberalization of food prices in August. The huge acceleration was also the result of a general indexation of wages imposed by Solidarity: indexation of wages whilst prices are raised is bound to lead to inflation. After Solidarity took power in September 1989 the indexation rules were modified but this change was by then unable to stop the inflation.

It is important to recognize that this temporary hyperinflation was effectively induced (Kolodko, 1991b). To an extent, it was provoked by the macroeconomic policy adopted. It was due, on the one hand, to the political struggle and, on the other, to the conviction that under hyperinflationary conditions it would be easier to bring about lower real wages and to depreciate the value of money bal-

ances held by the public (especially households). In Poland, the monetary overhang was brought down by inflation. In addition, there was a belief that hyperinflation would be easier to overcome than the condition of shortages and inflation which had existed immediately before. Above all, however, the more or less deliberate choice of accepting hyperinflation came from the priority given to starting Poland firmly on the transition path to a market economy. The implementation of this requires, amongst other things, the almost full liberalization of prices, devaluation and the introduction of currency convertibility, and a rise in interest rates so that they become positive in real terms. Under Polish conditions, the achievement of these objectives was not possible without passing through a phase of hyperinflation.

Indeed, it can be argued that macroeconomic stabilization in Poland was subordinated to the primary strategic goal of transition towards a market economy even at the expense of the possible, partial, failure of macroeconomic stabilization. It is true that the stabilization policies of the first post-communist government have led to the deepest recession in contemporary Europe with inflation in 1990 still running at the highest level in Europe. But it is also true that the Polish economy is clearly nearer—with respect to institutional changes and economic policy—to a market economy than any other post-communist country.

(ii) The Deficit and Inflation in 1989

From the above it is clear that it is not possible to describe a simple causal relationship between the budget deficit and inflation in the conditions of 1989. Indeed, given that the inflation arose in large part from indexation, from political forces, and from policy, it is probably more accurate to see the deficit as endogenous, resulting from rather than, in itself, a major generator of inflation.

In fact there were major changes during the year. In the first half of the year, reflecting especially rapid growth in expenditure, the consolidated budget deficit was roughly 11 per cent of GDP. This was brought down in the second half (one of the objectives in the last months of 1989 was a reduction in

borrowing) and, for the year as a whole, the deficit was of the order of 2.8 per cent of GDP, implying a large turn-around. The last months of 1989 can be considered as an introductory stage to the more comprehensive stabilization programme of January 1990. Some aspects started even earlier, notably the major cuts in subsidies and liberalization of agricultural prices in August 1989.

(iii) The Stabilization Programme

As far as fiscal adjustment is concerned, the stabilization programme adopted in January 1990 assumed that the state budget would be balanced. This was mainly to be achieved by a radical limitation—in many cases the complete abolition—of subsidies, which were expected to fall from about 38 per cent of state expenditure in 1989 to 14 per cent in 1990. The policy also involved improving fiscal discipline, a ban on the contraction of non-interest-bearing loans from the central bank (and strict limits on borrowing at commercial rates), and the elimination or substantial limitation of previously numerous tax exemptions.

As is well known, the results of the stabilization programme were mixed. After a jump in inflation in January at the start of the 'big-bang' strategy, inflation did come down but tended to rise again towards the end of the year. Partly because of the price jump and the effect on real wages and households' spending power, the initial decline in real output—especially of the state enterprise sector—was much larger than expected at about 25 per cent. The trade balance moved to surplus during the first year. Table 1 shows some indicators of the difference between the assumptions of the policy-makers and the results for the first year.

The most notable features of the table are the over-optimistic assumptions made about the development of the real economy. Such optimism might well be a remnant of the wishful thinking characteristic of the central planning period, since the forecasts were not backed by reliable and convincing economic calculations. Further declines in industrial production and in GDP occurred in 1991. (After the 25 per cent fall in output in 1990—which would be about a 23 per cent fall if the private sector is included—there was a further fall of about 10 per cent during 1991, including the private sector.) Inflation continued at a rate of about 70 per cent during the year and the balance of payments moved to deficit. (For 1991 the current account deficit was of the order of \$1.4 billion and trade balance amounted to \$51 million.) At the beginning of 1992 the degree of recession was clearly imposing serious political strains.

(iv) The Fiscal Position

By contrast with the extremely poor results for the real economy and the stubbornness of inflation, the results for the fiscal deficit seemed, initially, highly favourable. For the year 1990 as a whole, a surplus of Zl 2.5 trillion or 1.3 per cent of budgetary expenditure was achieved. On the face of it, this appears to suggest that the difficulties discussed in previous sections did not apply in practice to Poland. This, however, would be to misread the situation. Temporary factors did improve the fiscal position in 1990, but the position was deteriorating through the year. Budget deficit problems re-emerged in 1991, and in 1992 there is the danger of a full-scale budgetary crisis. The deterioration is clearly shown in Figures 1 and 2.

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

Rates of growth (%):	Assumptions	Results
Industrial production	-5.0	-25.0
Unemployment rate	2.0	6.3
Inflation (consumer price index, December to December)	240.0	249.0
Gross national product	3.0	11.8
Real wages	-20.0	-30.0
Trade balance (billions of dollars)	-8.0	+2.2

Figure 1
State Budget Deficit: Cumulative (in % of expenditure)

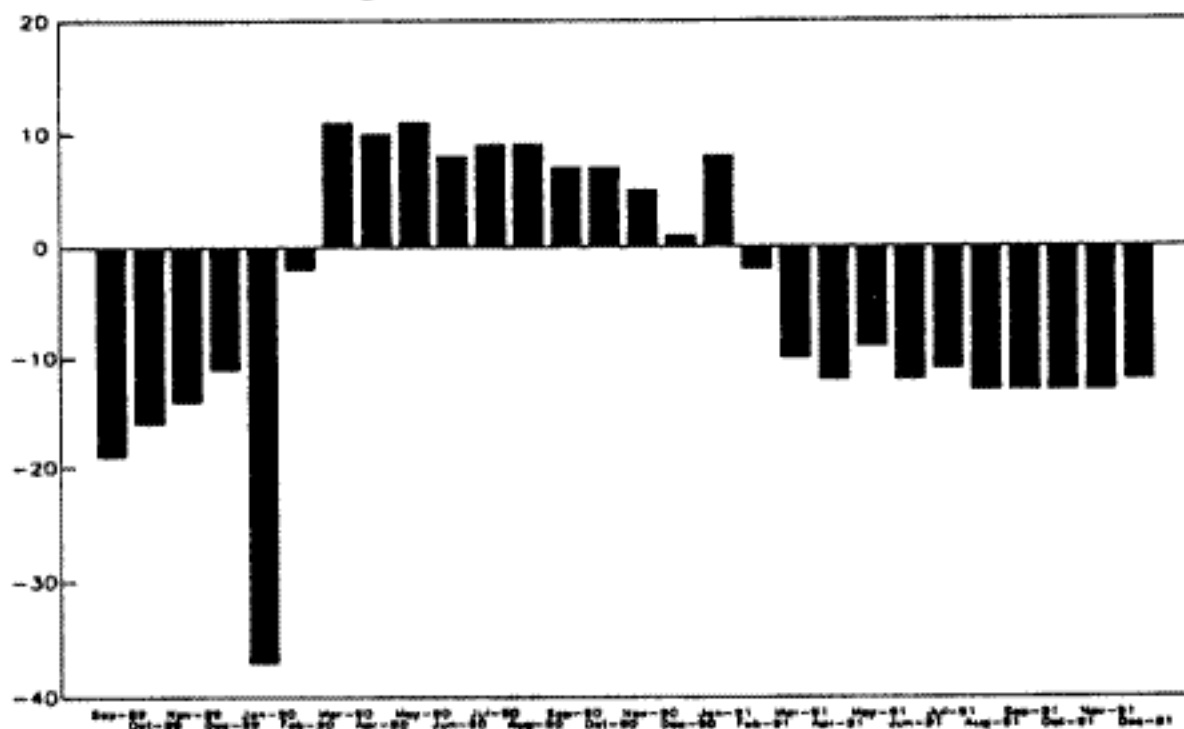
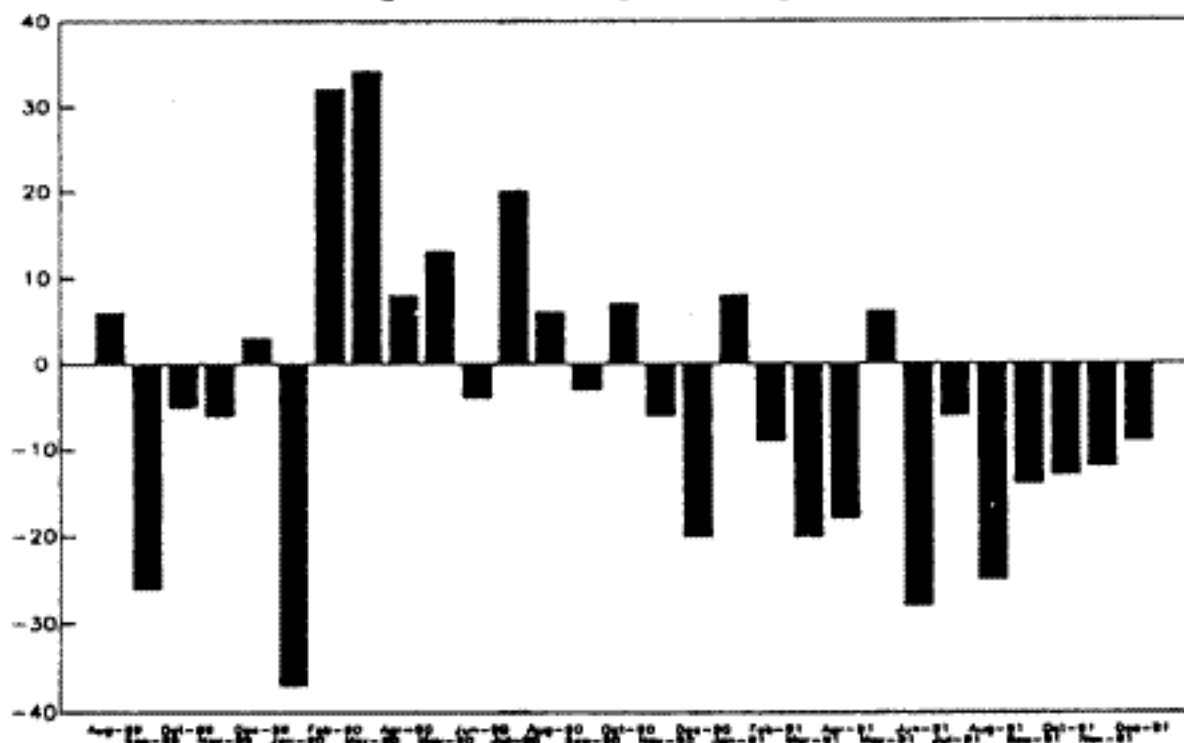


Figure 2
State Budget Deficit: Monthly (in % of expenditure)



There are several reasons why the impacts on the budget were, in 1990, initially favourable despite the obvious negative factor of the development of heavy recession in the real economy. The main factors were:

(a) The most important was an explosive growth in the profits of state enterprises at the beginning of the year, in spite of a large reduction in their sold production (by 33 and 18 per cent for socialized industry and socialized construction respectively, as compared with the previous month). There were two main reasons for this. The first was that many enterprises had gained from the effects of devaluation. The second was that the almost universal response to 'big bang' was a rise in prices relative to wages, which supported profitability in spite of output declines. The state budget was a major beneficiary due to the importance of state enterprises in the tax base. A third factor was the unloading of the inventories accumulated during the shortage-inflation period.

(b) Extremely high profits of the banking sector—due to large spreads between borrowing and lending rates—in turn supported tax revenues.

(c) There was a strong tendency through the year to postpone expenditures in order to meet short-term objectives, leading to a bunching of expenditures towards the end of the year, or even to their postponement to the next year.

During the year, as the figures show, the situation deteriorated markedly. In addition to the factors mentioned above, there was some reflation or re-

laxation in the summer of 1990 in response to the larger than expected recession of the first quarter.

In 1991 the budget position rapidly worsened as recession continued and intensified and as costs, especially wage costs, rose against a non-accommodating exchange-rate policy. (The exchange rate was fixed at its January 1990 level until 17 May 1991 when there was a devaluation of about 12 per cent: in the autumn of 1991 a less-than-fully-accommodating crawling-peg exchange-rate regime was adopted.) The effects of rising wages, increasing international competition, and low demand on the profitability of state enterprises were very adverse, further worsening the underlying position of the budget.

The results of these threats to budgetary stability are clear. In the first place, the costs of the over-restrictive policy to the real economy have been very great and, moreover, because of the endogenous effects of the budget, they have led to further efforts to curtail expenditures. In Tables 2 and 3, it can be seen that, as expected revenue has fallen, exceptional measures to cut expenditure have been introduced. This risks worsening the situation further, as described in previous sections.

Thus, at the end of 1991, two years after the introduction of the 'big-bang' policy, optimism over the Polish budgetary position had disappeared. With output down by more than 30 per cent and GDP lower by about 20 per cent, the economy appeared locked in recession. Unemployment, which reached 2.2 million or 11.2 per cent of the labour force in December was bound to rise further, with

Table 2
State Budget Revenue in 1991 (in trillion Zloty)

	Plan for 1991	Implementation Jan.–June	Forecast July–Dec.	Yearly target revised in Sept.	Actual Jan.–Dec.
Total revenue	289.2	98.0	129.0	227.0	211.8
from					
enterprises	242.9	79.5	100.8	180.3	—
banks	15.6	6.3	8.4	15.7	—
private sector	11.1	6.7	10.5	17.2	—
privatization	15.0	0.8	6.2	7.0	—
other domestic	4.4	4.6	2.0	6.6	—
foreign	0.2	0.1	0.1	0.2	—

Table 3
State Budget Expenditure in 1991 (in trillion Zloty)

	Plan for 1991	Implementation Jan.–June	Forecast July–Dec.	Yearly target revised in Sept.	Actual Jan.–Dec.
Total expenditure	293.5	110.0	141.0	251.0	242.4
subsidies	37.4	15.0	14.3	29.5	–
foreign debt service	13.8	3.9	7.5	11.4	–
social security	25.6	12.4	20.5	32.9	–
current expenditure	174.5	68.7	79.0	147.7	–
settlements with the banks	13.8	2.7	8.4	11.1	–
capital expenditure	27.3	7.3	10.7	18.0	–
government's reserve	1.0	–	0.4	0.4	–

further costs to the budget. And the budget itself was in crisis: there was almost no further scope for cutting subsidies or other public expenditure, and tax rises, even if they could be introduced quickly, risked making the situation of state enterprises even worse.

So the question arises as to whether the positive achievements with respect to transition to a market economy inevitably require such high costs—appearing in practice as declines in the population's standard of living and a destruction of the real economy. The costs have indeed been huge (and attempts (Sachs, 1990) to belittle them do not change the facts, at most they present them in a false light). A full discussion would be beyond the scope of this paper. However, detailed analyses (such as Kolodko, 1991b) show that much of the huge cost of stabilization and transformation was avoidable. The costs could have been much smaller and the achievements no worse or, in practice, probably better if the numerous errors contained in the stabilization package had been avoided. The most important error was that the stabilization package was considerably overshoot. This led, in turn, to further pressures on the budget due to endogenous responses, and a further compounding of the problems.

V. CONCLUSIONS

The above analysis and description of the experience of stabilization in Poland suggests some gen-

eral lessons which may be of importance for other countries undergoing programmes of radical transformation. Perhaps the most important, given the prominence that has been given to the Polish 'shock therapy' as a model for other countries, is to understand the difficulties that have emerged. Despite major achievements, heavy recession has coincided with a budgetary crisis. Over-ambitious objectives for fiscal stabilization have contributed both to the depth of the recession and to the budgetary crisis itself. As has been explained, the initial success in achieving budgetary balance—even a surplus—in the first year of stabilization depended on a number of special or temporary factors: the more normal situation is, unfortunately, that structural adjustment puts heavy pressure on the state industries and hence on the tax base and on the budget. Unless this is recognized, there is a danger of overkill and potential instability.

More generally, the formulation of objectives for fiscal policy and the design of an appropriate package of measures presents particular difficulties in the case of post-socialist economies. In the first place, as exemplified by Polish experience, there is no clear and simple relationship between budget deficits and the inflationary process. In 1989, before the 'big bang' strategy, the budget deficit was more the result of the changes that were occurring than a direct cause of inflation.

During a stabilization programme the specific characteristics of a planned economy undergoing transformation create extreme difficulties for the

measurement of the fiscal deficit—both the actual deficit and the potential deficit—and make the assessment of the fiscal corrections needed a very complicated task and one fraught with uncertainty. The processes of systemic and structural transformation that are set in train strongly limit the policy-makers' room for manoeuvre, making budget balance extremely hard to achieve. Some components of expenditure, especially on infrastructure and on the social safety net, need to increase whilst revenues from the state industries tend to decline. An over-restrictive policy may limit the capacity of enterprises to adapt in desirable ways.

These problems have major implications for the desirable design of fiscal policy during transition. In the first place, it seems essential to recognize reality and to take account of the importance of the state enterprises in generating tax revenues. Tax reforms are, of course, needed, but inevitably take time to introduce. Privatization, which is also badly needed, also takes time, and may, moreover, tend to lower potential tax revenues in the short term. A balance or compromise is needed: macroeconomic pressure on the state enterprises is part of the objective of stabilization; on the other hand, excessive pressure limits their room for manoeuvre and destabilizes the budget. All this means that targets for budgetary stabilization need to be formulated in a realistic way and over a considerable period of time. (It goes without saying that fiscal objectives cannot be independent of other aspects of economic policy—both macroeconomic and microeconomic.) Otherwise, there is the danger of a substantial degree of overkill.

The other major implication is that, even if objectives are reasonable and feasible, macroeconomic policy and, especially, fiscal policy must be formulated in a way which takes account both of uncertainty and of the strong endogeneities or feedbacks involved. In Poland, short-term objectives for the deficit have led to further cuts in expenditures and further pressures on enterprises and the tax base—leading to potential instability. Once again the lesson is that objectives need to be realistic and formulated for the medium term.

It has been suggested that Polish experience illustrates both 'overkill' and the problems of potential instability. Thus one of the general lessons is to

avoid such instabilities if at all possible. More moderate fiscal objectives at the start of a stabilization programme could have resulted in less adverse consequences for the real economy, and, due to the strong endogeneities involved, the consequences for the deficit might have been over the medium term as good as, or better than, actually achieved. If deficits are accepted in the short or medium term, then attention needs to be given to the problem of financing them in a non-inflationary way. Given the limitations that apply to domestic sources of financing (bonds or privatization receipts) there may be a case for foreign assistance to the budget in the early stages of stabilization.

In Poland, however, the problems have not been avoided. The magnitude of the deficit problem at the end of the second year of the programme combined with a stubborn and deep recession in the state-owned industrial sector has brought about a crisis. The possibility of further reductions in subsidies is virtually exhausted, and additional cuts in public expenditure would risk being incompatible with the continuation of a civilized society. The only reasonable way out is a reorientation of economic strategy the essence of which should be a stress on economic growth. Budget balance needs to be seen as a longer-term objective, which can only be achieved as the economy recovers and reorients towards the market. In turn, economic growth and financial stability will only be possible with a far greater emphasis on the health and structural adaptation of the state-owned industrial sectors.

Of course privatization and tax reform are necessary and should be pursued. But, in the short term, privatization is more likely to reduce than increase tax revenues, quite apart from the necessary expenditure on structural adaptation, some of which will inevitably fall on the budget. Similarly, fiscal reforms (value added tax and individual income tax) will in the short run produce redistributive and inflationary effects rather than revenue for the state budget. Institutionalization of the 'second' or 'grey' economy could not lead to more than a small increase in taxes. Thus a growing and profitable state enterprise sector is essential, not only as a step on the way to marketization and privatization, but to medium-term budgetary equilibrium as well.

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