Moct/Most Nomisma Economic Journal on Eastern Europe And The Soviet Union – 1/1991, pp. 9-36

Polish Hyperinflation And Stabilization 1989-1990

Grzegorz W. Kolodko*

Introduction

In the latter half of the Eighties, inflationary processes in Poland underwent an ever greater intensification. Their characteristic feature was the parallel existence of both price inflation and shortages. In the second half of 1989 near hyperinflation was reached. The economic situation was one of extreme disequilibrium, a recession appeared, external debt was growing. Against this background - after the political breakthrough of summer 1989- an economic programme was developed based on two approaches. The first aimed at radical acceleration of previously initiated market-oriented institutional changes. The second approach consisted of a fundamental change in economic policy in favour of fiscal and monetary instruments.

Based on these premises, the Polish version of an orthodox stabilisation programme was worked out and received the approval of the International Monetary Fund. After preparations lasting several months, its implementation commenced at the beginning of 1990.

In this paper, some of the processes leading to the elaboration of the programme, its assumptions and implementation, as well as the effects obtained so far, are discussed. These have been rather unfavourable. A high rate of inflation still persists. The previously dominating trade-off of inflation versus shortage, typical of reformed socialist economies, has been replaced by another dilemma: inflation versus recession. The latter constitutes the greatest threat to the success of the stabilisation package. Therefore, in this paper some of the directions and instruments necessary for future modification of the stabilisation programme are put forward.

1. Sources of Inflation in Poland

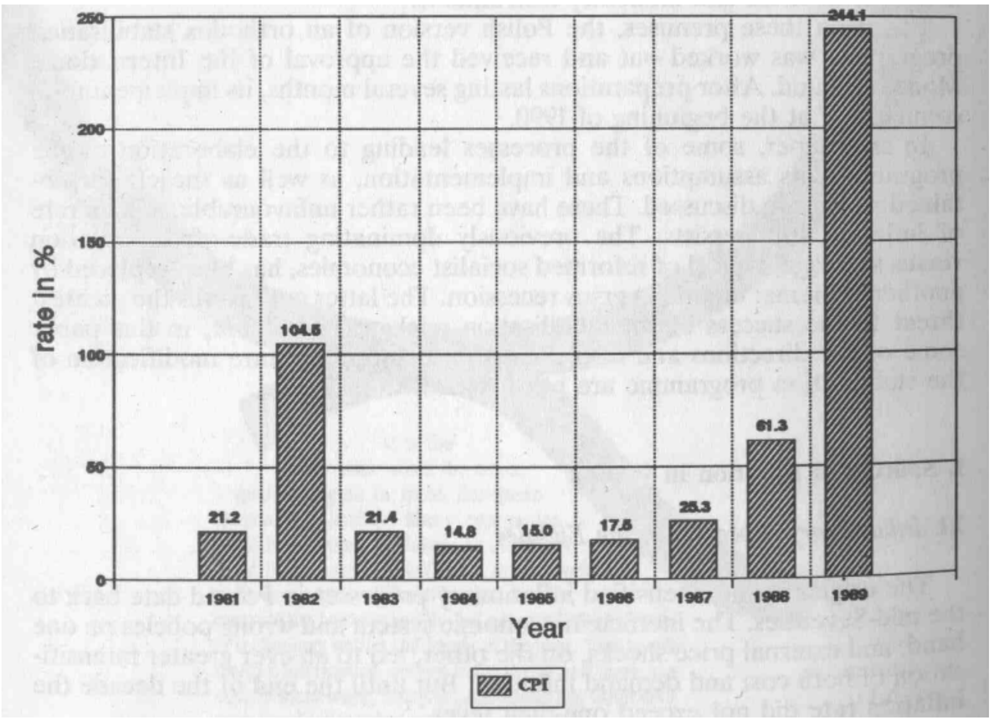
1.1 *Inflationary Processes in the Eighties*

The origins of the intensified inflationary processes in Poland date back to the mid-Seventies. The inefficient economic system and wrong policies on one hand, and external price shocks, on the other, led to an ever greater intensification of both cost and demand inflation. But until the end of the decade the inflation rate did not exceed one-digit level.

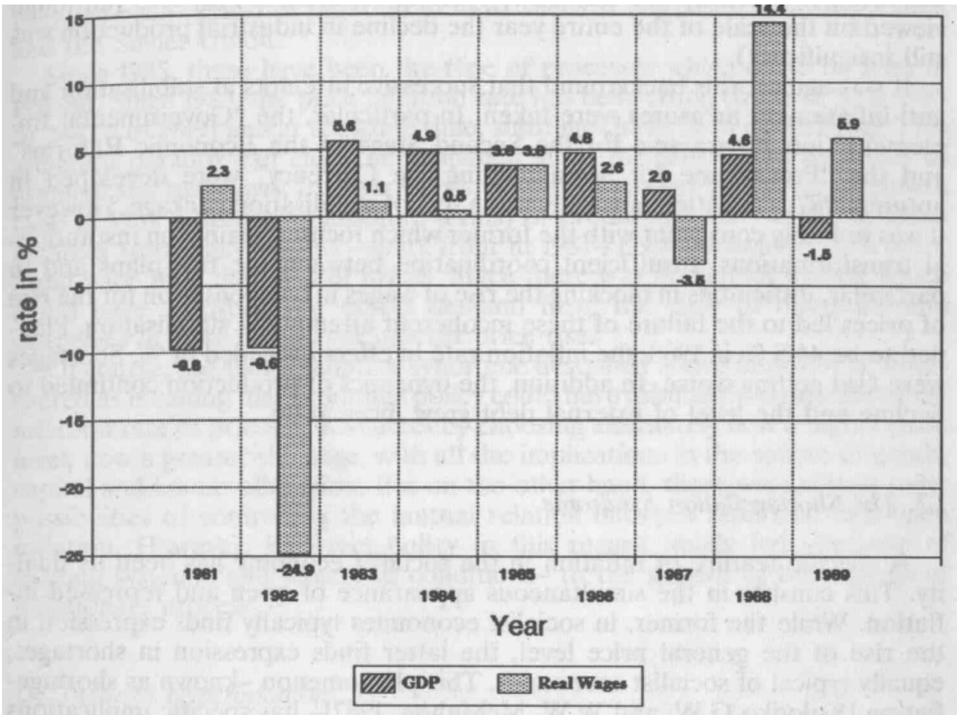
A marked acceleration of inflation took place at the beginning of summer 1980 as a result of the simultaneous appearance of a dynamic wage rise and an economic crisis. The inflation rate was particularly high in 1982 but in the following period its rate gradually declined to less than 15 % in 1985. It is also worth noting that the period from 1982 through to 1985-86 was characterised by a relatively high economic growth rate, although this growth rate was referred to the critical breakdown of 1979-82, when the per-capita GDP had dropped by almost one third.

* *Director, Research Institute of Finance, Warsaw.*

INFLATION, 1981-89



ECONOMIC GROWTH AND REAL WAGES, 1981-89



But in the latter half of the 1980s inflationary processes visibly accelerated once more. The price inflation (open inflation) rate went up from 15 % in 1985 to 61 % in 1988. At the same time, economic growth slowed down. The trend of both these processes became stronger and stronger, this being particularly apparent in 1989 (see Figure 1 and 2). This, among other things, was the source of the mounting tide of social dissatisfaction which led not only to the resignation of the government, which took place in September 1988, but also to the fundamental institutional and political breakthrough in the summer and autumn of 1989.

Thus, in the 1980s, several different periods can be distinguished from the point of view of the dynamics of price inflation processes. The first one extended from summer 1980 to the end of 1981. Next, a shock price rise took place in February 1982 with consequences bearing on the whole year. Then, between 1983 and 1986 a gradual reduction in the rate of inflation followed, after which we witnessed a renewed acceleration starting in 1986 and lasting until mid-1989[1].

1.2 Failed Stabilization Attempts

Throughout the past decade, a number of attempts at stabilisation have been made. The most spectacular was the 1982 reform which among other things resulted in a fall in real wages by up to 25 per cent. The general price level rose at a stroke by over 100 per cent after which some adjustment followed, mainly with regard to the household demand, a real reduction in household sector money reserves and limitation of the excess liquidity of enterprises. But then, starting in August, after a dramatic breakdown because of demand barriers in the preceding months, the economy managed to regain a trend towards growth. It started to grow once more and a process of inflation rate reduction was initiated.

However, in the mid-80s, the reform process lost its original momentum. Institutional changes were insufficient and inconsistently implemented. Economic disequilibrium intensified once more, additional inflationary factors appeared (in particular a permanent trade balance surplus from 1982 on), and social support for the reform was fading. Also the drive behind the economy was losing its intensity and this led to recession starting in May 1989 (although viewed on the scale of the entire year the decline in industrial production was still insignificant).

It was against this background that successive attempts at stabilisation and anti-inflationary measures were taken. In particular, the "Governmental Implementation Programme for the Second Stage of the Economic Reforms" and the "Programme for Strengthening the Currency" were developed in autumn 1987. The latter especially was a sort of stabilisation package. However it was not fully consistent with the former which focused mainly on institutional transformations. Insufficient coordination between the two plans and in particular, difficulties in blocking the rise of wages in compensation for the rise of prices led to the failure of these incoherent attempts at stabilisation. Planned to be 44.5 % in 1988, the inflation rate in effect exceeded 61 %. Shortages were also getting worse. In addition, the dynamics of production continued to decline and the level of external debt grew incessantly.

1.3 The Shortageflation Syndrome

A specific feature of inflation in the socialist economy has been its duality. This consists in the simultaneous appearance of open and repressed inflation. While the former, in socialist economies typically finds expression in the rise of the general price level, the latter finds expression in shortages, equally typical of socialist economies. This phenomenon - known as shortage-flation [Kolodko G.W. and W.W. McMahon, 1987]- has specific implications for stabilisation policy, since not only price stabilisation, but also the elimination of shortages must be sought during its implementation. So the problem is more complex than in market-type economies where shortages do not appear.

The shortageflation syndrome can be interpreted in two ways. Firstly, a certain analogy emerges with the inflation versus unemployment alternative described by the Phillips curve. In the case of a centrally planned economy with full employment a similar dilemma regards the possibility (and scope) of the trade-off between the scale of the price rise and the level of shortage. However this sort of trade-off comes into play for short periods and only with regard to particular sub-markets, since, over a longer period and on the macroeconomic scale, the shortage will reproduce itself at an even higher level of costs, incomes and prices. To block this specific process requires certain institutional changes (market-oriented restructuring of the economy and re-monetisation of economic relations), as well as appropriate modifications of economic policy, especially shifting the focus away from a "prices and incomes policy" (meaning here also its liberalisation) towards a fiscal and monetary policy [Kolodko G.W., 1990].

Secondly, the shortageflation syndrome is to be interpreted as a process of simultaneous intensification of both price and repressed inflation. As a result of maintaining soft budgetary constraints for economic agents (especially for the enterprise sector), there is a simultaneous increase in both the shortage level and the inflation rate. Such processes have, in the latter half of the Eighties been typical of inflation in most socialist countries, including China and the Soviet Union.

Since 1985, these have been the type of processes which could be seen in Poland. Since 1985, the price inflation rate has been rising (from 15 % in 1985 to 244 % in 1989) and at the same time, shortages have been intensifying. This apparent paradox can easily be explained given the differential dynamics of nominal and real flows. In other words, in spite of an ever lower rate of growth (and in 1989 a decline in absolute terms) of production and supply, nominal incomes (especially wages) -apart from in 1987- grew incessantly at a more rapid pace than the level of prices. Since there was no capital market which could have absorbed the excess demand flow, the state of disequilibrium deepened in spite of an ever quicker price rise.

Of course, the shortageflation syndrome described above must not be interpreted as meaning that economic policy could have arbitrarily manipulated the inflation rate of prices or resources by choosing alternately now a higher price level, now a greater shortage, with all the implications in the sphere of goods, capital and labour allocation. But on the other hand, there were always some possibilities of controlling the mutual relation between repressed and open inflation. However, incorrect policy in this regard finally led -because of existing systemic and structural conditions- to the growth of both forms of inflationary process.

1.4 Induced Hyperinflation

The sources of hyperinflation[2] in Poland were already accumulating since the beginning of 1988. Inflation was visibly accelerated by the so-called "prices and incomes" operation of February 1988. It was to facilitate the execution of the "Implementation Programme of the Second Stage of Economic Reform". This was not the case, however. Instead of the intended reduction in the average wage level by about 5-6 % there was a rise of as much as 13 %, while supply was insufficient in real terms. This led to further destabilisation and considerably strengthened the influence of demand and cost inflation (excessive increases in labour costs). Price inflation accelerated considerably, and shortages were growing. And the government to an ever larger extent began to loose control over inflationary processes.

Another strong impulse towards hyperinflation was the rapidly worsening condition of the state budget, among other things because the state raised, with retroactive effect, purchase prices for agricultural products. This obviously wrong decision was -like many other economic decisions in Poland- mainly motivated by political considerations and strongly contributed to the quickening of inflation. Throughout 1989, the budget disequilibrium was increasing, and for many reasons [Raport, 1990]. Inflationary budget expenditure was growing excessively, especially for subsidies to state sector production increasingly showing a loss. On the other hand, because of the adoption of wrong systemic solutions and low fiscal discipline, budget revenues were (in real terms) lower than planned.

Polish hyperinflation was mainly provoked by two decisions taken as a result of the Round Table negotiations [Kolodko G.W., 1989a]. Here the unprepared, so-called "marketisation" of agriculture (in August 1989) and the "general wage and income indexation system" forced through by Solidarity for political reasons are intended. The "marketisation" of agriculture consisted almost exclusively of the liberalisation of retail food prices and of profit margins in the food trade, without the necessary previous de-monopolisation measures in the areas of trade in agricultural products and the supply of agriculture with means of production. This operation contributed greatly to the August price rise of up to 40 % in comparison with July. The accelerated price inflation process was additionally fuelled by the effects of full indexation which gave an extremely powerful impulse to wage inflation and to current demand. The first corrections to the faulty and destructive indexation system were made soon after the take-over of power by Solidarity.

Apart from these -and some other- sources of hyperinflation which we may call technical, there were also some wider causes. So it is possible to guess that the hyperinflationary option was deliberately chosen for the following reasons.

Firstly, the conviction that the suffering caused by hyperinflation would foster the population's readiness to bear the inevitable cost of a shock therapy for stabilisation.

Secondly, the belief that escape from hyperinflation -under certain circumstances, presumably to be found in Poland- would be relatively easier than escape from galloping inflation combined with shortages.

Thirdly, hyperinflation would facilitate (and this did actually happen) the depreciation of monetary resources accumulated by economic agents (particularly by households) and generally reduce excessive financial liquidity in the economy.

Fourthly, the justified conviction that in a hyperinflationary environment it would be easier to lower the real income level of households, although the implementation of this assumption was not spread equally over different months.

Fifth and finally, the premises defined above as technical having been fully met, hyperinflation was a conscious choice for an interim period because of market-oriented systemic transformations, since on this occasion, certain indispensable market options of economic policy could be initiated which otherwise would have been extremely difficult, if not impossible. Here we are referring to a reduction in the scale of subsidies and budgetary redistribution, the introduction of partial currency convertibility, the implementation of capital and labour market elements, the initiation of the privatisation process, etc.

To sum up, it must be stated that the hyperinflation which started in Poland during the summer of 1989 was to a large extent induced, since its technical causes alone -in spite of the price explosion already in August- in September could still have been brought under control or at least radically neutralised. The choice of using inflation to curb inflation was also encouraged by the practical situation, especially the coincidence of a change of government and an outbreak of rampant inflationary processes happening at the same time.

2. Economic Disequilibrium

The steady worsening of the situation in the latter half of the 1980s found its expression, among other things, in a deepening economic disequilibrium which affected practically all sectors of the economy. In spite of the ever higher inflation rate, disequilibrium grew in the goods and consumption services markets. In this case we were dealing with both a disequilibrium of flows (the inflationary gap opened being "filled" ex post by the increment in compulsory household savings) and a resource disequilibrium in the shape of the so-called inflationary overhang i.e. resources reflecting the excess liquidity of the household sector at the given time (with the given real supply, demand and price levels)[3].

In a similar state of pronounced disequilibrium were the investment and labour sectors. In both these areas, too, a surplus demand typical of the socialist economy existed which -in the face of the lack of efficient market allocation- could not be balanced by the available supply of means of production.

A concise expression of the internal disequilibrium was the state budget deficit, which -as stated above- almost led to budget breakdown in mid-1989. Towards the end of the last decade, and in particular in 1989, the so-called Oliviera-Tanzi effect [Tanzi V., 1977] made its appearance. It consists of the fact that, in the face of hyperinflationary trends, tax remittances by economic agents are more and more delayed while at the same time, pressures for advanced disbursements from the budget, mainly for public sector expenses, become increasingly insistent (and often more effective). As a result, the budget deficit becomes larger and this in turn pushes up the inflation rate. This fact must be particularly stressed, since during the elaboration of the stabilisation package in Poland the debate strongly indicated the inflated and ever bigger budget deficit as one of the sources of inflation, while neglecting the fact that there was also a very strong opposite relation, that is to say, it was galloping inflation turning into hyperinflation that led to the ever growing budget disequilibrium level. A unilateral approach to this problem and underestimation of the importance of the above-mentioned effect greatly influenced the final shape of the stabilisation programme, in which the necessity of a fully balanced budget was recognised to be one of the prime intermediate objectives in combating inflation and this equilibrium was to be achieved by placing a very heavy fiscal burden of the enterprise sector (including private enterprises).

The economic disequilibrium had its external dimension too. Polish foreign debt in convertible currencies doubled in the 1980s. It grew from about US$ 20bn in 1980 to more than US$ 41bn at the end of 1988, and this in spite of repayments which amounted to about US$ 20bn over this period. It must be stressed that this was possible owing to a sustained trade balance surplus between 1982 and 1989 as well as to the positive transfer balance. At the same time however, the positive trade balance exerted an inflationary pressure. In 1990, it will be negative again, or at least the government's economic programme assumes so.

Apart from the dollar debt, Poland's debt expressed in transfer roubles grew considerably in the last decade. At the beginning of 1990 it was Rb 5.6bn. This debt is almost entirely with the Soviet Union.

3. The Orthodox Shock - January 1990

3.1 New Environment

The Polish economic stabilisation programme which has been undergoing implementation since the beginning of 1990 can be seen as a more or less successful attempt to apply orthodox International Monetary Fund methods to the conditions in Poland concisely illustrated above. Numerous difficulties in applying IMF orthodoxy -which is a prerequisite for signing a stand-by agreement with this organisation which, in turn influences the whole sphere of Poland's financial relations with the West- resulted mainly from the need to allow for the existing severe disequilibrium, and in particular for the manifold shortages.

Notwithstanding all this, it must be stressed that the economic package presented by the new government was, to a large extent, a continuation of measures which had already been taken earlier. The basic difference consisted less in the economic side of the problem than in its political aspects; and this was true in both the internal and external dimensions, since the political situation had radically changed. The new authorities have immense popular support at their disposal which makes the implementation of the difficult economic programme possible, but at the same time, creates the danger of its overheating by applying an excessively restrictive financial policy.

On the external front however, Western attitudes towards Poland have undergone complete reversal. The West has decidedly approved the direction and pace of Polish reforms. What is more, its attitude to Polish debt service also changed. In particular, the IMF has departed from the requirement of a two-year deadline for balancing the current account balance, while accepting that higher priority must be given to internal equilibrium. In this connection, the situation with respect to external aid has also changed. Instead of a net negative capital transfer amounting to US$ 1.5-2 bn yearly (as in previous years), a US$ 2bn net capital inflow can be expected in 1990.

In sum, implementation of the hard economic programme has encountered on the one hand, social acceptance of a drastic therapy that reduces real wages and living standards, and on the other, economic support from the West for implementation of the new government's economic programme. Under these circumstances, after several months of preparations, implementation of the stabilisation programme was set in motion at the beginning of 1990.

3.2 Aims of the Stabilization Programm.

3.2.1. State Budget

The stabilisation programme envisages balancing the state budget in 1990. This is to be achieved mainly by a radical limitation -and in many cases complete abolition- of subsidies. Their share of state expenditure is to fall from about 36 per cent in 1989 to about 14 per cent in 1990. The state budget equilibrium is also to be helped by improved fiscal discipline, a ban on the contraction of interest and non-interest bearing loans from the central bank, (intermediate crediting on commercial terms must not exceed 4 per cent of the budget in the first quarter of the year and 2 per cent in the following quarters) and substantial reduction or elimination of previously numerous tax exemptions. The institution of public debt is also introduced. An issue of government bonds amounting to ZL 4.1 trillion (as compared with ZL 197 trillion of the budget on both sides) is planned. The bonds will be exchanged for shares in privatised state enterprises[4]. Also, emissions of short-term treasury bonds must not exceed 4 per cent of the total budget.

3.2.2. Prices

Prices have, to a large extent, been liberalised. However, at the beginning of 1990, 14 per cent of prices (in terms of value) were still directly set by the state. This mainly regarded the prices of energy, transportation, housing, medicines and the cheapest sort of milk. In addition, about 10 per cent of prices are subject to a sort of indirect state control. This consists of an obligation to inform the tax authorities of intended price increases and the increases can then be postponed, although for no longer than three months.

Particularly important from the economic point of view -but at the same time very painful from the social point of view- have been the corrective adjustments of the price of energy. The retail price of coal rose overnight by up to seven times! Electric power rose twofold, and prices for liquid fuels doubled. The move in prices induced thereby is called corrective inflation. In January it was planned to amount to 45 per cent (in comparison with the average price level in December). As a matter of course, this inflation rate must also have been a result of general price liberalisation as well as other decisions made under the stabilisation package, especially with respect to the rate of interest and the exchange rate.

3.2.3. Monetary Policy

It has been assumed that the budget equilibration measures and price liberalisation will not lead to hyperinflation if the whole economic and financial system is adequately "anchored". Under the Polish stabilisation programme the following factors are of special importance as so-called anchors (stabilisers):

a) a hard budgetary policy (both on the side of rigourous revenue enforcement and on the side of severe economic discipline with regard to expenditure);
b) a restrictive monetary policy;
c) a quasi-freeze on wages; and d) a uniform and fixed exchange rate.

As for monetary policy, a positive real interest rate has been assumed to be practically the sole instrument for controlling money supply to the national economy. At the same time, it was accepted that the requirement regarding this real rate would not apply to each individual month, but in the initial phase of programme implementation, to the first quarter of 1990 as a whole. The interest rate is to be changed every month, being kept in the beginning as little as possible below the inflation rate and later, somewhat above it. Thus the following interest rates (basic interest rates on refinancing credits from the central bank) were adopted for the first three consecutive months: 36 % for January, 20 % for February and 10 % for March. Of course an inconsistency is immediately evident here because -given the interest rates adopted for these months- the average interest rate for the whole three-month period could not be positive in real terms. This especially regards the deposits of the household sector. But another more serious objection arises, since it is doubtful whether, under such circumstances, a positive real interest rate is really needed. Under conditions of very high inflation and currency substitution, an interest rate high enough in comparison with the expected inflation rate would be quite sufficient to bring about the necessary reduction in credit demand on the one hand, and to maintain the propensity of economic agents towards saving, on the other.

3.2.4. Wage Restrictions

After heated debates at the end of 1989, it was decided that there would neither be a full wage freeze nor the use of a compensatory mechanism at the level of 0.8 of the cost of living increase, as had been the case, with certain modifications, in the fourth quarter of last year. It can be assumed that it was only as a result of a some compromise between the requests of the trade unions and the expectations of international financial institutions that the principle of wage fund (and not individual wages) indexation at the rate of inflation multiplied by 0.3 in January, by 0.2 in the following three months and later by 0.5 was adopted.

Coefficients constructed in the above way allow the wage fund in an enterprise to be raised (as far as allowed by its financial condition in the new economic environment) by the real inflation rate multiplied by an appropriate index. Thus, much depends on inflationary expectations and on the credibility of the inflation rate forecast by the government, because if the admissible wage fund increase is exceeded by less than three percentage points, the enterprise will pay a penalty tax amounting to 200 per cent of excess payments; if the permitted limit is exceeded by more than three percentage points, penalty taxation is as much as 500 per cent for each additional point of excess payments. In Polish economic jargon this type of solution is usually called the "wane guillotine". Such a solution permits either a greater rise in the wage fund than would result from the official forecast as to the inflation level (if management of the enterprise can predict with more accuracy the general dynamics of price levels) or an appropriate ex post regulation (correction) when the real inflation rate becomes known. It is easy to see that this sort of wage policy tool functions in such a way that the higher the inflation rate the greater the reduction in the real wage level. In view of the very high inflation rate during the initial implementation period of the stabilisation programme, the extremely restrictive character of this mechanism must be stressed.

3.2.5. Exchange Rate

One of the main nominal anchors in the stabilisation programme is the exchange rate. For many years, the Polish economy was practically a two-currency economy and the US dollar still plays a very important role, especially with respect to households. They still keep (at the present exchange rate) more than half their money balances in hard currency. So the scope of currency substitution is still very wide. A specific feature of the economic and financial system was the extreme, rarely encountered difference between the market price of the dollar (until March 1989 i.e. the start of the exchange rate liberalisation policy it was a black market price) and the official one. On the long-term average their ratio was usually 4-5:1.

In September the official (bank) exchange rate was still only Zl 1,400, and at the end of the year, because of galloping inflation it reached the 6,000 level. During this period the market exchange rate first rose slightly, then fell, and at the end of the year was fluctuating around Zl 9,500. That is why the official bank exchange rate was set at this level at the start of the anti-inflationary programme, on the assumption that it would remain stable for at least three months. If in comparison with the bank rate the parallel (market) rate declined by more than 10 per cent over a period defined in the "Letter of Intent" addressed to the IMF as a "more-than-short period", the central bank would be obliged to intervene through an interest rate change.

It must be added that the introduction of a uniform fixed rate of exchange, also called "internal convertibility", was supplemented, on the one hand, by further liberalisation of external trade and, on the other, by the introduction of restrictive import duties and taxes on some goods (e.g. the duty on motor cars together with the.simultaneously collected turnover tax comes to a total of 44 per cent of the foreign price). On this occasion the foreign currency retention accounts (RODs) -except for previously existing ones- for exporting enterprises were abolished and in their place, an obligatory immediate resale 91 export receipts was introduced, along with the possibility of refinancing Imports with foreign currencies bought from commercial banks. The central ank m turn would use its reserves, supported by the US$ 1 bn stabilisation oan specially granted by the OECD countries for currency stabilisation purses, to meet the commercial banks' demand for foreign currencies.

3.3 The Social Dimension of Stabilization

The case of Polish stabilisation displays many specific features. With respect to the economic sphere, the shortageflation -and later even hyper-shortageflation- syndrome described above is meant here; in effect, in this case we are dealing with not only a classic case of high inflation but with shortages too. Therefore the stabilisation programme was aimed simultaneously at either limiting or eliminating shortages and stabilising price levels. So, in contrast with Latin-American stabilisations [Bruno M., G. Di Telia, R. Dornbusch and S. Fisher, 1988], in this case there is the additional problem to be solved of bringing prices to a level which will clear the market. This requires, first of all, a significant acceleration of inflationary processes in the first period, but such a policy can encounter social barriers if aimed at bringing prompt anti-inflationary effects.

And here, the immense patience and even more -social support for the implementation of the stabilisation programme- are worth noting. To outside observers this may almost seem irrational, but at least two circumstances must be kept in mind here. First, the very difficult economic programme requiring sacrifices is being implemented after a radical political change as a result of which the Solidarity movement, which enjoys immense political support, has taken over government. Secondly, the intensity of support for the new authorities is -as shown by opinion polls- proportional to the level of aversion to and dislike for the former system and policies carried out by its authorities. Therefore this factor is utilised by propaganda, which successfully brings home to the greater part of public opinion that the former authorities are totally responsible for the present difficult situation (which is by no means true) and insists that there is no alternative whatsoever to the programme being implemented at present (which is also absolutely untrue).

But the fact remains that the immense social support is a function of political rather than economic factors and has strongly encouraged the new government's "now-or-never" or "all-or-nothing" approach. Of course, these two alternatives are false but, as it seems, both socially acceptable and politically viable. At that is what matters most in politics.

4. Implementation of the Programme

4.1 Budget

At the beginning of January, shock therapy was applied. As far as the budget was concerned, subsidies to production carried out at a loss, in particular subventions to energy prices, were substantially reduced. Also, many arbitrary tax exemptions and reductions were abolished and the collection of budgetary revenues was disciplined. There was also a delay in the execution of part of the payments which were to compensate the public sector and its workers for the inflationary price rise. However it is difficult to evaluate performance of the state budget from the short-term perspective of just a few months. Nevertheless the fact remains that over the first five months of 1990 the budget was not only balanced but a certain surplus of revenues over expenses persisted. However it must be remembered that in the Polish financial system, the first three months of the year have always been somewhat specific. In January, many distortions appear resulting from the settlement of outstanding debts and obligations from the previous year. In February, so-called "compensation taxes" on high personal incomes are paid. In February and March special remunerations (so-called "thirteenth month bonuses" and "profit shares") are paid, which temporarily raises the level of household sector incomes. Nevertheless it can be stated that first, budgetary subventions have been substantially cut; second, fiscal discipline has been improved; third, no substantial savings in public sector expenditure have been achieved; fourth, the scale of income redistribution through the budget has been reduced; fifth, the budget has been practically balanced throughout the first half of the year.

I mentioned above that the 1990 budget assumed the state would sell long-term bonds (convertible into shares in privatised enterprises) for an amount in excess of Zl 4.1 trillion. But because of bad organisation of the operation and as a result of the excessive drainage on the population's resources and its general pauperisation, the government did not manage, during the first half of the year, to sell bonds for more than 1 per cent of the proposed amount, thus creating a threat to budget revenues and to the fragile budget equilibrium.

But a still greater threat comes from the huge economic recession. It was assumed that: a) industrial production would fall by 5 per cent (during the whole of 1990 in comparison with 1989); the GDP would be reduced by 3.1 per cent only; whereas c) consumption would be reduced by 1 per cent only. Such optimistic assumptions might well be a remnant of the wishful thinking typical of the central planning period, since they are not backed by any reliable and convincing economic calculations.

The resulting threats to the budget and the inflationary implications are twofold. First, revenues from income taxes will be less because economic activity is greatly weakened. The decline in industrial production (measured by the sale of production of the socialised sector) in the January-June period by up to 30 per cent must be considered very drastic indeed. This cost of the excessively restrictive monetary and wage policy is unnecessary[5].

Second, the unemployment resulting from such a deep recession can prove much more costly for the budget in pushing its expenditure far above the level planned, since resources were set aside in the budget to cover the costs of an expected unemployment level of about 400,000. In July, unemployment was already in excess of half a million. And unemployment is bound to grow rapidly m the latter half of the year because of the lag effect i.e. a time-shifted adjustment of employment to the level of demand for labour corresponding in the recession. In other words, while in the recession phase industrial output fell by as much as 30%, employment diminished by a "mere" 7%. But in the depression phase (which practically has continued since February following the January breakdown), with the decline of production practically stopped in absolute terms, the employment level will decline further.

In other areas -especially in agriculture which has a very large share of total production (over 15 per cent) and employment (about 28 per cent), building and transport- the scale of recession caused by implementation of the stabilisation programme and by the critical situation as a whole is more difficult to assess because of their seasonal character. In my opinion, these side effects of the anti-inflationary shock therapy, although unavoidable, could have been less if the level of different anchors (stabilisers), in particular the interest rate and real wage reduction coefficients, had been more aptly chosen. But the fear that these coefficients might prove insufficiently restrictive and hence ineffective induced the authorities to exaggerate in the opposite direction. And it is precisely in this respect that the programme has overshot.

4.2 Prices

At the beginning of January, the greatest price shock in Poland's post-war history took place. Far-reaching price liberalisation on one hand, and central corrective price rises on the other, provoked a price explosion of nearly 80 per cent in comparison with December. And it must be stressed that since October 1989 the inflation rate has been gradually falling amounting in the months of the last quarter of the year to 55, 22 and 17 % (each percentage is in comparison with the month before).

Equally alarming is the fact that progress towards price structure improvement has been less than originally assumed [Frydman R., G.W. Kolodko and S. Wellisz, 1990]. The higher than expected price rise has meant that real energy prices did not grow as much as was assumed in the programme - with all the resulting consequences including the need for repeated corrective raises[6], since the stabilisation programme assumed that real price rises for coal and other fuels would be sufficiently high to anticipate the increase in costs which would follow general price level growth, which however was expected to reach only 45 %. But in reality, it proved to be increased by 80 %.

Neither can the remaining changes in price structure be favourably evaluated, since in the initial phase of the programme almost all prices were still formed according to the cost-based pricing formula rather than the demand/ supply-based formula, but this in any case had been foreseen. Finally, the impact of price changes on the real economy sphere also cannot be judged favourably, since from the very beginning, negative adjustments in the shape of reductions in production (because of the demand barrier) took place, instead of positive real adjustments in the shape of production cost reduction, the streamlining of employment, quality improvements, etc.

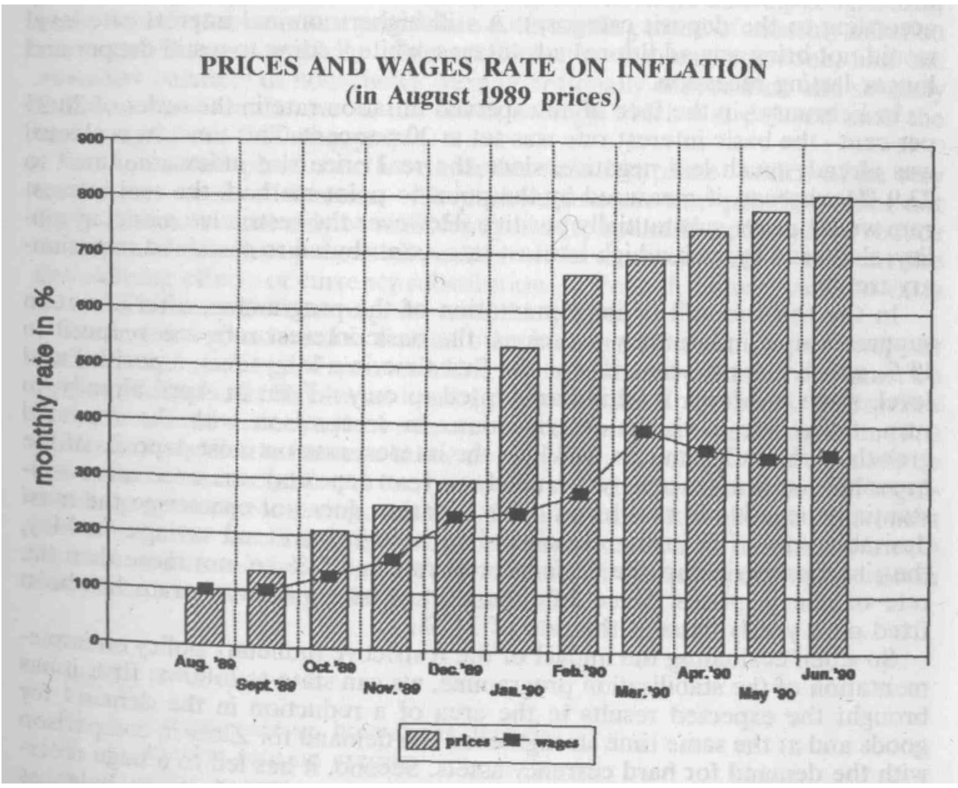
After the January price explosion, the dynamics of prices visibly weakened in the following months. The inflation rate measured by the CPI amounted to 23.9 % in February and to 4.7 % in March[7]. Unfortunately, in April it took off again -up to 8.1 % monthly i.e. as much as 155 % yearly- in May the inflation rate was 5 % and in June close to 4 %. The government target of the monthly rate of inflation in July was 5.5 %. In my opinion, the reversal of a favourable trend over several weeks towards the suppression of inflation was the result of several factors.

First, a very high statistical increase in real wages in March as a result of the existing wage policy rules and its false sequencing in the initial period of the implementation of the stabilisation programme. Just as there was no need for such a drastic reduction in real wages as was the case in January, so there was no need to "make up" in March.

Second, the use of the US dollar exchange rate as a nominal anchor brought about an increase in the cost of imports paid in other currencies which appreciated during this period. As a result, this factor also constituted a certain cost-driven inflation impulse.

Third, the enterprises continued to use -of course within the framework of a radically reduced demand- the so-called cost-plus pricing formula wherever possible.

Finally, fourth -and this is the most important conclusion here- inflation cannot be brought under control by the exclusive use of regulative tools. Recession itself is -through an abrupt reduction in real supply- the strongest inflationary factor, the more so because in our case it has affected more than proportionally the branches of the consumption industry.



4.3 Interest Rate

The interest rate has been one of the basic instruments in the implementation of the stabilisation programme. It was assumed that it would, within the first three-month period, come as near as possible to a real positive rate. However there was a very large deviation in January. The basic interest rate was set at 36 per cent (monthly), differentiated appropriately for different credit and deposit categories.

But the real inflation rate in January was much higher than originally assumed: it reached 78.6 %, the highest level in the world that month (along with a similar inflation rate in Argentina). So the real interest rate in the first month -according to the programme's authors the key one for the success of the entire operation- was decidedly negative. But despite the intentions, it was a good thing, since the interest rate was high enough -even more than enough-to radically reduce the demand for credit from both the enterprise and household sectors and to encourage the trend to locate free monetary resources in domestic currency accounts rather than in hard currencies. The interest rate on the latter has not been changed (it amounts to 3-10 per cent annually according to the deposit category). A still higher nominal interest rate level would not bring any additional advantages, while leading to a still deeper and longer lasting recession.

In February -in the face of an expected inflation rate in the order of 20-25 per cent- the basic interest rate was set at 20 per cent. This time, its real level was already mush less negative, since the real price rise index amounted to 23.9 %, whereas, if measured by the point-to-point method, the real interest rate would prove substantially positive. However the restrictive monetary policy, sheltered by such a high interest rate, contributed to sustained recessionary trends.

In the third month of implementation of the programme, after a certain suppression of inflationary processes, the basic interest rate was reduced to 10 % which already secured -for the first time in a long time- a positive real level, since in March inflation amounted to only 4.7 %. In April already, in turn, there was a visible deterioration. In comparison with the repeated growth of the inflation rate to 8.1 %, the interest rate on most deposits of the household sector (except two- and three-year deposits) was once more substantially negative in real terms. This situation does not encourage the most desirable way of reducing demand - i.e. through increased savings. In May, the situation is similar; the basic interest rate is 5.5 % i.e. not more than the rate of rise in prices. Since July the central bank's discount rate has been fixed on a yearly basis at the rate of 34 %.

So when evaluating the impact of the restrictive monetary policy on implementation of the stabilisation programme, we can state as follows: first, it has brought the expected results in the area of a reduction in the demand for goods and at the same time strengthened the demand for Zloty in comparison with the demand for hard currency assets. Second, it has led to a huge recession, unnecessary on such a scale, in the real sphere. Third, money balances in the household sector have been subject to a steady deep depreciation, with further and already negative repercussions in the sphere of excessive restraints on demand, including a shortage of financial resources needed for the implementation of the privatisation programme.

In the light of the above considerations, some more general conclusions and recommendations with respect to sequencing the steps of the interest rate policy under conditions of fighting the hyper-shortageflation syndrome can be drawn. Here, four distinct phases must be distinguished. The first one is characterised by high inflation accompanied by vast shortages and soft budgetary restraints, the latter phenomenon being institutionally connected with the former two. In such circumstances, the following economic law is functioning: in a shortage economy, any attempt to decree a nominal interest rate above the inflation rate (i.e. at a positive real level) strengthens the existing trends with respect to the price inflation rate. If, in the given period, this rate is growing, any rise in the interest rate will intensify even more the inflationary processes, and *vice versa.* Therefore this so-called "making the interest rate real" would have been justified after the 1982 stabilisation, especially in 1983-1985, while being pro-inflationary in the later period [Kolodko G.W., 1989a]. Also a real positive interest rate should have been more actively sought after in the fourth quarter of last year, when a descending trend of monthly inflation rates had been successfully achieved. However this was not done, and the monetary balances of households were intentionally depreciated and severely redimensioned on the eve of the shock therapy which was delayed until the beginning of the following year.

In the second phase i.e. the corrective inflation phase -which of its very nature was of short duration- the positive interest rate principle does not apply. This rate must only be sufficiently high to radically and abruptly reduce the demand for money from all sectors of the economy and to prevent the destabilising effects of currency substitution. In Poland, January and the early part of February 1990 correspond with this phase.

In the third phase -and in Poland this phase is still continuing and will last until the end of the third quarter at least- positive real interest rates must be used, while the interest rate on loans (granted in the first place to enterprises of the socialised sector) must be lower than the interest rate on deposits (this particularly applies to household sector deposits). A policy of this type will be anti-inflatory as it contributes to a reduction in the scale of recession, strengthens the propensity for savings and stimulates investment, while the differences in interest rates are financed through low interest rates on the instant access deposits and zero-interest on current accounts in the enterprise sector. So in this phase, the following relations must hold:

$$rd > rc > p \text{ where:}$$

rd	=	interest rate on household deposits
rc	=	interest rate on credits
p	=	inflation rate.

Finally, in the fourth phase, when stabilisation effects begin to take on a more permanent character, transition to the interest policy typical of market economies is necessary, where:

$$re > rc > p.$$

It is evident that neither the months preceding the stabilisation programme nor its implementation so far have been subordinated to the above sequencing, and that is why the desired stabilising effects could hardly have been expected.

4.4 Wages

The wage indexation system in force in the course of implementation of the programme is undoubtedly of a very restrictive, deflationary character. Its short-term impact is unquestionably anti-inflationary and stabilising. But, in the longer run, its influence is demotivating and supply-reducing and hence pro-inflationary. In addition, its main drawback is that it treats all enterprises in a practically identical way irrespective of their production trends. Worse still, the restrictive wage policy has, in the first place, affected enterprises which deliver to relatively equilibrated partial markets, since it has been there that the demand barrier has appeared first, limiting production which so far had been profitable and selling well.

In January, the demand reduction caused by fiscal and monetary measures was so great that in many cases, the enterprises did not raise wages even by the permitted (free of penalty tax) coefficients. They simply lacked the necessary liquidity. Thus, wages grew only by 1.3 %, this being equivalent to an enormous fall of over 45 per cent in real terms. But already in February these indicators looked quite different, a part of February's payments constituting delayed partial compensation for January's inflationary rise in the cost of living. With a price rise lower than in January, the rise in wages was substantially greater. In March in turn, there was a considerable increase in real wages, mainly resulting from so-called profit-share payments, whereas in April, real wages fell by 14.5 %. But as we have already pointed out, the sequencing of variations in the cost of living as well as both nominal and real wage changes was controversial.

Nor did this wage policy contribute to a wage structure improvement. During the implementation of the stabilisation programme all wages were changing in a converging direction and at a similar pace. Thus neither in intergroup nor interbranch relations did the desired change take place and adjustments in this respect, which will be necessary in future, will once more exercise inflationary pressures.

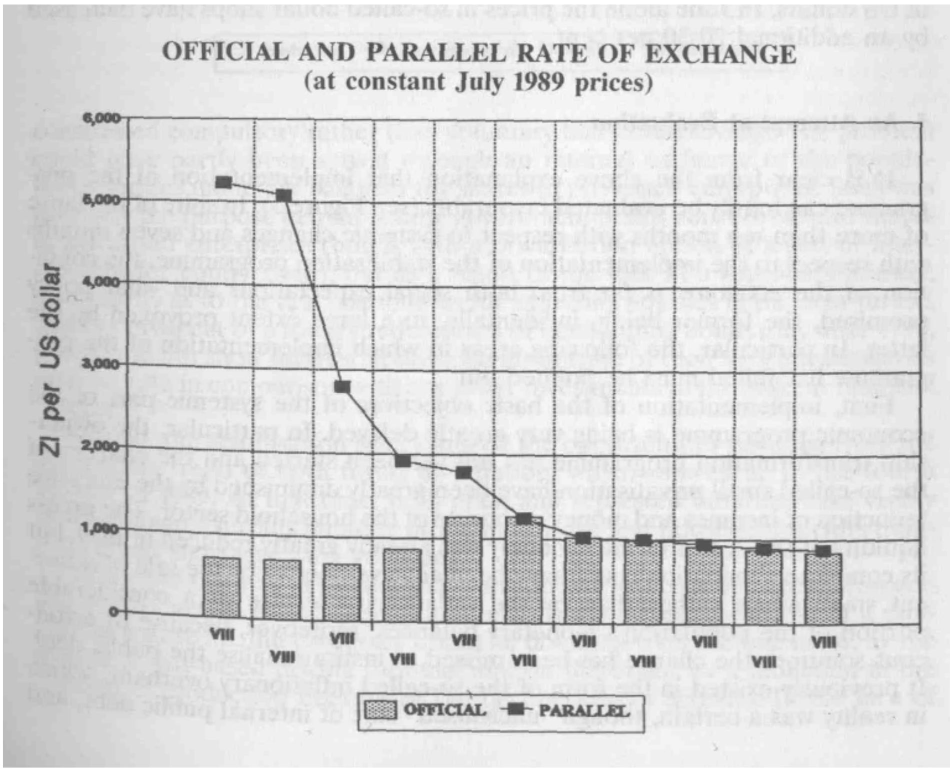
4.5 Exchange Rate

The exchange rate policy in the early months of 1990 can be considered successful. In spite of the controversial choice of the US dollar as the nominal anchor, since in Poland's case it would have been better to use a currency basket the composition of which corresponded with the share different currencies had in Polish foreign trade, the exchange rate level was correctly anticipated, although in this case, it was not a matter of precise anticipation, since in reality it was a devaluation of the Zloty to the level of the then current market rate (i.e. to the level of Zl 9,500 for one US dollar) that was carried out on January 1st 1990. The introduction at the same time of a high nominal interest rate on bank deposits in Zloty and of prohibitive - maybe even excessively high and sometimes harmful- import taxes, as well as the selling off of previously accumulated dollar assets by a pauperised population, and of currencies kept on the above-mentioned ROD accounts by enterprises, were the factors which contributed to the maintenance of a stable and uniform exchange rate. On one hand they reduced the demand for dollars and on the other, increased their supply.

In the first six months of implementation of the programme, the parallel (market) exchange rate deviated only slightly from the bank (official) exchange rate, the deviation not exceeding 3 % (see Figure 4). It was assumed a change in the official exchange rate would be necessary only after the first quarter of 1990, but such a need did not appear. For the sake of price stabilisation, the stand-by agreement with the IMF envisaged that in the case of an excessive exchange rate divergence an intervention through interest rate adjustment should be used first, but thus far no intervention has been necessary. The objective of stabilising the exchange rate for a protracted period is to make this rate one of the nominal anchors, although in the case of the Polish economy the importance of this factor is less than in developed market economies.

Also the utmost psychological importance of a stable, uniform exchange rate is worth stressing, since, for the great majority of the Polish population, this is an entirely new situation. On the other hand, it is to be noted that the radical change in the ratio between the market and official exchange rates directly affects many households, as at least every fourth household owns foreign currency assets. There are more than 4 million hard currency bank accounts alone, in Poland. Their owners have been deprived of the premium resulting from the margin of difference in the exchange rate, and consequently many have become poorer. Wealth accumulated in hard currencies has shrunk considerably. For the first time under long-lived Polish inflation, which has lasted from the second half of the Seventies all through the Eighties, considerable economic losses were suffered by households fleeing the Zloty for the US dollar.

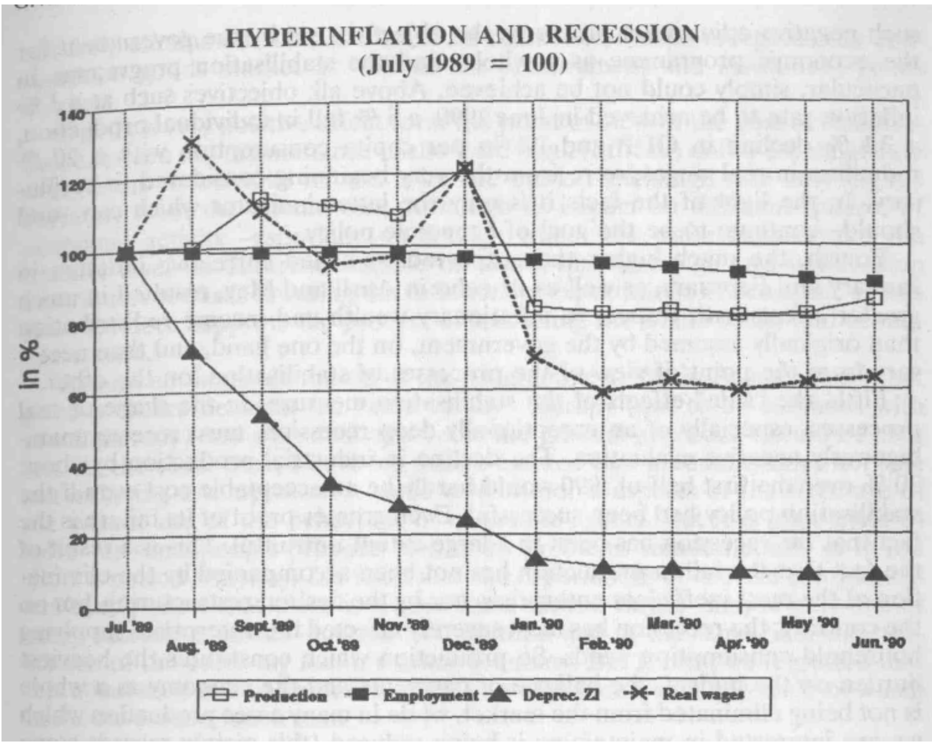
What is more, in the course of implementation of the programme, we are dealing with high inflation in the market served by convertible currencies. This increases the scale of inflationary processes in the economy as a whole, since an estimated 20 per cent (in terms of value) of all transactions are carried out in US dollars. In June alone the prices in so-called dollar shops have increased by an additional 20-30 per cent.



5. An Attempt at Evaluation

It is clear from the above explanation that implementation of the programme can hardly be evaluated favourably (see Figure 5). In spite of the lapse of more than ten months with respect to systemic changes and seven months with respect to the implementation of the stabilisation programme, the condition of the economy is far from both social expectations and what policy promised, the former being, incidentally, to a large extent provoked by the latter. In particular, the following areas in which implementation of the programme has failed must be pointed out.

First, implementation of the basic objectives of the systemic part of the economic programme is being very greatly delayed. In particular, the ownership transformation programme has not yet been started and the chances of the so-called small privatisation have been greatly diminished by the excessive reduction of incomes and money resources of the household sector. The excess liquidity of this sector of the economy was already greatly reduced in 1989, but its complete elimination could have been achieved better by the sale of different small assets rather than by the inflationary seizure of a considerable portion of the population's monetary balances. Moreover, because of erroneous solutions the chance has been missed to institutionalise the public debt. It previously existed in the form of the so-called inflationary overhang, which in reality was a certain, though "uncivilised" sort of internal public debt, and constituted compulsory rather than voluntary household savings. The problem could have partly been solved through an internal exchange of the population's surplus monetary balances for shares in privatised enterprises. Such was precisely the purpose behind issuing government bonds convertible into shares in privatised enterprises (bonds with a privatisation option of a sort of internal-debt-for equity swap), but as a result of the lack of a secondary market, uncertainty as to the real possibilities for acquiring equities in the near future, and the prospect of a lottery redemption of outstanding bonds only after 1994, people did not show interest in these bonds in spite of their very advantageous interest rate in comparison with any other investments in the nascent financial market[8].



Second, the stabilisation policy missed the opportunities resulting from the descending trend of both forms of inflation, which showed up in the fourth quarter of 1989. At that time, both open and repressed inflation were visibly slowing down (surplus liquidity of the enterprise and household sectors diminished and shortages were reduced).

Third the fact was neglected that adjustments by economic agents (especially by production enterprises) would initially almost exclusively be of a non-market nature i.e. the processes would be dominated on the one hand, by the so-called cost-based pricing formula, and on the other, by a reduction in the volume of production because of the decline in real demand. In the face of such negative adjustment processes the objectives set by the government for the economic programme as a whole, and the stabilisation programme in particular, simply could not be achieved. Above all, objectives such as a 1 % inflation rate to be achieved in June 1990, a 5 % fall in individual production, a 3.1 % decline in GDP and 1% in per capita consumption with a 20 % reduction in real wages, were from the very beginning considered to be illusory. In the light of the facts it is only the latter indicator which can -and should- continue to be the goal of economic policy.

Fourth, the much higher than expected, so-called corrective inflation in January and February, as well as its echo in April and May, resulted in much greater effects with respect to inflationary wealth and income redistribution than originally assumed by the government, on the one hand, and than necessary from the point of view of the processes of stabilisation, on the other.

Fifth, the "side" effects of the stabilisation measures in the shape of real processes, especially of an exceptionally deep recession, must receive unambiguously negative evaluation. The decline in industrial production by about 30 % over the first half of 1990 would hardly be an acceptable cost even if the stabilisation policy had been successful. Even greater proof of its failure is the fact that the recession has been to a large extent unfruitful. This is a result of the fact that the fall in production has not been accompanied by the elimination of the most inefficient enterprises nor by the desired restructuring, but on the contrary, the recession has most severely affected the enterprises supplying household consumption needs. So production which constitutes the heaviest burden on the budget, the balance of payments and the economy as a whole is not being eliminated from the market, while in many cases production which we are interested in maintaining is being reduced (this mainly regards some branches of the food-processing and consumption goods industries, e.g. the textile industry).

Sixth, the primary objective of the stabilisation policy -i.e. to reduce the inflation rate to 1 % monthly until the middle of the year- was not achieved, because under the existing structural and systemic conditions, it could not be achieved. To put it simply, this goal was too boldly set. In the initial phase of debate, I defined such optimistic visions of inflation being curbed within a very short period as an expression of a lack of imagination and responsibility[9], unless, in one of the successive phases, refuge was to be taken in freeze-type measures, which however it is clear are inconsistent with the philosophy behind the new systemic and political principles. Still worse, price inflation has been stabilised at the highest level in Europe, and much has to be done to make this stabilisation as short as possible, since the mean monthly inflation rate for the period March- July 1990 reached about 6 %, this being equivalent to a yearly inflation level of 100 %. It is worth adding that in April and in July the inflation level was similar to that of the first half of 1988 (8.1 % in April in comparison with 8.3 %). But there is a difference: now industrial production is 30 % lower.

Seventh, these negative facts must however be perceived against the background of a positive phenomenon: as a result of the stabilisation programme and systemic transformations, shortages have been radically reduced, though not fully eliminated. This is true of all markets, because it regards the consumption goods market as well as the procurement and investment goods markets.

Eighth, a very positive effect form the point of view of the goal of stabilisation has been the maintenance of the fixed bank (official) dollar exchange rate over seven consecutive months with the market exchange rate only slightly deviating from the official one. Although its impact on different spheres of economic activity -especially on foreign trade, the trade balance and the transfer level- is different, there is no doubt that exchange rate stabilisation contributes towards lowering the inflationary expectations of economic agents and therefore supports the process of stabilising the whole social and economic system.

To sum up, implementation of the programme so far in Poland shows that given a choice between the "cold turkey" therapy (not to be confused with shock therapy) and a gradual approach, the gradual approach should be chosen. At the same time, I have long since insisted that graduality does not rule out inflicting a sharp blow at some unwholesome aspects of the structure of the system and of the behaviour of economic agents. But it is impossible to solve -as some people propose- too many problems simultaneously or in too short a period. Anyway, life itself and the experiences of the last few months irrefutably show that there is a need for a second thrust -maybe only one of many successive moves- towards stabilisation and at the same time transformation of the economy into a market economy. But it must be regretted that this conclusion has to be drawn anew at a high social cost, the scale of which could have been much less.

6. Elements of the "Second Gear" of Stabilization

In the light of past experience and the resulting conclusions, it becomes evident that the economy must "change gear", although by no means must it change the fundamental direction of the market- oriented institutional (systemic) structural and political transformation of the whole economy. The essence of the "second gear" must be an active interventionist state policy oriented towards supply-inducing structural transformations, since otherwise, if the economy does not regain its capability for growth, it will remain in a condition of protracted depression without any likelihood of permanent stabilisation. We cannot continue to delude ourselves that the problems of structural changes and economic recovery will be solved by the market itself. And there are two reasons why. First, it has not been achieved anywhere else in the modern world, even in very developed and mature economies, by any market which is not supported by a sound state policy. Second, in Poland's case, we are still dealing with market mechanisms which are only just coming into being and must be (and sometimes -even contrary to official statements- already are) supported by an enlightened state interventionism.

The particular difficulty of the stabilisation policy "second gear" is the need to solve a sharp contradiction between recession and inflation. The trade off of open (price) inflations versus repressed inflation (shortages) typical of the economy in the previous period has now been replaced -and this is an important achievement of economic policy- by the dilemma: how can economic growth be stimulated while preventing depression (or even a further recession) without a renewed acceleration of price inflation (or the return of shortages)? Against the background of this question, I would like to formulate some proposals.

First, while the stabilisation policy is running in "second gear" and the systemic and structural changes intrinsically coupled with this policy are continuing, one should not lay down any too- far reaching objectives with regard to the scale of inflation rate reduction.

It seems that bringing the inflation rate down to about 2 % monthly (i.e. 26.8 per cent yearly) while keeping up the trend towards the formation of market-clearing (shortage-eliminating) prices is sufficient at this phase of the fight against inflation, since otherwise, -e.g. if a goal in the order of 1 per cent monthly were laid down, policy would have to be much more restrictive, thus sustaining the recessionary trends in the real economy sphere and threatening it with further destruction[1].

Second, economic recovery must be mainly induced by stimulating investments, since only investments can contribute to structural changes having an anti-inflatory character. Without new investments a trend towards economic growth cannot be permanently sustained. Investments must be stimulated, among other things, by a less restrictive fiscal policy, especially in combination with transformations in ownership.

Third, monetary policy must, as up to the present, remain -because of its restrictiveness- the main element of the continuing stabilisation effort. But for an intermediate period, until permanent stabilisation is achieved, the interest rate on household deposits must be higher than that on loans, since that is the third phase in the above-described interest policy sequence. Only under such conditions -and not with a negative interest rate on a part of deposits- a substantial increase in the propensity of households to save can be expected, without which a non-inflationary growth of effective investment will hardly be imaginable, all the more so because foreign aid in this respect can only expected to a limited extent. In my opinion, particularly important in this area is a perceptible positive real interest rate on short and medium-term deposits. One of the serious errors in the interest rate policy so far followed has been the lack of appeal of three and six month deposits. Under conditions of aggressive stabilisation measures, three months and even more six months is a long period. The refinancing credit rate must catch up with the interest rate on the deposits of households, not only in the case of 12-month deposits but even with respect to three-month deposits. Such measures will of course contribute to a relative reduction in the demand of households (without a need to limit their real incomes) and at the same time, to non-inflationary growth of the demand for investment, thus oriented towards a long-term increase of production. It is only later that the fourth phase of the interest rate policy must be initiated, during which both interest rates must be positive in real terms, with credit prices exceeding the interest rate on deposits.

Fourth, owing to the increased propensity of households to save, it will be possible -in keeping up the restrictive fiscal and monetary policy- to unblock the anti-motivational wage limitations and eliminate the pathologies which sometimes result from these limitations, e.g. making it impossible to employ workers dismissed from the state sector in the private sector. At present, the maintenance of wage rise limitations mainly leads to recession and further decline in the real wage level rather than to a curbing of inflationary processes. Wage policy needs radical flexibilisation through liberalisation, and this, if the conditions I have mentioned above are met, should exert a supply-promoting influence.

Fifth, price liberalisation must continue gradually. The fundamental problem consists in the requirement that prices should rise as slowly as possible and at the same time, be kept at a market-clearing level. Only then should the subsidies still existing be eliminated; as long as the budget is balanced, subsidies will not necessarily feed inflation.

Sixth, the exchange rate policy must also be made more flexible. I think that the high, still persisting inflation to a certain extent results from the fact that the fixed uniform exchange rate was anchored to the US dollar. In view of the exchange rate risk, the structure of Polish external trade and the balance of payments, I think it would be better -on the occasion of a possibly indispensable currency rate correction- to anchor the exchange rate to a currency basket (e.g. ECU) which reflects our external trade relations better. At the same time, this would stimulate import-induced inflation to a lesser extent.

Seventh, one should constantly strive to create a competitive environment. Cordoning off the economy with restrictive import tariffs in reality favours the opposite situation. Domestic producers often continue to avail themselves of the comfort of monopolistic positions undisturbed by competitive imports. Here the most typical examples are our automotive and electronic durables industries. In this connection, radical reduction, and in most cases even abolition of import duties, and a further liberalisation of foreign trade seem to be justified, since only under such conditions will the positive effects of a supply-inducing, outwardly open policy be attainable. The fear of a cumulative flow of foreign currency out of the country, presumably leading to a failure of the nominal anchor represented by the fixed exchange rate seems exaggerated. This view is based on the assumption that, under conditions of greater liberalisation of external trade, it is the foreign currency turnover and not necessarily the foreign currency outflow that will accelerate. The resultant of all adjustment processes which could be set in motion should, in this case, be advantageous to a build up of nominal foreign currency balances, especially those of the household sector. This is also corroborated by the experience of many other countries which have taken measures to stabilise and reduce the scale of currency substitution [Pinto B., 1990].

So in the light of the sum of the above considerations, it can well be seen what indispensable systemic, political and structural measures should together form what I call the "second gear" of stabilisation. In my opinion, the economic situation is sufficiently complicated -and destabilised- to justify concentrated anti-inflationary and equilibrating measures being taken right now. The fact of the matter is that economic pressures are, by their very nature, continuous, and this cannot be changed by even the most radical approach of the "now-or-never" of "all-or-nothing" type. The point is that it is certainly a question of "now", but surely not of "everything", since the present stabilisation policy is, on one hand, the continuation of measures already taken earlier and on the other, the beginning of processes we will have to struggle with in the future.

Notes

[1] Literature devoted to inflation in socialist economies is becoming increasingly extensive. See also Winiecki (1985), Kolodko (1987), Rosati and Michalski (1989), Rutkowski (1989), and Topinski (1989). From the English language literature, it is primarily Nuti's study that is worth citing.

[2] The use of the term "hyperinflation" in the context of Polish 1989-90 inflation is controversial, since it only lasted for seven months, and on average in that period amounted to somewhat less than 40 per cent monthly which is equivalent to about 5,500 per cent on a yearly basis. Dornbusch (1990) would call it "megainflation". Cagan (1956) -using very formal criteria- defines hyperinflation as a process of a steady rise in prices in excess of 50 per cent (why not 40 per cent for example?) in each consecutive month. But according to Cagan, to overcome hyperinflation calls for a reduction of the inflation rate to less than 50 per cent monthly at least throughout the following year. Nevertheless, I still intend to use the term "hyperinflation" here, keeping in mind however that as will be shown below, in Poland it has an induced character. Hence its vehemence, irregularity (from 17.7 % in December 1989 to 78.6 % in January 1990) and short duration.

[3] Some economists [Topinski A., (1989)] try to deny the applicability of the inflationary overhang notion to the analysis of resource disequilibrium. I fear also that incomplete comprehension of the essence of the so-called overhang and an overestimation of its real volume was one of the reasons behind excessive drainage on the monetary assets of the household sector in the first months of implementation of the stabilisation programme.

[4] The treatment of possible receipts from such bonds as budget revenue is controversial. However, since the state is not obliged to redeem these bonds in financing this expenditure from budget resources but has to exchange them for privatised enterprise equities, we are not dealing here with a conventional internal debt. So in this connection, receipts from this specific bond issue can be considered to be budget revenue rather than budget debt contracted on the open market.

[5] Some economists use farther-reaching definitions in this context. Rosati (1990) rightly remarks that the simultaneous use of a certain combination of financial, monetary and wage restrictions brings the economy to outright ruin.

[6] They were already partly enacted in May, mainly through liberalisation of trade margins and by shifting transportation costs onto buyers. Prices rose on the average by about 5 %. But from the buyers point of view -and also as an implication for production costs- the rise in actual cash prices paid for coal was considerably more. Coal prices were liberalised completely in July 1990.

[7] Here, mean monthly levels in comparison with each previous month are meant. The so-called "point-to-point" indices, i.e. end-of-month to end-of-month indices are presented in Figure 3.

8 One million of 1990 year-end Zloty had the following nominal values at the end of the first quarter of 1990 (taking into account changes in exchange rate, nominal interest rates and premium in the case of bonds): 2,496 million if invested in bonds, 1.06 million in the case of bank deposits in US dollars, and 1.277 million in the case of a three month deposit with the National Savings Bank (PRO).

9 On this subject see also arguments set forth at the XV Congress of the Polish Economic Society in Lodz in November 1989 [Kolodko G.W., 1989b], and also in the debate with Jeffrey Sachs [Kolodko G.W. and J. Sachs, 1989].

10 Rudiger Dornbusch (1990) thinks that goals of the zero-inflation type for countries trying to extricate themselves from mega or hyper-type inflation are unrealistic, because they can lead to so a deep recession that it will in its turn become a pro-inflationary factor, and destroy the whole stabilisation effort. I would only like to add that, as in Poland also in Yugoslavia, unrealistic goals as to the expected inflation rate were adopted. In Yugoslavia it was assumed it would amount to 1 % monthly on the average throughout the year. In reality, it amounted in the consecutive months of the first

References

Bruno M., G. Di Telia, R. Dornbusch and S. Fisher (1988), *Inflation, Stabilization. The Experience of Israel, Argentina, Brazil, Bolivia and Mexico,* The MIT Press, Cambridge, Mass., London.

Cagan P. (1956), *The Monetary Dynamics of Hyperinflation,* in M. Friedman (ed.), *Studies in the Quantity Theory of Money,* University of Chicago Press, Chicago.

Dornbusch R. (1990), *Experience with Extreme Monetary Instability,* MIT, Cambridge, Mass., (paper presented at the conference on *"Managing Inflation in Socialist Economies",* EDI World Bank-IGS SGPiS, Warsaw, March 12-13).

Frydman R, G.W. Kolodko and S. Wellisz (1990), *Stabilization in Poland: A Progress Report,* paper presented at the second international monetarist conference on *"Exchange Rate Policies of Less Developed Market and Socialist Economies".* Freie Universitaet Berlin and Landeszentralbank Berlin, Berlin 10-12 May.

Kolodko G.W. and W.W. McMahon (1987), "Stagflation and Shortageflation. A Comparative approach", *Kyklos,* vol. 40, f. 2.

Kolodko G.W. and J. Sachs (1989), "The Patient is Ready", *The Warsaw Voice,* 24 December.

Kolodko G.W. and W. Grzegorz (1987), "Polska w swiecie inflacji" (Poland in the World of Inflation), *Ksiazka i Wiedza,* Warszawa.

Kolodko G.W. (1989a), *Kryzys, dostosowanie, rozwoj* (Crisis, Adjustment, Development), Panstwowe Wydawnictwo Ekonomiczne, Warszawa.

Kolodko G.W. (1989b), "Crisis, Adjustment, Development. Political Challenges and Dilemmas of Economic Sciences", *Working Papers* n. 7, Institute of Finance, Warsaw.

Kolodko G.W. (1990), *Inflacja, reforma, stabilizacja* (Inflation, Reform, Stabilisation), Alma-Press, Warszawa.

Kornai J. (1990), *The Road to a Free Economy,* Norton, New York.

Nuti M. (1986), "Hidden and Repressed Inflation in Soviet-Type Economies: Definitions, Measurements and Stabilization", *Contributions to Political Economy,* n. 5.

Pinto B., *Unification of Official and Black Market Exchange Rates in Sub-Saharan Africa: Monetarism in the Tropics?,* paper presented at the second international monetarist conference on *"Exchange Rate Policies of Less Developed Market and Socialist Economies",* Freie Universitaet Berlin und Landeszentralbank Berlin, Berlin, 10-12 May.

Raport (1990), *Raport o stanie finansowym panstwa w 1989 roku* (Report on the Financial Condition of the State in 1989), Instytut Finansow, Warszawa.

Rosati D. (1990), "Teoria i praktyka programow stabilizacyjnych Miedzynarodowego Funduszu Walutowego" (Theory and Practice of the IMF Stabilization Programs), *Studia i Materialy* n. 13, Instytut Koniunktur i Cen Handlu Zagranicznego, Warszawa.

Rosati D. and R. Michalski (1989), "Inflacja" (Inflation), *Ksiazka i Wiedza,* Warszawa.

Rutkowski J. (1989), *Inflacja w Polsce Ludowej* (Inflation in the People's Republic of Poland), Panstwowe Wydawnictwo Ekonomiczne, Warszawa.

Tanzi V. (1977), "Inflation, Lags in Collection and the Real Value of Tax Revenue", *IMF Staff Papers,* n. 1.

Topinski A. (1989), *Inflacja a funkcjonowanie gospodarki polskiej* (Inflation and the Functioning of the Polish Economy), Instytut Nauk Ekonomicznych PAN - Panstwowe Wydawnictwo Ekonomiczne, Warszawa.Winiecki J. (1986), *Inflacja w gospodarce rynkowej i w gospodarce planowej* (Inflation in Market Economy and in Planned Economy), Panstwowe Wydawnictwo Ekonomiczne, Warszawa.