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Inflation Stabilization in Poland: A Year After

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1. Introduction

The fundamental problem to be considered in this paper concerns the theoretical and practical problems of the stabilization in post-communist economy, in particular the Polish experience, since stabilizations of this type must, by their very nature, differ from the classical stabilization policies (Bruno - Di Telia - Dornbusch - Fischer [1]) (*) in at least two fundamental aspects.

Firstly, in the post-communist economy it is not only the stabilization at a low, controllable price inflation level that matters, but also - and even in the first place - the elimination of shortages. In other words, the goal of stabilization is the formation of a mechanism of prices which, with as low as possible rate of their rise, will help to clear the market.

Secondly, the stabilization is to be perceived in a broader context of systemic transformation from planned, bureaucratically administered economy, to a market economy. In the light of this perception, stabilization is one of the prerequisites and, at the same time, mechanisms of the market-oriented transition, while the systemic transformation is of prioritary importance.

It is from this point of view that the Polish experience of 1989-1990 and the resulting perspectives must be evaluated, Since Poland’s case is not unique. Both the process of reaching very intensive inflationary processes and the attempts to fight them under conditions of market transformation are, may be, the most spectacular but still only one aspect of certain more general trends appearing within the post-communist world.

The empirical analysis and certain generalizing theoretical conclusions in this paper will be particularly focussed on the character and sources of the Polish inflation in the period immediately preceding the 1990 stabilization package, assumptions and goals of the package and evaluation of its implementation. This is of particular importance because of conclusions resulting therefrom for economic policies of the post-communist countries are hardly to be overestimated. Many other countries - from Soviet Union to China, from Estonia to Albania - are facing options similar to the Polish dilemmas of 1989-1990. On the one hand - they find themselves in different development stages of inflationary proceses and of attempts at controlling them and, on the other hand, are in different situations as to the pace and direction of the market transition, but the Polish experience should nevertheless be highly instructive for all these economies.

The paper consists of ten paragraphs. The second paragraph shortly discusses the development of inflation in the late 80s, especially the so-called induced inflation of the later half of 1989. In the third paragraph, fundamental assumptions of the stabilization package the implementation of which was started at the beginning of 1990 are presented. The fourth

* *Advise*: the numbers in square brackets refer to the Bibliography in the appendix.

paragraph informs about the announced program goals, while the fifth presents its real results after one year of implementation. In the next, sixth paragraph, favourable economic processes and developments connected with the stabilization and systemic transformation policy are presented. It is against this background that, in paragraph 7, an attempt is made to answer the question what causes have led to such huge divergencies between the assumed targets and the achieved results. Do the causes lie in the assumptions or rather in the program implementation sphere? The eighth paragraph, in turn, poses the question about the applicability of the cold-turkey-type or graduality-type approach to the stabilization in post-communist economies in general and the Polish one in particular.

The ninth paragraph discusses the transition from a shortageflation-type crisis to slumpflation. And, finally, the tenth paragraph, in summing up the discussion, contains a certain attempt to outline the perspectives of stabilization policy in Poland as well as the conclusions resulting therefrom for other economies of the post-communist world. To the paper, a statistical Appendix is subjoined (Graphs 3-12) illustrating the course of inflation and stabilization as well a the accompanying real and financial processes.

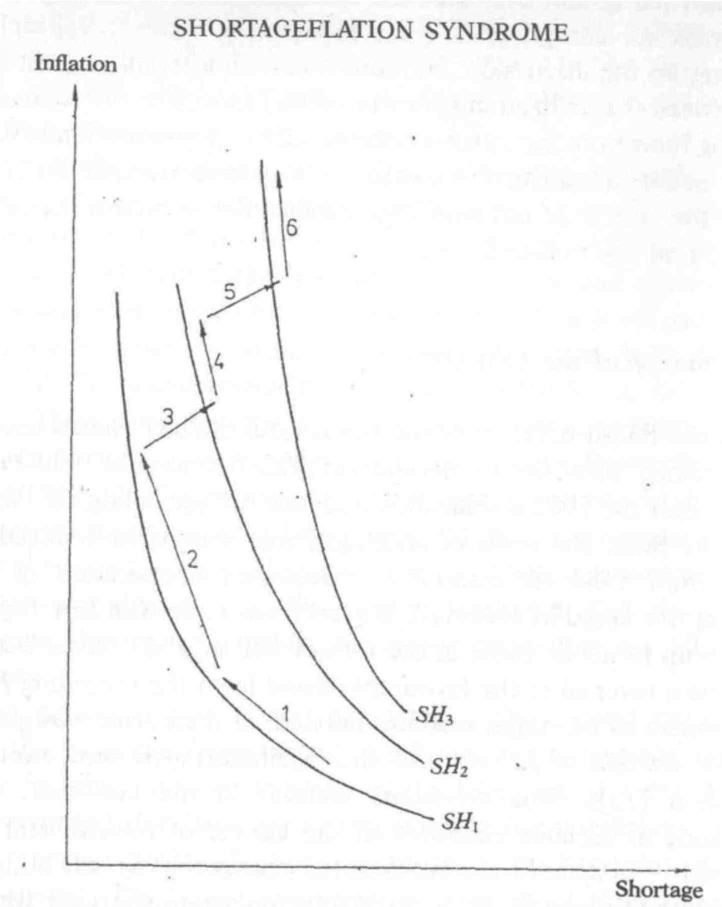
2. Inflation of the Late 80s

In the Polish inflation of the 80s several distinct phases could be distinguished. After the acceleration of price rise pace in 1980-1982, it slowed after the 1982 stabilization and was further falling till 1985. At the same time, the scale of shortages was somewhat reduced too. Then, from 1986 till mid-1989, a renewed acceleration of price inflation rate could be observed. It grew from somewhat less than 15% in 1985 up to about 160% in the former half of 1989. What is more, this time a reversal of the favourable trend from the preceding period with respect to shortages was also noticed, as their scale was growing too. So, we had to do with the shortageflation syndrome (Kolodko-McMahon [12]). This syndrome consists in the fact that, under conditions of socialist economy in the course of reform, still characterized - in spite of market-oriented changes - by soft budgetary constraints (Kornai [15]), a price inflation-versus-shortage trade-off appears in the short run. Whereas in the long run - because of the inconsistent and soft fiscal, monetary and income policies - both the so-called price (open) inflation and repressed inflation with its accompanying permanent shortages simultaneously grow (Kolodko [8]). The shortageflation curve is shifting ever farther from the coordinate system origin towards the upper right-hand corner of the diagram (Graph 1).

The essence of the shortageflation syndrome shows that, in the face of intensification of both the open and repressed inflations above a certain critical level, the syndrome can not be overcome without making recourse to price liberalization, the latter being - as is well known - contrary to the command-type economy management system. Attempts at partial price liberalization not supported by other necessary measures tightening the budgetary constraints imposed on all economic agents through appropriate fiscal, monetary and income policies, lead in the long run exclusively to an acceleration of open-inflation processes, and by no means eliminate the shortages. Moreover, not only the position of the shortageflation curve in relation to the coordinate system origin, but its slope too, are changing. With time, it becomes more and more vertical. This means that the scope for the specific substitution between the open and repressed inflation is becoming ever less. Reducing the shortage scale by one additional joint requires an ever greater increase in the open (price) inflation. This was was just the path Poland took since 1985 until, in mid-1989, it reached the situation of extreme exhaustion by the shortageflation syndrome. In spite of the ever faster price rise pace, the shortages not only did not diminish, but were growing too. This resulted not only from a faster increase in nominal incomes than in prices, but also from the fact that, beginning with

May 1989, we already witnessed an onset of recessionary developments in the real sphere.

Graph 1



It was against the above background that the transition from galloping price inflation, with the accompanying shortages, to quasi-hyperinflation took place in Poland beginning with August 1989. Till the initiation of the stabilization package, this hyperinflation was accompanied by shortages, so for half-a-year we had to do with hypershortageflation. This resulted from the only partial liberalization of prices, namely liberalization of food prices in August 1989. The huge inflation acceleration was also a result of the introduction of a general income indexation system imposed by the Solidarity. After the power take over by Solidarity in August of that year, indexation rules were somewhat modified, but this change was already unable to stop hyperinflation.

This temporary hyperinflation was of induced character (Kolodko [11]). It was to a certain extent provoked by the macroeconomic policy carried out in the peculiar period of fundamental political ransformation in Poland (Fischer-Gelb [4]). The hyperinflation was provoked, on the one hand, by political struggle and, on the other hand, by the conviction that under hyperinflation conditions it would easier substantially to lower the level of real wages and to iepreciate the value of money balances, especially in possession of households. In addition, the induced quasi-hyperinflation perceived in his way resulted from the conviction that hyperinflation would be easier to overcome than the shortageflation syndrome in the form in which it existed immediately before. But above all, the more or less ieliberate option on behalf on hyperinflation ensued from the priority ?iven to objectives bearing on the transition to a market economy, since the implementation of this task requires, among other things, an almost full liberalization of prices and a deep money devaluation as well as a rise in credit costs up to their real level. Under conditions of such a considerable monetary destabilization with which we had to do in Poland, the achievement of the above objectives was not possible otherwise than by passing through hyperinflation phase.

3. Stabilization Package

The stabilization package was structured so as to induce processes which would lead to: a) first, demand and supply equilibration in the commodity market or, more exactly, formation of a mechanism of market-clearing prices; b) second, reduction in the inflation rate to the lowest possible level; c) third, equilibration of the current account balance.

Putting aside some technical details (Frydman - Wellisz - Kolodko [5]), the stabilization program included five main planes of action, namely: 1) fiscal adjustment; 2) price liberalization and adjustment; 3) tough monetary policy; 4) wage control; 5) exchange rate unification ind introduction of internal convertibility of zloty.

The fiscal adjustment policy was aimed at balancing the budget. In the year preceding the stabilization, budget deficit amounted to 6.0% of the state balance and 7.4% of the general government balance. Subsidies made about 1/3 of state budget expenditures. It vas assumed that, in order to eliminate the budget deficit, their level hould be reduced by at least one half and their share in the reduced xpenditures had to make about 1/5. The improvement of the budget ituation was also to be forested by better fiscal discipline, and possible temporary deficits were to be covered either with limited ommercial bank credits or by contracting debt in the open market ist being formed. In addition, budget revenues of 2.5% order were lanned from issues of tresaury bonds with option of later conversion ito equities of privatized enterprises. As a result of all the above leasures the state budget had to show an insignificant deficit amoun-ng to 0.2% of expenditures and the general government balance - a surplus of about 1.6%.

The second main plane of action of the package was liberalization id adjustment of prices. Contrary to widespread opinions - especially in the light of the not always justified talk about the so-called polish Big Bang - the scope of price liberalization performed at the moment of the package initiation was very limited, since the majority of prices had been already previously released, namely in the course of reforms of the 80s or - with regard to food prices - in August 1989. Thus, in the period of making way towards stabilization, the price system considered from the point of view of price control was as in Table 1.

In 1990, free prices of consumer goods and services made 82.6% of total sales value in this category, procurement goods prices were liberalized in 89%, and purchasing prices of agricultural products in 100%.

Thus, sources of the huge price explosion which took place immediately after the program initiation must not be sought in first line in the price liberalization scope, since the latter was limited, but in the centrally performed price adjustments and especially in the administratively carried out energy and coal price rises (in the latter case as much as sevenfold). These price rises were aimed, on the one hand, at reducing the subsidies which had excessively pressed on the budget and, on the other hand, at changing the price relations through a stepwise relative appreciation of fuels, especially of the hard coal playing a key role in the Polish economy.

Table 1

PRICE STRUCTURE IN POLAND IN 1989

Category	July	December
Share of contractual (freely negotiated) prices in the total sales		
Consumer goods and services	71	86
of which food...	58	93
State purchasing prices of agricultural products	30	41
Procurement goods..	86	89
Raw materials and components..	89	89
Share of prices subjected to maximum rise index and obligation to inform about intended rise		
a) maximum price rise indices:		
a consumer goods and services...	12.4	6.6
procurement goods	24.7	21.0
b) obligation to inform about intended price rises:		
consumer goods and services	23.6	21.4
procurement goods..	4.6	5.5
Share of fully prices in the total sales value		
Consumer goods and services	35.0	58.0
Procurement goods	56.7	56.5

Source: Price Department of the Ministry of Finance.

The third main plane of stabilization neasures had to include a tough monetary policy finding its expression in a strict control of money supply and regulation of its growth rate through the use of really positive interest rates. The really negative interest rates both on credits and deposits, typical of the shortageflation period, were to be replaced by positive interest rates. After a short period of the so-called corrective inflation whose rate was assumed to amount 45% in January (in comparison to the average price level in December) and to 20% in February, the interest rate had to exceed the inflation rate in the third month of program implementation already. The tough monetary policy had to bring several effects. First, it should radically reduce the demand of economic agents for credits and, as a result - through limitation of the liquidity of all economy sectors - bring a reduction in demand and, consequently, a decline in inflation rate. Second, it was intended to force the enterprises to reduce their investment demand whose excessive proportions were one of the chronic sources of inflationary processes in the previous period. Third, the really positive interest rates had permanently to increase the households' propensity for saving and overcome their inflationary expectations. It was in such an environment only - i.e. with tightened budgetary constraints resulting from restrictive fiscal and monetary measures - that the price liberalization and adjustment were not doomed to degenerate into hyperinflation.

It was also assumed - and that was the fourth program plane - that, in spite of the general trend towards liberalization, nominal wage rises would be subjected to strict control. In Poland - as distinct from other programs, e.g. the Yugoslav stabilization program carried out at the same time (Coricelli - Rocha [2]) - wages were not fully frozen, but a mechanism of their partial indexation was adopted which provided for the linkage of the admissible wage fund rise in the enterprise to the inflation rate through officially fixed coefficients. In consecutive months of the former half of the year they were set at 0.3, 0.2, 0.2, 0.2, 0.6 and 0.6, respectively. In July, this coefficient was exceptionally set at 1.0 and, then, for the rest of the year, reduced back to 0.6. It can be easily noticed that with this kind of indexation the higher the inflation rate the larger the scale of the drop in real wages.

Finally, the fifth main stabilization program plane was the introduction of internal convertibility of the domestic currency along with simultaneous exchange rate unification. It was provided that enterprises would be obliged to sell to the state at the stabilized exchange rate their foreign currencies gained from export receipts, while banks would be obliged to sell foreign currencies to importers. Also, the foreign currency turnover in the households sector had been already earlier (in March 1989) liberalized. Liquidity was to be guaranted by means of a stabilization loan obtained from OECD countries in the amount of US$ i billion. This point of the package also required a devaluation of the Polish zloty. After gradual devaluation (from Zl 1,400 to 6,000 for one US dollar) between September and December 1989, it was decided at the start of the package implementation to drastically devaluate the domestic currency by over one half, down even below the free-market level of Zl 9,500 for one US dollar. And decision was made to adopt just this exchange rate as the nominal anchor supporting the whole stabilization program.

Is is still to be added that very high charges were imposed on imports in the form of duties (mostly of 20% order) and, additionally, m the form of the so-called turnover tax equally amounting to 20% assessed on % above basis (i.e. on the merchandise value increased by duty). As a result, the cost of a dollar in the import was often by 44% higher than the value obtained by enterprise for a dollar earned m export. This was intended to limit the enterprise sector's demand for foreign currencies and, in this way, contribute to exchange rate stabilization and, in consequence, to inflation stabilization at level.

4. Program Goals

The stabilization program outlined in the above-described wa got the approval of the International Monetary Fund and its basic points were put down in the Letter of Intent. Also, there was an explicit social support for this program, above all as a result of fundamental political transformations towards democratization simultaneously going on in Poland.

Both these facts - international support as well as the indulgence of the country's population or, more exactly, the governments belief as to their scale - led to an unrealistic formulation of program goals and, what was worse, to a general overshooting of the program, since it was assumed the inflation would drop in the middle of the year to 1% in monthly scale. At the same it was assumed that after a half-year period already the economy would once more enter the road of economic growth. But this was to be achieved at the cost of a 20% fall in real wages.

As far as trends in the real sphere were concerned, a drop by 1% (!) in consumption, by 3.1% in GNP and by 5% in industrial production was assumed in comparison with 1989. This relatively - for the project scale - small recession (after an only 1.5% GNP decrease in the preceding year) was to be accompanied by unemployment amounting to 400,000 persons, this being equivalent to about 2% of the total workforce.

With respect to foreign trade it was assumed the stabilization program execution would lead to such exports and imports development that in the so-called I payments zone (unconvertible currencies) a small surplus amounting to SUR 0.5 billion would ensue, whereas in the II payments zone (convertible currencies) - a deficit amounting to about US $ 0.8 billion.

It was also assumed that in the initial program implementation phase the nominal exchange rate of Zl 9,500 for one US $ would be maintained which, in view of the expected inflation scale, was equivalent to a small real appreciation of zloty.

5. Implementation

Should the formally taken execution degree of the above-presented goals be adopted as exclusive implementation criterion of the Polish stabilization program, we would be obliged to ascertain its complete failure. This is clearly illustrated by the comparison presented in Table 2.

Table 2

POLISH STABILIZATION PROGRAM: GOALS AND RESULTS

	Assumptions	Results
CPI (%)	20	100(a)
Industrial output	-5.0	-25.4(b)
GNP...	-3.1	-18
Unemployment..	2.0	6.3
Trade balance:		
in billions of dollars	-0.8	+4.3
in billions of roubles..	+0.5	+4.2

(a) In the second *Letter of Intent* to the IMF, approved in August already, the monthly inflation rates for October, November and December 1990 were on the average assumed at 1 .5, 1.0 and 2.0% respectively, i.e. at about 20% in annualised scale. The real inflation rate in this period amounts - likewise in yearly scale - to almost 100% (almost 6%).

(b) Index for 1 1 months of 1990 with respect to the public sector whose share in the industrial output amounts to about 90%.

Source: Main Statistical Office and own calculations.

Thus, not only the announced goals were not achieved, but what was achieved was obtained at a much higher cost than that originally foreseen in exchange for better results. In particular, the scale of decline in the standard of living and in real wages has been much larger than originally announced by the government, since real wages were reduced by as much as 20%(1), and the real money balances of the households sector were reduced on a still larger scale. The borne hardly be justifiable, and still less socially acceptable even if one of the basic goals - i.e. inflation rate reduction down to 1-1.5% monthly on the average or 13-20% yearly - were achieved. More important still, the inflation rate at the end of 1990 and beginning 1991, when it has been still more intensified, can not be compared with the above-mentioned quasi-hyperinflation, just because of th induced character of the latter. Still more inadmissible is comparing the inflation from arbitrarily chosen months with its highest - after all, completely induced - record level of January 1990 (as much as 79.6% monthly). It is worth remembering here that in the last three-month period of 1989 the inflation rate was already falling dropping from about 55% in October to 23 and 17% in November and December, respectively. So, if the contention of induced character of the Polish hyperinflation is justified, proper reference point for the 100% inflation arisen as a result of the stabilization package implementation and the accompanying processes (among other things, the recent

[1] This fact seems to be still overlooked by one of the foreign experts who earlier foretold a decline in inflation rate down 1% at most for the first month following the Package initiation already and later tried to belittle the recession scale brought about by the wrong stabilization policy. Jeffrey Sachs [20] declares: «There has been a persistent - and certainly erroneous - forecast of a 20% unemployment rate, though the unemployment rate stands at 5.5%, lower than in the United States. Similarly, fears of plummeting take-home pay abound, though the average industrial worker earne equivalent of $131 in October, compared with $108 in October 1989». As I mention above, government forecasts of unemployment rate spoke about 2% and not. Besides, comparing the unemployment in Poland which, within one year, has grown from zero to over 6% with unemployment in the United States can not be taken seriously. Finally, suggesting a more than 20% wage rise by converting the wages into dollars, in a situation where they really have fallen by over 20%, is an utter misuse.

adverse external developments) in the 160% inflation of the former half of 1989. It is in this perspective only that one can see how poor with respect to inflation stabilization have been the results brought about by the Polish Big Bang.

So, no wonder that in the presidential election in the later part of November 1990, where the governing prime minister running for presidency got a poor 18% of votes, Polish people gave voice to their negative evaluation of the economic situation. It is just because the stabilization program of his team had failed that Mazowiecki's government was overthrown, and not the other way round. It is not true that destabilization caused by the election has made the program implementation impossible, but it is just this program that has contributed to the political destabilization accompanying the election. This is an extremely important ascertainment, as it has a substantial ortance for the proper assessment of the Polish experience from h point of view of other post-communist economies which will have undergo a similar antiinflationary and stabilizing therapy.

6. Stabilization Versus Transition to a Market Economy

An assessment of stabilization program results separately from the broader context of systemic transformation oriented towards creation of market economy would be one-sided and over-simplified. The stabilization package being implemented in Poland must be perceived in a broader perspective of the complex market-oriented transition process. Hypothesis can be framed that, in reality, stabilization has been subordinated to transition in so far as transition in the primary strategic goal to be attained even at the cost of failure of the stabilization policy, inclusive of further destabilization.

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

In Poland's case, at the moment of stabilization program initiation, the market-oriented economic reforms were considerably advanced already. One must keep in mind that the Polish economy was in 1989 already in the forefront of the countries - then, not yet called post-communist (post-socialist) - which were progressing towards a market economy. One can however imagine that, in theory, a stabilization policy different from that actually chosen - and similar to the attempt undertaken in 1982 - could have been adopted. However, at that time, it was the inflation stabilization, with simultaneous reform of the socialist economy without any infringement of its fundamental principles, that was intended. It was the stabilization after which the State was to remain the dominating agent in almost all spheres, and the scope of economic liberalization, inclusive of price liberalization, was limited (Kolodko [9]).

Whereas the 1990 stabilization constitutes not only a fight for internal and external equilibration of the economy, but also for the creation of a different economic mechanism. It is accompanied by construction of appropriate institutional surroundings for the market and the use, especially in the fiscal and monetary areas, of ever more numerous policy instruments typical of the market economy.

Thus, when looking at the Polish stabilization in this perspective, its negative assessment formulated in the preceding paragraph requires relativization. It is true, that the stabilization policy of the first post-communist government has led to the deepest recession in postwar Poland and, at the same time, the deepest one in contemporary Europe, with simultaneous stabilization of inflation on the highest level in Europe in 1990. But it is equally 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. Subsidies have been markedly cut, the budget is balanced and its possible deficit must, by law, not be monetized, prices are to a very large extent liberalized, internal currency convertibility has been introduced, the privatization process has been set in motion, elements of financial markets are being developed, etc.

So, the question arises, did not certain positive effects achieved with respect to transition to a market economy unavoidably require such high costs finding their expression in the destruction of the real sphere and decline in the population's standard of living as those actually finding place? These costs are huge indeed, and attempts to belittle them not backed by any factual argumentation (Sachs [20]) do not change the facts; they at most can purposely present them in a false light. However, detailed analyses show that the huge costs of market institutional transformation and stabilization policy have not been unavoidable. Their magnitude could have been much less - and that with achievement of not worse but, may be, even better effects with respect to systemic transformation - if the numerous errors contained in the stabilization package were avoided and if the package were not evidently overshot (Rosati [19]).

7. Overshooting

One of the basic wrong assumptions contained in the stabilization package were expectations of a quick positive supply response on the part of the business sector. Enterprises behaved - and this inertia is to a large extent still lasting - differently than it would be the case in a market economy (Jorgensen - Gelb - Singh [6]). The supply respon-siveness is very low and the enterprises have generally responded to shock reduction in internal demand not by improving their efficiency but by maximization of prices - which, this time, in the phase of radical departure from the shortage economy, is already limited by effective demand barrier - as well as by reducing the absolute output level. Togegher with this, there is a time lag in employment adjustment; the employment is diminishing much slower than is the production decline. In Poland's case, the former fell in the course of 1990 by about 10% with an about 25% drop in the output of the socialized (state-owned and cooperative) industry (2).

Wrong assumptions with respect to the real sphere consisted in the naive belief that the output would automatically rouse up by itself without interference on the part of macroeconomic policy. Some state interventionism attempts were too late and badly sequenced. For the post-communist economy is not yet a market economy (but not a planned economy any more). It is a certain "systemic vacuum" period in which the known fiscal and monetary policy instruments are functioning somewhat differently than in a developed market economy. The problem consists not only in using an appropriate set of Policy instruments, but also in doing in the right time. And this has not been the case; since we have to do - on the one hand - with a ieneral overshooting of the program, and - on the other hand - with wrong responses resulting from undue insistence on automat' functioning of certain mechanisms. In

[2] This index regards the output of the socialized sector. In the private sector - nose share in the global 1990 industrial production has increased up to over 11% - e output has grown by about 9%, although there are other estimates showing its much greater increment.

other words, a kind of "ove liberalization" of the economy has taken place here as, may be reaction to its bureaucratization in the past.

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

What is more important, the mechanism for controlling the pace of nominal wage rise has been constructed in such a way that the non utilized limit of the admissible wage rise (upon exceeding this limit, the enterprise is bound to pay a prohibitive tax making from 200 to 500% depending on the scale of overstepping the limit) can be utilized in the following months. And this has been the case, especially in the latter half of the year (Tables 3 and 4). This is a bad mechanism. In the initial period its action was pro-recessionary (through reduction in effective demand and, consequently, in sales and production). Whereas later its action has been rather pro-inflationary, since an acceleration of the wage rise rate does not automatically lead to output growth but, in the first place, to acceleration of inflationary processes. This has been particularly visible since September. Thus, the statistical indices of real wage changes can not be averaged, since the excessive drop at the beginning of the year is not neutralized by the excessive rise in its latter half. Because the former has brought about recession whose scale could have been less, and the latter is not able to reverse the situation.

And as to the drastic rise in interest rates in January and their maintenance at a restrictive and processionary level till the end or February, it almost provoked a collapse in the real sphere. It was mainly during these two months that the huge recession - of 30% order - took place and, ever since, the economy has been already staying in recession state. Whereas the explosion of the so-called corrective inflation took place mainly in the former half of January. Then, the high interest rate already exerted a mainly pro-recessionary rather than antiinflationary inflence, since its really negative level with respect to deposits did not contribute to overcoming the inflationary expectations of the household sector. The administrative regulation of interest rates in monthly cycles - after all, having little in common with real cycles of economic and financial processes - was not flexible enough. Appropriate modifications to the interest rate policy were made in November only. Interests on households' deposits have been raised - tough they still are negative in real terms (Table 5). This raise especially regards medium-term (three- and six-month) deposits. And under stabilization conditions these are long terms. But the move was made too late. Because now the inflation, the interest rates and the inflationary expectations are all growing. The increase in interest rates by the central bank and commercial banks only authenticates and additionally strengthens the inflationary expectations of the public. In such a situation, raising the interest to its really positive level can bring about a perverse effect in accelerating rather than stopping the inflation. Whereas if interest rates on deposits had been set at a really high level beginning with the 7th or 8th stabilization week already, this could have overcome the still extremely strong inflationary expectations.

Table 3

NORMATIVE AND ACTUAL RATES OF WAGE RISE IN FIVE BASIC SECTORS OF NATIONAL ECONOMY

	Months of 1990										
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1. Corrective coefficients	0.3	0.2	0.2	0.2	0.6	0.6	1.0	0.6	0.6	0.6	0.6
2. Percentage rates of price rise:											
- projected.................................	45.0	23.0	6.0	6.0	2.5	3.0	5.5	3.0	4.5	4.0	3.0
- actual	78.6	23.9	4.7	8.1	5.0	3.4	3.6	1.8	4.6	5.7	4.9
3. Actual rates of wages rise..................	4.6	5.4	10.5	2.5	8.7	5.6	14.4	5.9	8.7	13.8	10.3
4. Normative rates of wage rise											
- by projected size......................	13.5	4.6	1.2	1.2	1.5	1.8	5.5	1.8	2.7	2.4	1.8
- by actual price rise	23.6	4.8	0.9	1.6	3.0	2.0	3.6	1.1	2.8	3.4	2.9

Source: Own calculation based on GUS data.

Table 4

NORMATIVE AND ACTUAL WAGES IN FIVE BASIC SECTORS OF NATIONAL ECONOMY

(in thousand of zloties monthly per employee)

	Months of 1990										
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1. Actual wages excluding profit payments	618.3	651.9	720.1	738.2	802.2	846.8	969.2	1,026.3	1,115.7	1,269.1	1,400.3
2. Normative wages (corrected by drop in employment) by actual price rise	738.1	782.2	799.9	823.4	864.8	892.5	939.7	965.3	1,006.0	1,054.1	1,085.1
3. Margin (normative minus actual wages) by actual price rise..	119.9	130.3	79.8	85.2	62.6	45.6	-29.5	-61.1	-109.7	-215.0	-315.2
4. Cumulative margin (normative minus actual wages) by actual price rise	119.9	250.1	329.9	415.1	477.7	523.4	493.9	432.8	323.2	108.1	- 207.1
5. Hypothetical wages after a single payment of cumulative margin (normative minus actual wages).......	738.1	902.0	1,050.1	1,153.3	1,279.9	1,370.2	1,463.1	1,459.2	1,438.8	1,377.3	1,193.2

Source: Own calculation based on GUS data.

Table 5A

NOMINAL AND REAL INTEREST RATES IN JANUARY - NOVEMBER 1990 MONTHLY INTEREST RATES

Month	on deposit to PKO Bank in %						on credits in %			percentage rates of price nse
	a vista	3-months	6-months	12-months	24-months	36-months	refinancing credit	one year credit		
								minimal	maximal	
					Nominal					
January	7.00	10.00	17.00	36.00	37.00	38.00	36.00	36.00	62.00	
February	5.50	10.00	13.00	20.00	20.50	21.00	20.00	20.00	23.00	
March	3.00	5.00	6.50	10.00	10.25	10.50	10.00	9.00	12.00	
April	3.00	4.00	5.00	8.00	8.25	8.50	8.00	7.50	9.50	
May	2.00	2.75	3.40	5.50	5.65	5.80	5.50	5.00	8.00	
June	1.30	3.00	3.50	4.00	4.10	4.20	4.00	4.00	5.50	
July	0.95	1.81	2.01	2.47	2.50	2.53	2.47	2.47	2.60	
August	0.95	1.81	2.01	2.47	2.50	2.53	2.47	2.47	2.60	
September.....	0.95	2.01	2.21	2.47	2.50	2.53	2.47	2.47	2.60	
October.........	1.17	2.47	2.72	3.09	3.12	3.14	3.03	3.03	3.20	
November.....	1.24	2.80	3.07	3.42	3.45	3.47	3.26	3.26	3.63	
December										
					Real by average price index of consumer goods and services					
January	-40.42	-38.75	-34.86	-24.28	-23.72	-23.16	-24.28	-24.28	-9.80	79.6
February	-14.78	-11.15	-8.72	-3.07	-2.67	-2.26	-3.07	-3.07	-0.65	23.8
March	-1.25	-0.67	2.11	5.47	5.70	5.94	5.47	4.51	7.38	4.3
April	-4.19	-3.26	-2.33	0.47	0.70	0.93	0.47	0.00	1.86	7.5
May	-2.49	-1.77	-1.15	0.86	1.00	1.15	0.86	0.38	3.25	4.6
June	-2.03	-0.39	0.10	0.58	0.68	0.77	0.58	0.58	2.03	3.4
July	-2.56	-1.73	-1.53	-1.09	-1.06	-1.03	-1.09	-1.09	-0.97	3.6
August	-0.84	0.00	0.21	0.66	0.69	0.72	0.66	0.66	0.78	1.8
September.....	-3.49	-2.47	-2.28	-2.04	-2.01	-1.98	-2.04	-2.04	-1.92	4.6
October.........	-4.28	-3.06	-2.82	-2.47	-2.45	-2.42	-2.53	-2.53	-2.36	5.7
November.....	-3.48	-2.00	-1.75	-1.41	-1.39	-1.36	-1.56	-1.56	-1.21	4.9
December										

Source: Own calculation based on the data of GUS, PKO and NBP.

Table 5B

NOMINAL AND REAL INTEREST RATES IN JANUARY - NOVEMBER 1990 MONTHLY INTEREST RATES

Month	on deposit to PKO Bank in %						on credits in %			percentage rates of price nse
	a vista	3-months	6-months	12-months	24-months	36-months	refinancing credit	one year credit		
								minimal	maximal	
Real by point-to-point price index of consumer goods and services										
January	-48.01	-46.55	-43.15	-33.92	-33.43	-32.94	-33.92	-33.92	-21.28	105.8
February	0.19	4.46	7.31	13.96	14.43	14.91	13.96	13.96	16.81	5.3
March	-2.92	-1.04	0.38	3.68	3.91	4.15	3.68	2.73	5.56	6.1
April	-3.29	-2.35	-1.41	-1.41	1.64	1.88	1.41	0.94	2.82	6.5
May	-2.49	-1.77	-1.15	0.86	1.00	1.15	0.86	0.38	3.25	4.6
June	-1.75	-0.10	0.39	0.87	0.97	1.07	0.87	0.87	2.33	3.1
July	-2.75	-1.92	-1.72	-1.28	-1.25	-1.22	-1.28	-1.28	-1.16	3.8
August	-0.93	-0.09	0.11	0.56	0.59	0.62	0.56	0.56	0.68	1.9
September.....	-3.86	-2.85	-2.66	-2.41	-2.38	-2.35	-2.41	-2.41	-2.29	5.0
October.........	-4.73	-3.51	-3.28	-2.93	-2.90	-2.88	-2.99	-2.99	-2.82	6.2
November.....	-3.67	-2.19	-1.94	-1.60	-1.57	-1.55	-1.75	-1.75	-1.40	5.1
December										
Real by average producer price index of industrial output										
January	…	…	…	…	…	…	-35.18	-35.18	-22.78	109.8
February	…	…	…	…	…	…	9.59	9.59	12.33	9.5
March	…	…	…	…	…	…	10.22	9.22	12.22	-0.2
April	…	…	…	…	…	…	5.78	5.29	7.25	2.1
May	…	…	…	…	…	…	4.98	4.48	7.46	0.5
June	…	…	…	…	…	…	2.46	2.46	3.94	1.5
July	…	…	…	…	…	…	-0.80	-0.80	-0.68	3.3
August	…	…	…	…	…	…	-0.42	-0.42	-0.30	2.9
September.....	…	…	…	…	…	…	-0.23	-0.23	-0.10	2.7
October.........	…	…	…	…	…	…	-1.79	-1.79	-1.62	-4.9
November.....	…	…	…	…	…	…	-0.04	-0.04	0.32	3.3
December										

Source: Own calculation based on the data of GUS, PKO and NBP.

It could still be done in the 3rd to 5th month of the package implementation. But in November-December it was a right move at wrong moment, thus an ineffective one.

The third basic aspect of overshooting has been the devaluation scale. The official exchange rate was reduced down to much - even below the market (parallel) rate level. It should in this way anticipate the so-called corrective inflation. And this was what really happened, although the inflation scale was much higher than expected because of the negative feed-back between the scale of devaluation and acceleration of inflation caused by this devaluation. Nevertheless, the exchange rate has been kept over the whole year (initially, a three-month period only was assumed). But, on the other hand, such a deep exchange rate devaluation - with simultaneous additional charges imposed on imports - was a successive, additional impulse stimulating both the corrective inflation and the recession. In the latter case the impulse consisted in a clear reduction in imports, this leading to a still deeper drop in production.

A particular kind of overshooting took place not on the economic plane but on the political one. The fundamental political breakthrough in Poland in 1989 which led to power takeover by Solidarity also resulted in a vast popular support for the new government. This fact - as well as a fundamental change in the West's attitude towards Poland - permitted to undertake the extremely difficult and socially painful economic program, inclusive of its stabilization aspects. However, the awareness of vast popular support - and it was confirmed by all public opinion polls - convinced a part of politicians that the limit of social resistance was very remote and that an even farthest-going blow in the shape of a shock stabilization program was feasible. While, in the previous periods, stabilization measures did not go far enough, this time a clear abuse of social confidence took place and the restrictiveness of the fiscal, monetary and income policies was overshot far beyond the dimension capable of obtaining social acceptance. The worst in this ascertainment is the fact that political situation of this type is not likely to happen again in foreseeable future. The overshooting with respect to utilization of the popular support was a fundamental political mistake which made the effectiveness of the contemplated stabilization effort impossible. This has been an irreversible loss.

8. Cold Turkey Versus Gradualism

There are many arguments for the superiority of cold-turkey-type approach over gradualism. Dornbusch and Fischer [3] stress that a shock therapy is the only one which can gain the necessary credibility-After the initial shock - by its very nature, extremely painful for the population - there is the possibility to obtain spectacular short-term effects in fight against inflation. If so, the shock therapy can be effective if it is not followed by a too early loosening of financial restrictions. For example, in Yugoslavia, after a high inflation (64%) in December 1989, it was reduced down to zero in the second quarter of the following year. This was a spectacular effect which authenticated the cold-turkey approach (Kolodko - Gotz - Kozierkiewicz - Skrzeszewska - Paczek [14]). But soon afterwards a renewed acceleration of inflationary processes took place (up to about 10% monthly in the last months of 1990) which deprived the program of its credibility.

In Poland, the program pratically did not succed at all to gain the necessary credibility, because the inflation rate did not fall - even temporarily - to the level foretold by the government. After December 1989, when the inflation rate was reduced from 55% in October to somewhat less than 18%, it bounced once more up to 80% in January 1990 and 23% in February. Then, a stabilization of the inflation took place at a level several times higher than that announced by the government and - as a result of these announcements - expected by the population. No right conclusions were drawn from this fact and implementation of wrong program assumptions was continued in the illusive conviction that overcoming the inflation was - under the given institutional, structural and political conditions - a function of time only. So, the cold-turkey approach did not succeed. This however does not testify to the superiority of the gradualist approach. It must be clearly stated that in the face of such a scale of disequilibrium and inflation with which we had to do in Poland in 1989, shock therapy was the only justified one. The fault does not lie in its use as general method - since this was not by any means a mistake - but in the wrong implementation of the methodologically right shock approach. The unique chance has been wasted.

Another aspect of the cold-turkey-versus-gradualism dilemma is the necessity to distinguish the three planes on which economic processes in general, and in particular those bearing on transition to a market economy, take place. These planes are: stabilization, transformation and restructuring. From this point of view, the shock aPproach is applicable to stabilization only. And in cases of especially severe inflationary processes it frequently is the most justified one. Such was Poland's case. Whereas with respect to systemic transfermation, i.e. institutional systemic change - although there is need for possibly rapid progress too - the cold-turkey approach is not applicable. With one exception, however, of which I take no account here namely the one-time German Democratic Republic.

So, there is nothing like a Polish Big Bang in the systemic sphere The transformation process in this area was subject to an evident acceleration in the framework of the general historic process of changes spreading over the whole post-communist world, and even was feeding back these changes. But here we have not to do with a shock approach but with a gradualism, natural for such cases, although the transformation itself is of revolutionary character. Key importance in the institutional change process perceived in the above way must be attached to a proper sequencing of measures to be taken (Nuti [18]).

The more so, shock policy is out of question with respect to structural changes, since these, by their very nature, require a longer time perspective. Against this background it must be concluded that the rather widespread talk about the Polish Big Bang is exaggerated, since it can at most refer to stabilization - which, anyhow, ended in failure - and not to the whole institutional and structural market-oriented transformation of the economy. Because the latter is a long-lasting, gradually developing process with extremely complex implications.

9. From Shortageflation to Slumpflation

The societies of the post-communist countries evolving towards market economy think - and often are confirmed in this conviction also by politicians - this will relatively soon be a Western-type market economy. Such illusions are also fostered by transferring the patterns of developed market economies onto the ground of the destabilized post-communist economy involved in deep crisis; in this case the above patterns are not applicable. Underestimating the perspective of the long, arduous road to the market also results from the lack of knowledge of the realities and peculiarities of these economies on the part of some Western experts and, in consequence, from the lack of insufficient imagination and responsibility in framing the goals and outlining the perspectives (3).

[3] I have drawn attention to this problem, among other things, in my debate with J-D. Sachs (kolodko - sachs [13]), in pointing out the danger of so-called "latinization" of the difficult process of economic and political reforms. This danger threatens not only Poland but the whole of Eastern and Central Europe as well as the Soviet Union.

On the other hand, this imagination was not lacking to D.M. Nuti ([17], P- 47) when he remarked many years ago: «If Poland were a capitalist country in a similar crisis, painful but fairly automatic processes and policy response would be set in motion. There would be hyperinflation, currency devaluation, drastic public expenditure cuts and deflationary taxation measures, tight money, high interest rates, disinvestment, bankruptcies and plant closures, and a couple of million unemployed. Some external creditors would get very little, or nothing at all, following the financial collapse of their debtors; some of the remaining debt would be offset by the scale to foreigners of financial assets (shares, bonds), land, building and plant. Fresh external finance would be available to the more credible borrowers. Unemployment would keep the unions in check restraining real wages and ensuring labour discipline. The drop in real wage trends and industrial steamlining would eventually promote exports and encourage new investment, attracting foreign capital; in ten years or so the economy would be getting out of crisis*.

The above view was formulated on the basis of observation of the 1981-1982 crisis, but it seems all the more adequate to the still larger-scale crisis of 1989-1990. Only that in the latter case the Polish economy already is nearer to capitalist economy than ever before in the post-war times. So it is understandable that it responds in a way similar to that outlined in Nuti's scenario from nine years ago, this time ever more resembling the market economies of Latin American-type rather than those of West European type (Kolodko [10]).

So, expectations of rapid stabilization cannot come true. Especially impossible are quick systemic transformation and rapid institutional and structural changes (Kornai [16]). But with all this, the question about the transition path from one system to another, important for many post-communist countries, still remains unanswered. Poland's example shows the impossibility of direct transition from a crisis typical of the state-controlled socialist economy finding its fullest expression in the shortageflation syndrome to an equilibrated capitalist economy not involved in crisis. The path i much more tortuous, long and complicated, since it leads from shortageflation to sound market economy in a truly distant perspective only, first passing through stagflation and even slumpflation. It is not possible to enter the road of radical transformation into a market economy under conditions of a relatively well functioning socialist economy. The situation must deteriorate first, i.e. destabilize to such a degree that overcoming the crisis will not be possible without fundamental institutional transformation. Because it is only then that both the population and their governing elites will be ready for indispensable reforms.

But equally impossible is a direct transition from crisis ([4]) and shortageflation to an inflation-free and growing market economy. On this road there is continued inflation, however this time accompanied no longer by shortages but by recession and unemployment. Their proportions depend on many circumstances of which a part are of specific character typical of the systemic vacuum of the post-communist economy. However, in their majority these are symptoms well known from underdeveloped market economies. Thus, as illustrated in Graph 2, the shortageflation curve passes to the "other side of the mirror", i.e. to the other side of the F-axis.

The inflation rate is dropping and shortages are being eliminated - though not always and not completely - but, at the same time, unemployment appears ([5]).

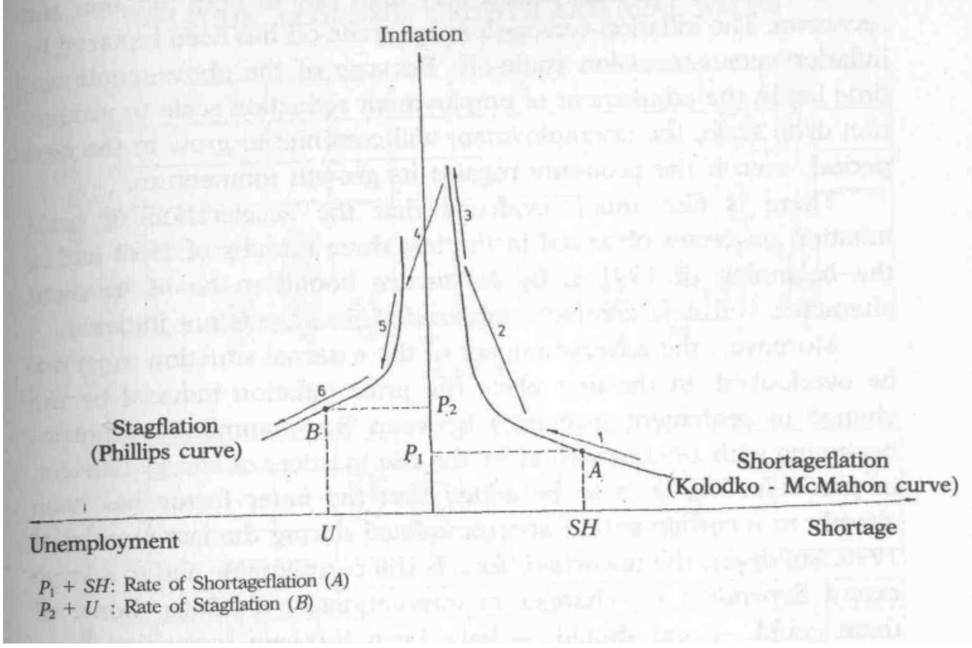
---

[4] I define this crisis as a general crisis of socialism, stressing in this way its invincibleness without fundamental institutional changes (kolodko [7]).

[5] Therefore, when assessing the scale of stabilization effects in Poland, one should compare not the price

GRAPH 2

SHIFT FROM SHORTAGEFLATION TO STAGFLATION



If these processes are also accompanied by recession - or even long-lasting depression - there will be transition from pathology characteristic of the command-type economy (shortageflation) to pathology typical of the market economy (slumpflation). It seems that in the period of transition to market economy it is not possible to avoid this arduous path. But the scale of crisis symptoms which are to be met on this path is, in the first place, a function of the adopted policy of stabilization, systemic transformation and structural changes. In the case of the Polish path to a market economy, the errors of these policies led to transition from a particularly intensive shortageflation to an exceptionally big slumpflation. As I have shown, this has not been unavoidable, if the stabilization measures were not overshot.

10. Perspectives

When talking about perspectives, the problem of time horizon arises at once. Over a longer period - estimated at many years - there is no reason why relatively optimistic forecasts and scenarios should not be framed. But over a short period a progress in the macroeconomic stabilization is hardly to be expected. The departure point - and this results from the hitherto conducted policies – is very unfavourable. Shortageflation sindrome has been replaced slumpflation - and that with a very high rate of both inflation recession. The inflation-versus-shortage trade-off has been replac inflation-versus-recession trade-off. Because of the above-mentioned time lag in the adjustment of employment reduction scale to prodution drop scale, the unemployment will continue to grow in the n period, even if the economy regains its growth momentum.

There is also much evidence that the acceleration of price inflation processes observed in the last three months of 1990 and at the beginning of 1991 is by no means bound to be of transient character, if a new complex stabilization package is not initiated.

---

inflation rate of the former half of 1989 (8.5% monthly) with the inflation rate of the end of 1990 and the beginning of 1991 (about 6%) but the shortageflation rate (of 10-12% order) with the stagflation rate (over 12%), respectively.

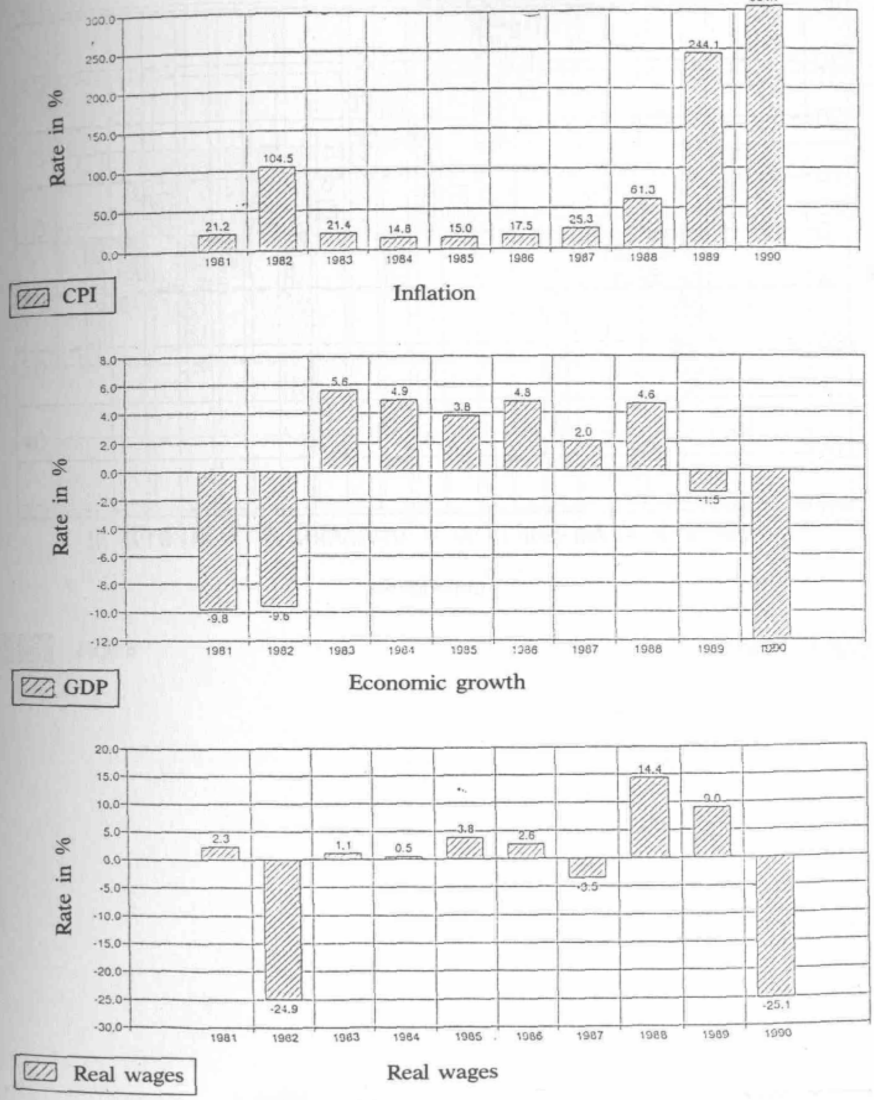
Moreover, the adverse impact of the external situation must not be overlooked, in the first place the price inflation induced by the change in settlement principles between post-communist countries beginning with 1991 as well as by the rise in prices of energy carriers, in particular oil. It is to be added that the latter factor has been already to a certain extent accommodated during the last months of 1990. However, the uncertaity zone is still considerable and to a large extent dependent on changes in international conditions. Some of them could - and should - have been foreseen (transition from settlements in transfer roubles to settlements in US dollars and the resulting proinflationary and prorecessionary effects), others (oil shock caused by the Middle East conflict) have complicated the situation in an unforeseeable way.

But there also is a feedback link between the internal political situation - on the one hand - and the stabilization and transition - on the other hand. One can hardly expect this situation to be as favourable in the future as it was in the initial period of stabilization program implementation. Therefore, successive attempts at stabilization - since their necessity is beyond any doubt - can be ever more difficult.

The Polish experience of the implementation of stabilization policy should be particularly useful to other post-communist countries. They will face - or are already facing - many dilemmas which Poland has, better or worse, tried to solve. Not that the so-called Polish experiment has entailed such high social costs, it would be well if lessons learned from it were as widely as possible used by other countries.

GRAPH 3

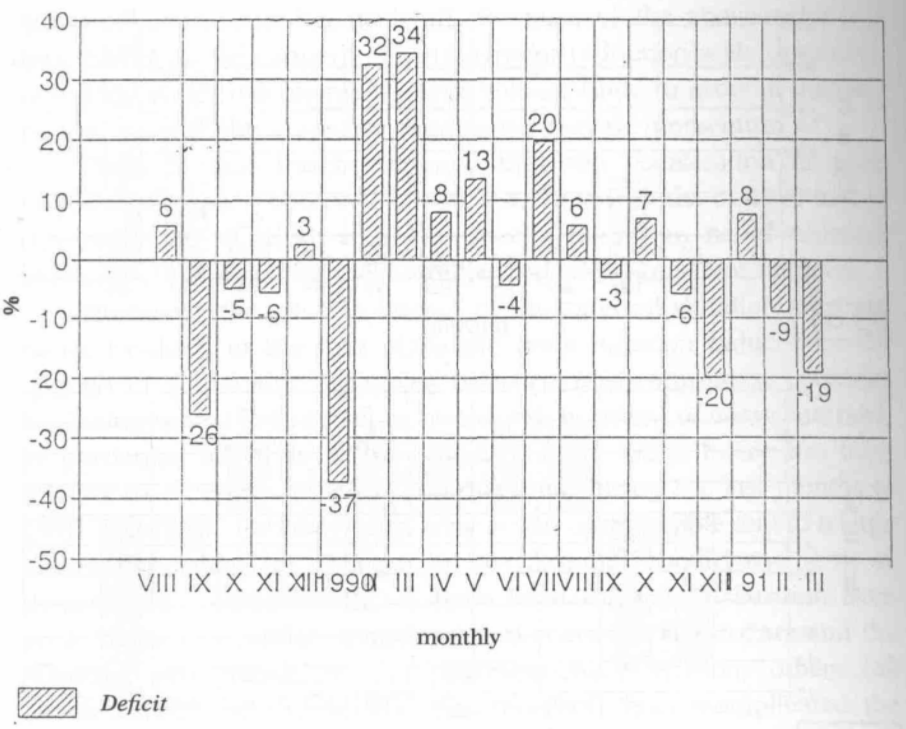
INFLATION, ECONOMIC GROWTH AND REAL WAGES IN 1981-1989



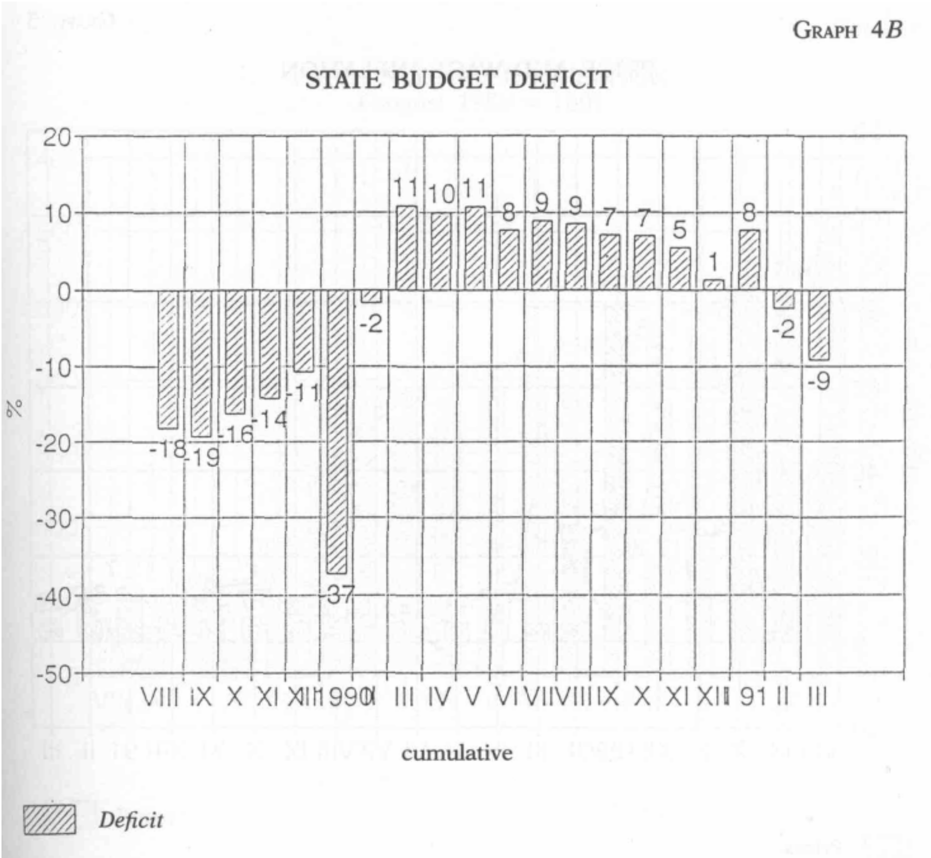
Source: CENTRAL STATISTICAL OFFICE (GUS); MINISTRY OF FINANCE, NATIONAL BANK OF POLAND and own calculation.

GRAPH 4A

STATE BUDGET DEFICIT



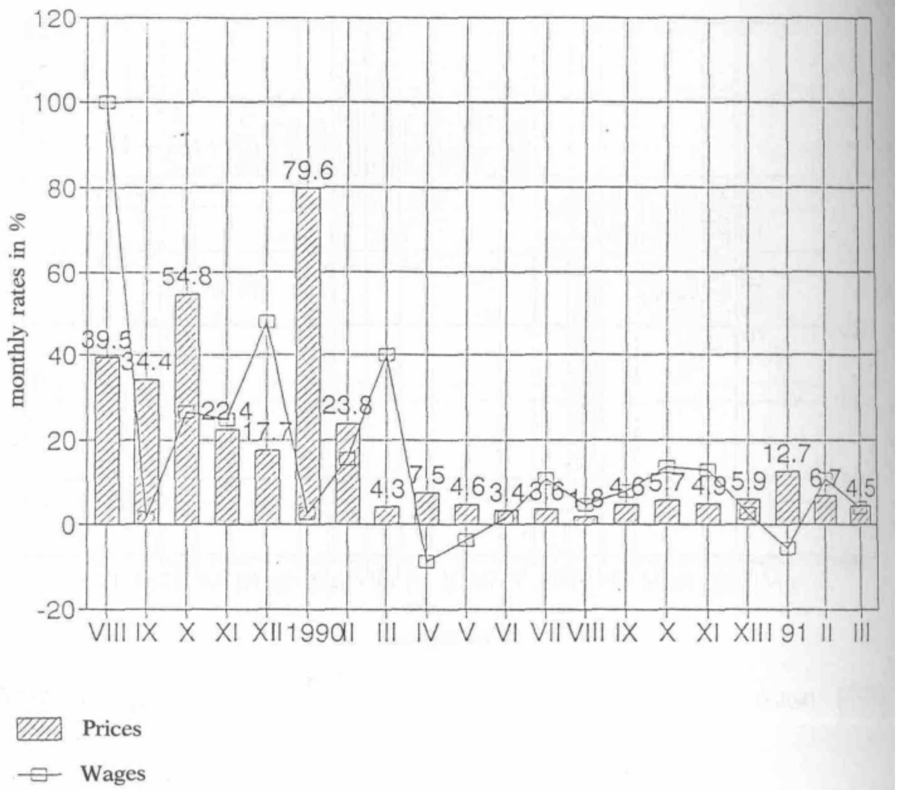
Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.



Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

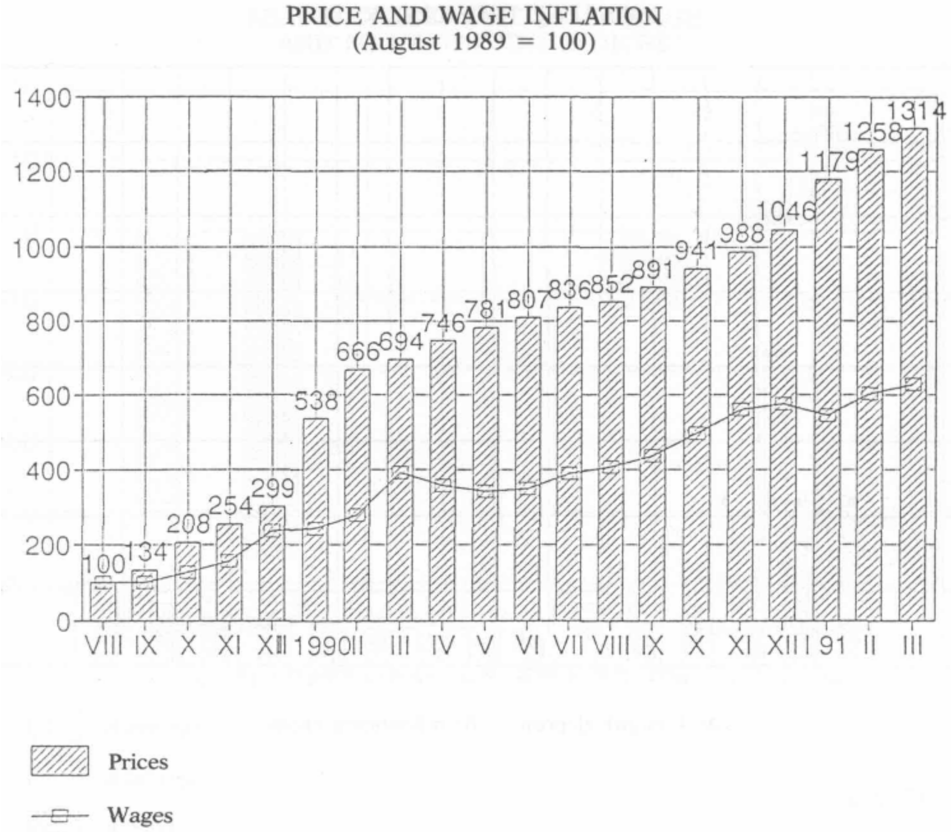
GRAPH 5

PRICE AND WAGE INFLATION



Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

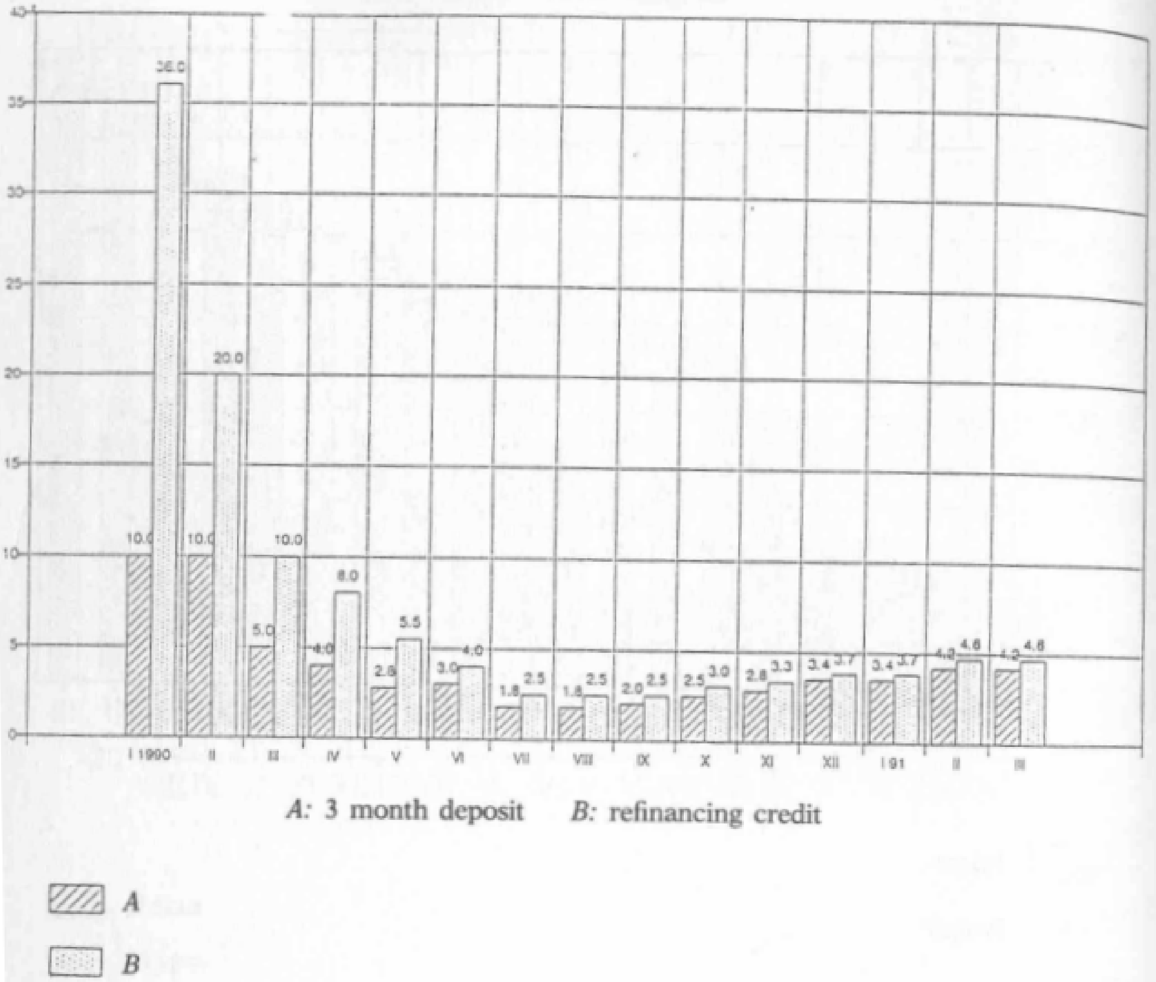
Graph 6



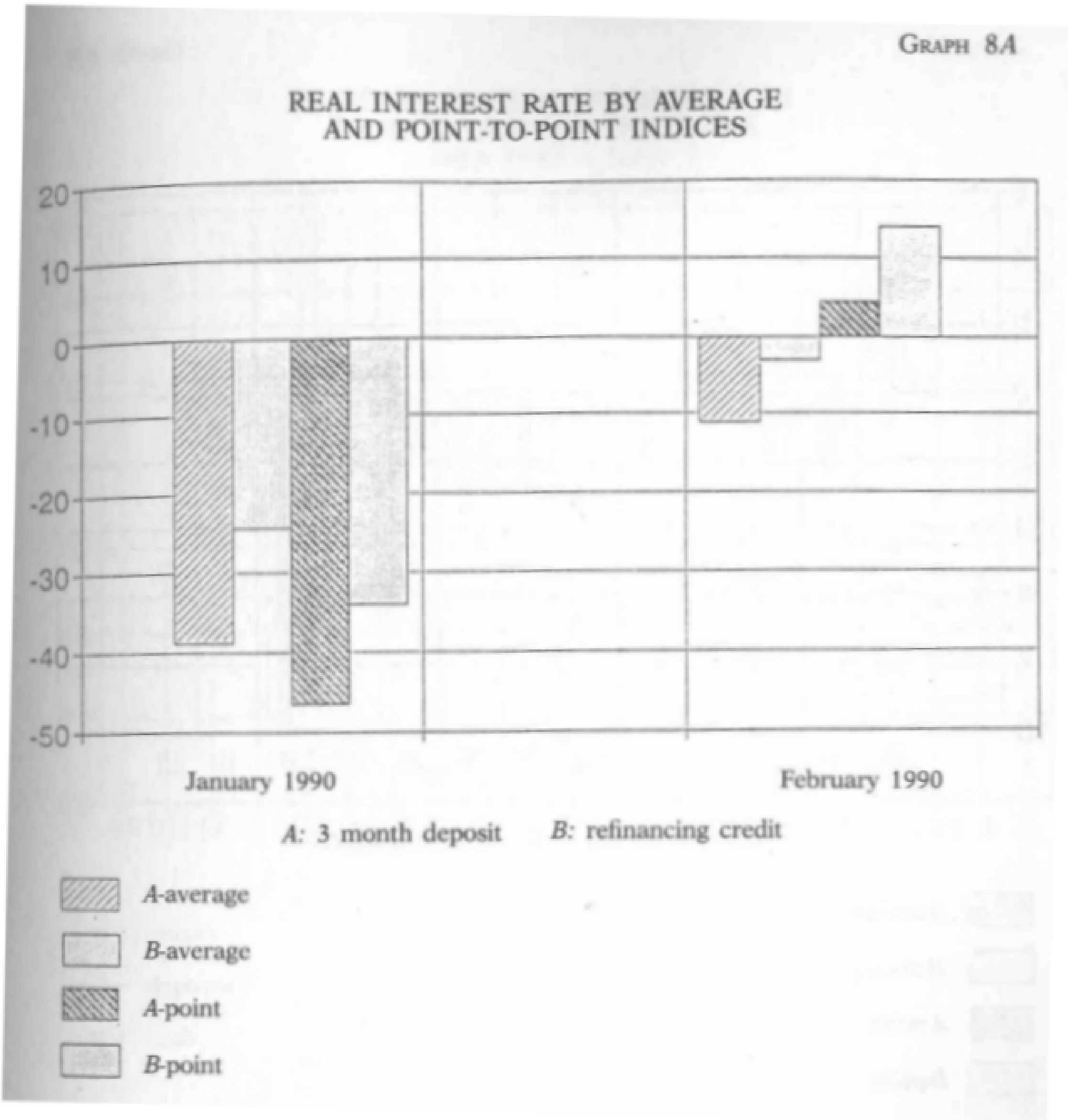
Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

GRAPH 7

MONTHLY INTEREST RATES



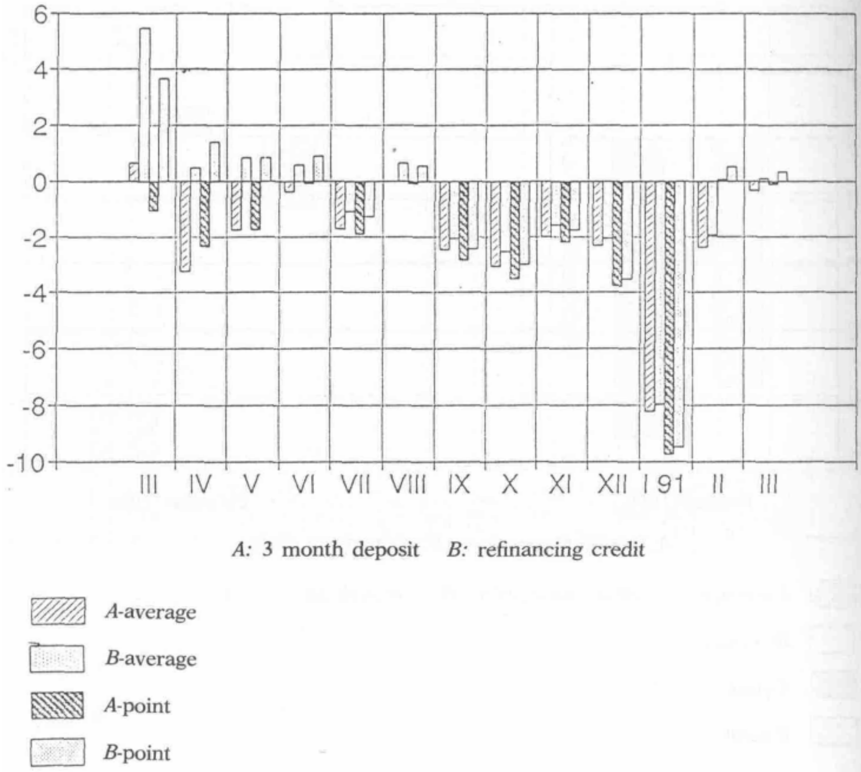
Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.



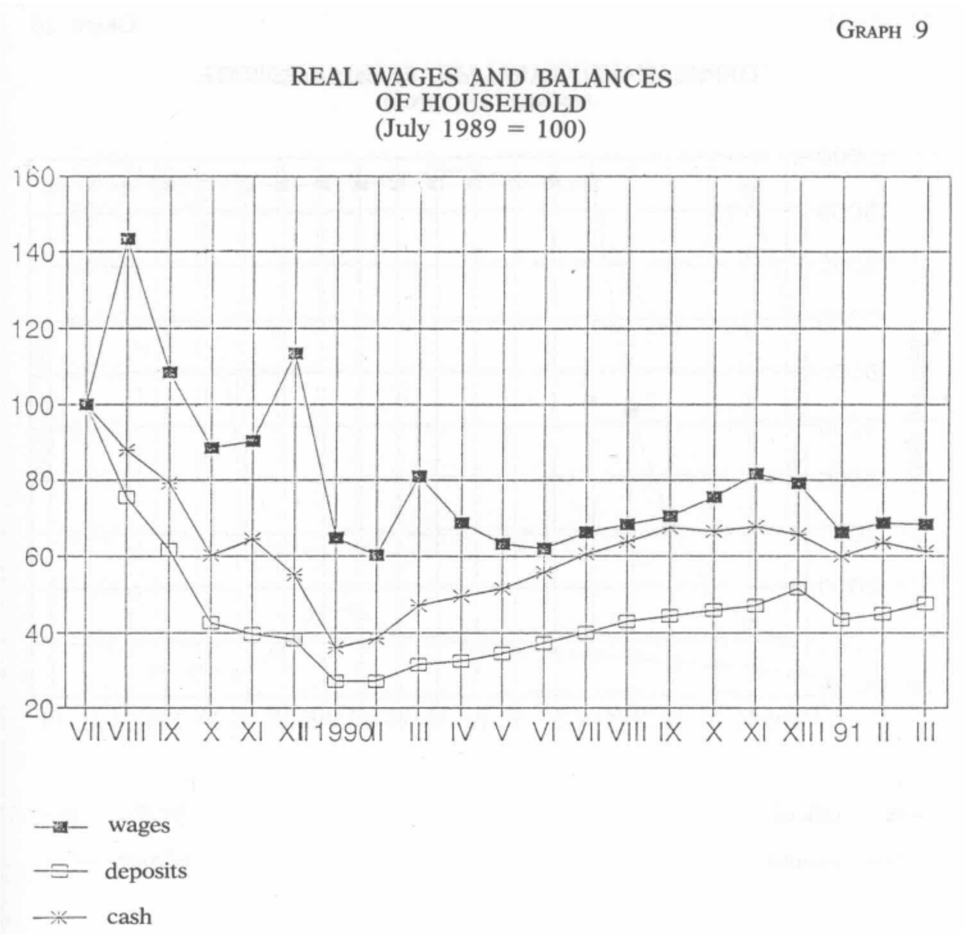
Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

GRAPH 8B

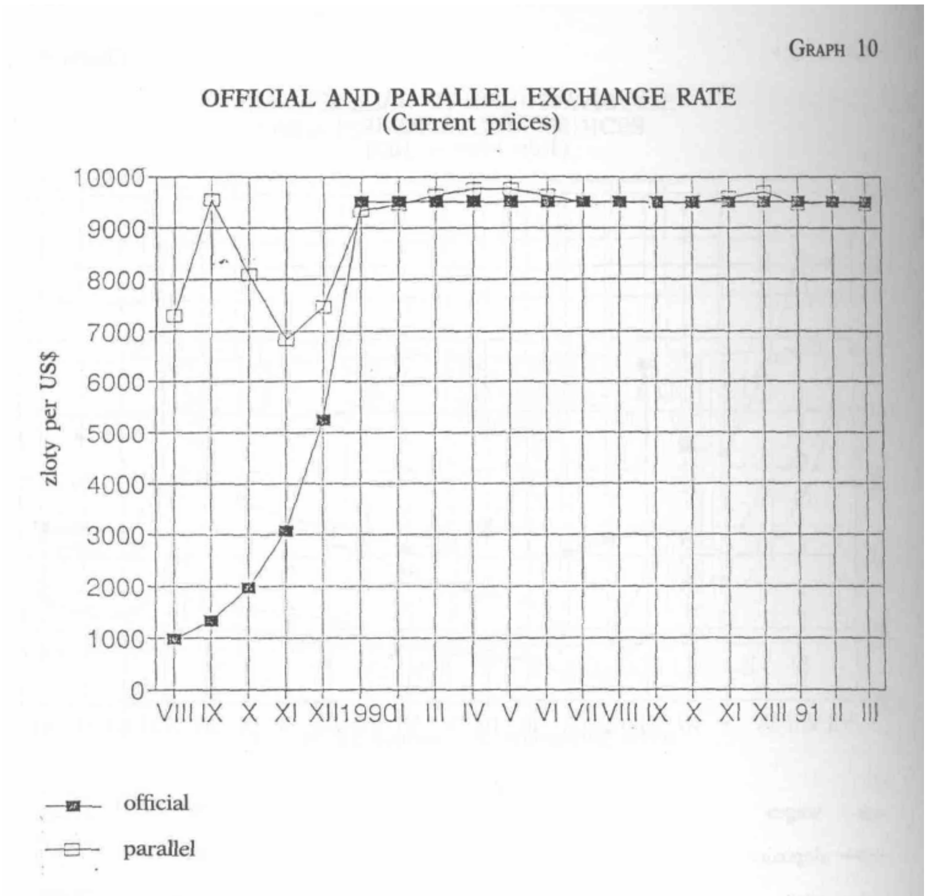
REAL INTEREST RATE BY AVERAGE
AND POINT-TO-POINT INDICES



Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

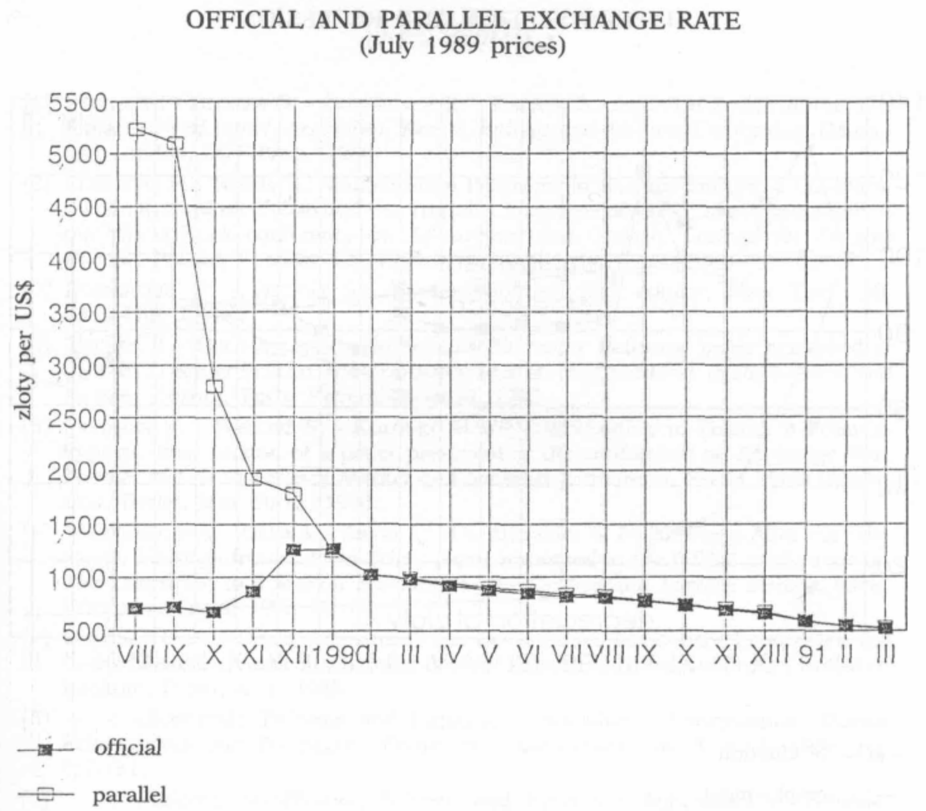


Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

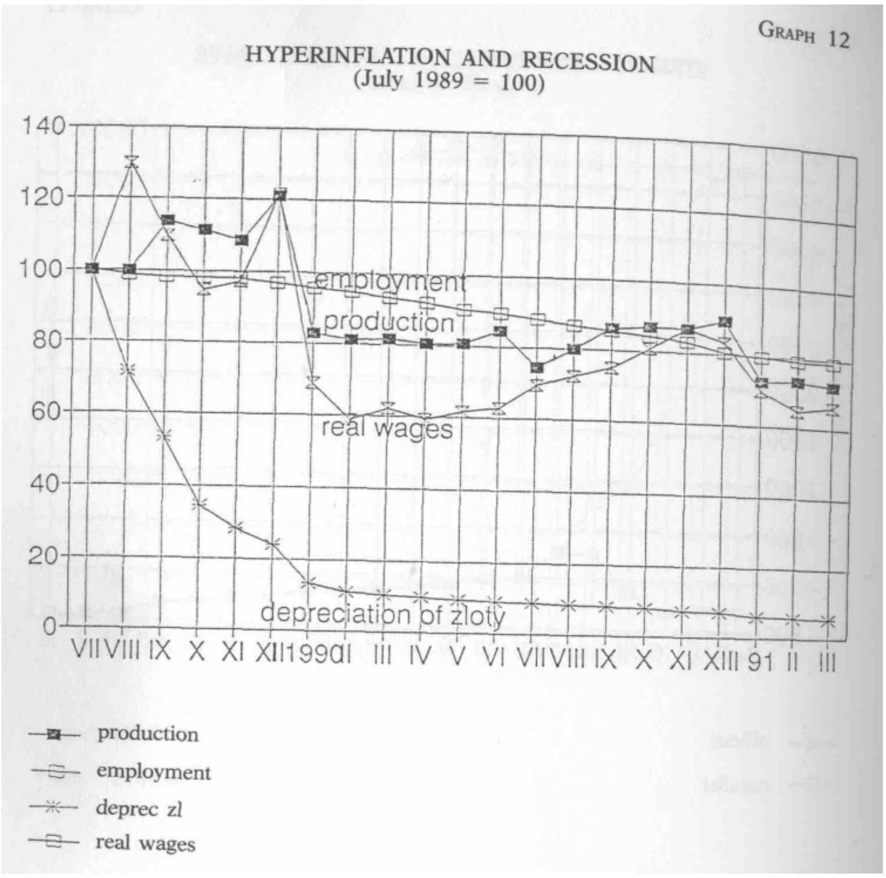


Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

Graph 11



Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.



Source: Central Statistical Office (Gus); Ministry of Finance, National Bank of Poland and own calculation.

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