

# The Yugoslav inflation

Egon Zizmond\*

The Yugoslav economic system enables the increases of incomes of production factors (agents) per unit of their contribution to the GNP. The initial impulse to this process is given by certain aggressive factors (agents) through increases of their prices. This consequently causes an imitation or adaptation by other agents that increase their prices (incomes) in order to prevent losses they have through inflation. Inflation as an outcome of causes of the economic system is allowed to run unchecked through base money creation. The Yugoslav inflation is, therefore, determined by elements of supply, *i.e.*, by pressure of production costs, and by the mode of financing these costs (personal incomes and taxes) and investments. "Shock therapy" for eliminating inflation in Yugoslavia is unsuitable because of a cost-push type inflation and of a rigid economic system which causes inelastic reactions of economic agents to impulses of the economic policy and substantial negative economic and social effects. We consider a step-by-step strategy to be a better solution. This means that a reform of the economic system is a precondition for the elimination of the Yugoslav inflation. In general, the reform should mean an affirmation of the market economy. This would in Yugoslav circumstances mean the formation of the private ownership of nowadays "socially-owned" means of production and other types of ownership, the formation of markets for all production factors (especially the labour market), the independence of the central bank, reorganization of commercial banks, liquidation of all uncovered deficits etc. When carrying out the reform, the economic policy should be based so that real personal incomes and taxes would not increase, only monetary policy would be restrictive. Such a strategy would permit waiting for a definite start of a new economic system at a sustainable level of inflation. After a definite start of the new economic system, shock therapy could be used to eliminate the inflation.

*1. Introduction; 2. Some performances of the Yugoslav economy; 3. Inflation and its causes; 4. Collapse of the new government's price stabilization program; 5. The recommended price stabilization strategy in Yugoslavia; 6. Conclusion.*

\* Ph.D., University of Maribor, Faculty of Business Economics.

## 1. Introduction

In this paper we shall analyse some performances of the Yugoslav economy and concentrate on main causes of its inflation (we shall neglect structural and external causes). We shall also estimate the newest price stabilization program and recommend an adequate price stabilization strategy.

## 2. Some performances of the Yugoslav economy

As the economic performance of a given country is mostly dependent on characteristics of the economic system and economic policy (Gregory & Stuart, 1985), we shall begin with a short illustration of these characteristics in Yugoslavia.

The Yugoslav political system was as variant of the Leninist non-competitive system, in which the political elite formally (according to the constitution) and informally affirmed the state's monopolistic position in society. The political elite, therefore, also adapted and subordinated the economic system. The market, its objective criteria and private ownership, were not compatible with the non-competitive political system. For this reason, the economic system had been operationalized so that, via social ownership of the means of production, decisions were imposed from the top political hierarchy. Beyond its organizational structure, informal channels, the principle of "democratic centralism" and repression the political elite's monopolistic position gave it the capability to initiate and operationally carry out virtually any measure. The primary characteristic of such an economic system was, therefore, rather like the substitution of real decision-making of firms with a direct influence on such decisions from the side of the administrative and political structures. The omnipresence of the state in both formal and informal decision-making capacities reduced the role of firms to operational level decision-making. Such a system could thus be defined as semi-command.

In order to find the relation between economic results and characteristics of the economic system (its mechanisms changed from one period to the next), we have divided the time between 1953 until 1989 into three sub-periods according to key particularities of the economic system. The years from 1953 to 1964 were a period of emphatic administrative rule by the government in a somewhat "self-managing economy", in which socially-owned firms actually had no rights to decide independently about distribution of income and extended production. They got these rights mostly in the period between 1965 and 1973 which brought forth signs of accelerated affirmation of the goods and service market, but not the production factors' market. After 1974, the goods market too suffered a total liquidation

as a result of the introduction of the so-called "consensual economy" system, which dealt away with market price formation by prescribing compulsory so-called "self-management agreements and social compacts". This induced an abandonment of competition (and effectively split the Yugoslav market into regional markets) and, again, emphasised vast administrative rule in all fields of economic life.

The last period (1974-89) was divided into two sub-periods. In the period 1974-79, economic results tended to be relatively favourable. In comparison to other countries that suffered a severe blow after the 1973 oil shock, the Yugoslav GNP improved. Such growth was mainly a result of investments in fixed assets which grew during this period at an annual rate of 8.9% (in the period 1965-73 only 3.4% annually), and so raised their share in the GNP from 25.7% in the year 1974 to 34.6% in 1979. Such investment growth, however, was not accompanied by an adequate increase in domestic savings, which dropped during that period. The difference between investments and domestic savings was evened out somewhat with foreign earnings. During this time, the net indebtedness mounted from US\$4,6 to US\$14 billion, while exports fell (in comparison to the GNP) from 20.4% to 15.5%. Despite unfavourable movements, economic policy did not react. Between 1974 and 1979 the national currency (Dinar) exchange rate remained unchanged, despite the fact that producer prices increased by 14.4% and consumer prices by 18.2% annually. While labour productivity increased at an annual rate of 1.7% average personal incomes grew much faster. This caused drastic cost pressures and increased consumption. Negative interest rates caused a diminishing of savings and inefficient capital allocation, and so the capital output ratio rose.

In the period 1980-89 and external liquidity crisis appeared and there ensued a great outflow of GNP across the country's borders to service debts, causing stagnation and increased internal instability. After 1980, the unsuitable economic policy (with periodic improvements in certain years) continued and the crisis deepened.

Some performances of the Yugoslav economy are illustrated in table 1.

From table 1, four tendencies can be clearly observed: a decrease in the GNP, industrial and agricultural production growth rates; after 1973, a substantial decrease in the labour productivity growth rate (which was negative during the time from 1980 to 1989); an increase of unemployment rate and a fast increase of the inflation rate throughout the entire period. Without any doubt, a more appropriate economic policy (balanced exchange rate, balanced interests, a more adequate policy for personal incomes) would have contributed to a considerably lower foreign indebtedness. Exports and accumulation would also likely be higher, and investment would be more effective (Yagci & Kamin, 1988). This was impossible under circumstances

Table 1  
Some performances of the Yugoslav economy  
(average annual growth rates in %)

	1953-64	1965-73	1974-89	1974-79	1980-89
GNP	8.6	5.3	2.8	6.3	0.7
Industrial production	12.7	6.9	4.3	7.6	2.4
Agricultural production	7.2	1.8	0.7	2.4	0.5
Employment	6.3	2.0	2.8	4.5	2.0
Labour productivity	2.2	3.2	0.0	1.7	-1.3
Unemployment rate <sup>1</sup>	5.2	7.9	14.2	12.5	15.3
Consumer prices	4.0	14.2	68.5	18.2	108.7

*Source: Yugoslav statistical yearbook.*

<sup>1</sup> Calculated as an average percentage of unemployed in the entire number of employed.

of a one-party political system, nonmarket economic system and discretionary economic policy. This brought about suboptimal economic results and general backwardness with respect to the developed world.

Catastrophic economic results in the last period can thus be mainly assigned to particularities of the economic mechanisms of the "consensual economy". The key problems in relation to this were social ownership of the means of production, the concept of self-management, and the dually-based income system. All of these were attributes of unsuitable income distribution.

The economic system's mechanisms produced dual effects. In the first place, they affected economic efficiency. They caused autarky, monopolization, and low competition. Because of inadequate formation and unbalanced prices of factors of production, an optimum allocation and combination of production factors was impossible. This can be demonstrated through analyses of capital output and labour output ratios (Zizmond, 1990a).

Besides the aggravated economic efficiency, these mechanisms simultaneously enabled inflation growth. They provided too rapid a growth rate in personal incomes in comparison with labour productivity growth, thus causing a decrease in accumulation and inflationary financing of investments.

### 3. Inflation and its causes

While Yugoslavia has always had higher inflation rates than the average inflation in OECD countries, in the past few years it has had the highest inflation rate in Europe and one of the highest in the world. As figures in table 1 demonstrate, the inflation rate in Yugoslavia soared dramatically

from one period to the next. In the last period, inflation escalated on an average rate of 108.7%. In 1989, the annual rate of inflation reached 1,255.7%. In December 1989, the level of consumer prices was already 2,665.0% higher than in the same month of 1988, while the December price increase of 58.8% meant a 2,5616% inflation on an annual level. Price increases in 1989 could thus be defined as hyperinflationary.

The Yugoslav inflation can be determined as a result of the simultaneous activity of two main causal groups. The first group is represented by semi-command characteristics of the Yugoslav economic system, and the second consists of inadequate measures of economic policy, which enabled the price level increases with monetary policy.

We can explain the systemic reasons for the Yugoslav inflation in this way. The economic system enables the increases of incomes of production factors (agents) per unit of their contribution to the GNP. The initial impulse to this process is given by certain aggressive factors (agents) through increases of their prices. This consequently causes an imitation or adaptation by other agents that increase their prices (incomes) in order to prevent losses they have through inflation. This means that Yugoslav inflation has an emphasized social component, and that the process of income and price increases is made possible by the monetary policy. The Yugoslav inflation is, therefore, determined by elements of supply, i.e., by pressure of production costs, and by the mode of financing these costs (personal incomes and taxes) and investments. We shall discuss these problems separately further on.

### 3.1 Personal incomes

In the entire post-war period, the trend of growth of nominal personal incomes has been faster than the trend of growth of labour productivity. Also, the tendency of lowering the accumulation in the economy shows that a large part of the income has flown into personal consumption. The permanent growth of prices had been accompanied by a continuous trend of increasing unemployment, which is a sure sign of a cost-push inflation.

The key year which is important for the analysis of this inflation cause was 1961, when the reform of the personal incomes' distribution system was carried out. In such a system the total income was understood as a result of work and entrepreneurship of the company's workers who got the right to distribute the whole income freely and independently. The main motivation in such a system became a maximization of personal incomes, which were not formed proportionally only according to labour productivity, but also regarding the profitability of the company.

That is why the unity of the labour market broke up. The net income per worker (dependent on market circumstances of the companies' products)

became decisive for the size of personal incomes and more profitable companies had the chance to pay higher personal incomes. That stimulated the growth of personal incomes also in other companies, as employed workers in less profitable firms demanded higher personal incomes and also got them.

Governments have been aware of these processes and from time to time have controlled increases of personal incomes and their sectorial dynamic. The type of control varied (direct control, self management agreements and social negotiations, nominal anchoring etc.), but had never been successful because the reasons for a far too rapid growth of personal incomes lay in their non market formation, *i.e.*, in the income distribution system. Faster growth of personal incomes on a macroeconomic level meant growth of costs per production unit, which caused the tendency to cover the increased costs with higher prices.

### 3.2 Fiscal system

In Yugoslavia, the total amount of the outflows of the public sector increased from 42% in 1971 to more than 50% of the GNP in 1990. This was mostly the outcome of the decentralization of some activities of the federal government on lower political-territorial levels (republics) and of the new organization of social activities (*e.g.*, "self-managed communities"), which caused hyper-organization and an unreasonable rise in costs for these activities. The increase of such outflows meant a strong acceleration of the inflation rate.

The Yugoslav system of financing the public sector was divided into two parts: the budget system from which the state functions were financed, and the social activities' financing system.

Budget revenues were mainly obtained through indirect taxes: in 1989, turnover taxes represented 60% and custom duties 20% of all revenues. Their rates have increased and had a direct influence on inflation. The other important source of budget revenues were corporate income taxes and personal income taxes, which in 1989 represented 15.8% of all budget revenues. As in Yugoslav companies income (meaning profit plus personal incomes) was taxed, the taxable income of the company was higher than the profit. This in the extreme meant that income tax could be greater than profit, especially if the company paid higher personal incomes in comparison to the branch average, if it was labour intensive, or if it managed under low profitability. In such cases the company, because of the taxation policy, suffered losses. To avoid them, it strived to include the income tax in its costs and prices. Thus, such a system did not enable sufficient accumulation and it was at the same time inflationary.

The specific problem was the social activities' consumption which because of the self-managing organization, has to great extent avoided the control of the economic policy. Its amount was larger than budget consumption (in 1989 these revenues were 2.4 times bigger than budget revenues). Also, taxes for this consumption were calculated on the basis of income and personal incomes (since personal incomes have been growing faster than productivity, taxes have been growing faster, too).

Thus, in the Yugoslav system, the bases of the fiscal system were already inflationary since the system was based on indirect taxes. Although income taxes and personal income taxes were formally declared as direct taxes, they were similar to the value added tax because they were paid at a proportional rate. Since they were included in the companies' costs, they were inflationary because of growing rates.

In addition, inflation was accelerated by the total government expenditures which were bigger than the real amount dedicated to them. Deficit financing with base money creation and additional financing of government expenditures through budget rebalancing (which accelerate inflationary trends because of increases of budget expenditures in real terms) was practiced. Besides this, large deficits occurred regardless of the budget itself. One of the main inflationary causes became accumulated losses that were not covered by adequate payable claims. These debts were located in the federation (National Bank of Yugoslavia), in other "political and self managed communities of social activities", in the commercial bank system and in "socially-owned" enterprises. In 1989, the estimated losses reached approximately US\$ 30 billion, which actually corresponded to half of the Yugoslav GNP. Also, these losses were due to the inadequate economic system as it was based on social ownership of the means of production.

### 3.3 Investments

Yugoslavia has in the entire post-war period dedicated a large part of the GNP for gross investments (more than 40%). The main problem (when dealing with influence of investments on inflation) was that the economic system and economic policy did not permitted conditions in which *ex ante* investments would match with *ex ante* savings.

Roughly, savings can be divided into business and individual savings. Business savings have not been stimulated in the Yugoslav system. If workers in self-managed firm were saving directly and invested a part of income into their firm, they benefited from higher personal incomes in the future (if investments were efficient), but they could not withdraw the invested capital as the entire capital was under social ownership. If instead, workers distributed the entire income in personal incomes, they could save

and open an account at the bank and could in the future withdraw not only the interest but also the principal (Furubotn & Pejovich, 1970). In addition, business savings were affected because people predicted that investment efficiency was low and so have never expected any higher personal incomes from investments. Another negative factor was a real negative interest rate during the entire post-war period. The motive for savings was therefore low, for workers as well as for "socially-owned" companies.

Contrary to the motive for savings, the motive for investments was always vast. As the basic suppositions of Neoclassical analysis of the self-managed socialist company's behaviour show, the company in the long run would decide for a capital intensive technology (Vanek, 1970). The potential tendency of labour substitution for capital is a result of the workers' tendency to maximize personal incomes. In Yugoslavia, this tendency was strengthened through systemic and economic policy solutions: the obligation of paying the price for the use of "socially-owned means" was abolished in 1971, interest rates for credits have been negative in real terms and a political pressure on companies to open up new working places was always present. The next reason for a high investment propensity was a long run practice of providing inflationary financing of investments.

The presented economic and non-economic influences caused different tendencies to invest and to save. That is why it came to conflicts between investments which were under strong influence of political factors, and savings which were mainly determined by economic motivation (Bajt, 1983). The employed wished to keep their share of the GNP, which was lower if the share of investments rose. As a result, it came to simultaneous increases of investments and personal incomes, *i.e.*, to increases of the demand over the available supply at current prices. Investments were financed through bank credits and the employed raised nominal personal incomes often with bank credits, too, and so reduced a part of the GNP dedicated to investments. The normal economic outcome of solving such a conflict between two interests was inflation.

### 3.4 Monetary policy

Inflation as an outcome of causes of the economic system was allowed to run unchecked through monetary policy. The basic mechanism which enabled this process was the system of central and commercial banks. Financing the increases of factors' incomes was actually effected through base money creation.

During the eighties, a surplus in the current account (which was vital for the servicing of foreign debt) also represented the channel for base money creation. Under such circumstances, aggregate excess demand was present



which could have been neutralized with an adequate reduction of bank activity and at the same time with adequate income policy (interventions in personal incomes and budget expenditures growth) and exchange rate policy, in order to prevent additional inflationary pressures. This was not carried out by federal governments during the eighties. Particularly fatal were steps taken in 1986, when reductions of interest rates, overvalued exchange rates of the national currency and price freezes were taking place. In May 1988, the government wanted to lower the inflation with three nominal anchors but made the same mistake as in 1986. An expansive monetary policy and the absence of restrictions on personal incomes' growth caused drastic increases in domestic consumption, debilitated regular debt servicing and accelerated inflation. In 1989 monetary expansion continued and monetary aggregates did not provide any barriers to price growth, which was mainly determined by personal incomes growth. Crediting economic agents continued regardless of their financial credibility. Financing the Budget deficit and lack of financial discipline also continued. The situation in October and November grew worse because of an extremely low depreciation of the national currency and a too low prime rate. In the last quarter of 1989 hyperinflation was on the way.

Monetary policy was inflexible because of systemic and subjective reasons, both deriving from the uncompetitive political system:

1. Certain systemic obstacles curbed "the proper" monetary policy and actually turned it into a subsidization policy and a policy of income distribution. The prime rate mechanism did not function and a large part of the base money creation was more or less autonomous. The National Bank of Yugoslavia was obliged to finance the surplus of the clearing account and the Federal Budget deficit automatically and to subsidize the interest rates for some users (for instance, agriculture) with base money creation. It is estimated that all this in 1989 represented 85% of the entire base money creation.
2. Even more numerous were the subjective reasons. Given Yugoslav political circumstances, economic and political decisions were frequently exposed to various pressures of interests appearing inside the Parliament and the Communist Party, and those of certain republics, lobbies and individuals that aspired to realize their own objectives. Demands originating from less developed regions of Yugoslavia (for lowering of the prime rate below the inflation rate, for selective credits, for conversion of short-term credits into long-term credits at real negative interest rates, and so on), have almost always been fulfilled. The next problem that subverted an adequate monetary policy was lack of financial discipline. It was present in monetary transactions between the National Bank of Yugoslavia and commercial banks, as well as in transactions between commercial banks and firms. Ignorance was another affliction (Bajt, 1989), which included inadequate

estimations of economic trends (surplus in the current and clearing account, foreign currency reserves, budget deficit etc.) as well as the carrying out of the economic policy itself. It was primarily the outcome of an unsuitable selection of qualified personnel as a result of the uncompetitive political system. It also made possible discretion and voluntarism in the economic policy.

The mechanisms comprised within the economic system did not lead directly to inflation, but meant that the system did not have any built-in self-regulating mechanisms which might have assured an equilibrium, therefore making the system vulnerable to inflationary pressures. The inflationary process was made possible by the monetary policy which increased money supply to enable the realization of the nominally increased GNP.

#### **4. Collapse of the new government's price stabilization program**

In 1989, the new federal government lead by Ante Markovic commenced with a ban on ideological, political, and economic blockades, thus applying the introduction of necessary mechanisms for the marketization of the economy. The most significant achievement in 1989 was the ratification of the law on enterprising activity, which in a way interrupted the monopoly of the socially-owned sector and therefore provided for the establishment of private firms. However, the pace of reform performance was quite slow. Hyperinflationary rates forced the government to begin laying foundations for a new reformatory and price-stabilization program. This program was ratified on the 18th of December 1989, and contained mainly measures of economic policy.

The program was based on a "shock therapy" and its basic goal was a quick reduction of inflation. The key role should be played by the fixed exchange rate. Such a measure reflected the conviction of the government that the exchange rate was the basic aggregate which determined the dynamics of Yugoslav inflation and that through a fixed exchange rate and shock therapy it would be possible to bring inflation immediately to a halt. Yet such presumptions became unrealistic since the Yugoslav economy does not incorporate qualities that would provide success with shock therapy. Above all, during the time of approval for the program, the nature of the Yugoslav economy was not a market one (and still is not). Given the prevalence of social ownership and the lack of a labour market, reactions of economic agents on impulses of economic policy remained less elastic compared to market economies (Zizmond, 1990*b*). The Yugoslav economy has still not entered the world market and remains overprotected from the influence of foreign competition. Moreover, at the time the program was

being ratified, price disparities were still present and tremendous disharmonies were evident in personal income levels. Because of the lack of private ownership and a labour market, inflation in Yugoslavia generally assumed a cost-push character. Shock therapy may only be effective against a certain degree of inflation, caused by inflationary expectations and not by cost-push reasons (Bajt, 1990).

As none of the previously mentioned preconditions to ensure by way of shock therapy were present in Yugoslavia, inflation continued in spite of the program (indeed with falling rates until June 1990). This is illustrated in table 2.

Table 2  
Price growth in Yugoslavia in 1990 (indices)

	Consumer prices	Producer prices
Dec. 1990/Dec. 1989	221.5	161.7
Monthly average	106.9	104.1

Source: Reports of the Yugoslav Federal Bureau of Statistics.

As the table indicates, the basic goal (a quick reduction of inflation) was not achieved. Already in January 1990 the level of consumer prices increased by 41.5% and from December 1989 till December 1990 it rose by more than 121%. This was mainly due to the following reasons:

1. As figures in table 2 (the difference between the growth rates of consumer and producer prices) demonstrate, the most important inflationary cause in 1990 was the fiscal policy. In the first place, the government did not take into consideration the Tanzi effect. Secondly, it installed an additional tax for army financing. In October, the government even succeeded in increasing the Federal Budget. The monthly amount dedicated to public spending increased from 23.2 billion dinars in December 1989 to 49.1 billion dinars in October 1990, that is, by 111.6%. This meant that it also increased in real terms.

2. The second reason for increased consumption was the increase of net personal incomes. From December 1989 to November 1990 the monthly total amount of personal incomes increased from 20 to 35.5 billion dinars, that is, by 77.5%. This data confirms the former conclusion about the cost-push nature of Yugoslav inflation, which is due to systemic causes. In particular, the growth of personal incomes is the consequence of their non-market formation and cannot be slowed by administrative control. On this basis, personal consumption increased from October 1989 to October 1990 by 21.8% in real terms.

3. All these processes were facilitated by monetary policy which has taken some unintelligible steps. Firstly, during the months of increased demand for real money (February, March and April), which was due to disinflation, the government strengthened the monetary squeeze and consequently caused liquidity problems and a decline in economic activity. Secondly, since April, when prices were stagnant and economic activity ran at the new, 15% lower level, and when the demand for money stabilized, the monetary policy increased the money supply sharply (Bole, 1990). Monetary policy therefore worked in a contrary fashion to what should have been done.

In 1990, economic policy was thus again inappropriate. In practice, it operated with only few economic policy measures (exchange rate, price control in infrastructure and limitation bank credits) and did not impose any fiscal squeeze. It is generally accepted (Dornbusch, 1990) that programs which are based mainly on incomes policy without a fiscal squeeze cause repressed inflation and an overvalued exchange rate. This happened in Yugoslavia, too. On the other hand, the fixed exchange rate can be obtained in the long run only in circumstances of at least 100% prime money coverage by net foreign exchange reserves (Fischer, 1982), which was not the case in Yugoslavia (the net foreign exchange reserves covered less than 30% of the prime money). Also, this conditions can not be fulfilled if the fiscal policy is "undisciplined" and causes inflation and overvaluation of the national currency, which leads to a balance of payments problems.

As the exchange rate has been fixed since December 1989 and the producer price level rose till December 1990 by more than 61%, great disparities between export and domestic prices have occurred. They have exacerbated the trade balance (in 1990, deficit exceeded US\$4.6 billion) and exporters have put pressure on the government to devalue national currency. This happened by the end of December 1990.

We can therefore conclude that this Yugoslav price stabilization program has also failed due to the reasons outlined in the previous sections. The economic policy measures imposed by the federal government were inadequate and uncoordinated, which was partially the result of pressures from some lobbies (agriculture, army) and the lack of consensus between the Yugoslav republics and their governments, which in some republics are still under communist rule. The main problem, however, is that the shock therapy was carried out too quick y, that is, before market conditions were sufficiently developed to accommodate the policy's successful implementation. The economic incentives for economic agents did not change: maximization of consumption (personal and budgetary incomes) continued to characterize the economy's behaviour, as well as that of the non-economic actors (budgets and social activities). In an economy which does not have clear policies regarding capital ownership, it is impossible to curb personal

incomes' inflationary growth either through price freezes or a restrictive monetary policy.

## 5. The recommended price stabilization strategy in Yugoslavia

We see crucial causes for failure of the past price stabilization policy in Yugoslavia in the wrong identification of inflation causes. The stabilization policy in Yugoslavia was mainly based on measures which should decrease demand, and only a few cases on the stabilization of production costs. As Yugoslav inflation is primarily of a cost-push type, the demand side policy causes the decrease of economic activity and unemployment increases and has only a small counterinflation effect.

As already stated, the Yugoslav inflation is caused by the growth of nominal costs. Inflation is thus a social process in the income distribution, where all agents tend to increase their part of the GNP, which causes cost increases facilitated by the monetary policy. Thus, if the normalization of external balances (*i.e.*, the reduction of internal consumption below the level of the produced output) and the normal foreign debt servicing are achieved, price stabilization can be achieved by the following optimal solution (Bajt, 1986). Stabilization of costs could be achieved by stabilization of nominal incomes per unit of production factor (thus, a corresponding part of demand would also be stabilized) by support of the monetary policy, while the reduction of investments at *ex ante* savings could be achieved by preventing the National Bank of Yugoslavia from creating capital and by raising the interest rate for Dinar deposits to the real positive level, which should be higher than the level of interest rate for foreign-exchange deposits.

Such a concept of price stabilization is to a great extent consistent from the technical-economic aspect. But despite its entire implementation the following inflation problem would still appear: personal incomes would still have priority in the internal distribution and would acquire new credits and creation of money, especially due to unequal personal incomes for the same work between different firms. Such an inequality would cause a spillover effect and the result would be higher personal income level and inflation. Also, the monetary policy is inflexible and unsuccessful because of reasons explained in previous sections. We have also found out that in the fiscal sector, inflation causes (which are mainly of systemic origin) are very important. The problem of inflation in Yugoslavia, therefore, can not be solved only with known (orthodox,

heterodox) measures of the economic policy. These can alleviate inflation but can not eliminate it completely because of inconsistency in the economic system. Anti-inflationary strategy has therefore to be rather more complex in Yugoslavia compared to cases in market economies.

“Shock therapy” for eliminating inflation in Yugoslavia is unsuitable because of a cost-push type inflation and of a rigid economic system which causes inelastic reactions of economic agents to impulses of the economic policy and substantial negative economic and social effects. We consider a step-by-step strategy to be a better solution. This means that a reform of the economic system is a precondition for the elimination of the Yugoslav inflation. In general, the reform should mean an affirmation of the market economy. This would in Yugoslav circumstances mean the formation of the private ownership of nowadays “socially owned” means of production and other types of ownership, the formation of markets for all production factors (especially the labour market), the independence of the central bank, reorganization of commercial banks, liquidation of all unconverted deficits etc. When carrying out the reform, the economic policy should be based so that real personal incomes and taxes would not increase, only monetary policy would be restrictive. Such a strategy would permit waiting for a definite start of a new economic system at a sustainable level of inflation.

## 6. Conclusion

The government had already started the economic system reform in 1989, but it had not been carried through. When the government was forced (because of hyperinflation and public pressure) to begin a “shock therapy” with economic policy measures, there were no conditions prepared which would ensure the complete success of measures, even if they were more coordinated and carried out adequately. Besides, in the first months of 1990 shock measures were causing a sharp decline in economic activity, bankruptcy of firms and a fast growth of unemployment. A rigid economic system could not neutralize these effects.

The key measures of the reform are still on the way, and these are considered to be the crucial perils for any price stabilization program’s success. This means that a complete economic reform has to be carried out and, in the meantime, with adequate economic policy it should be necessary to keep inflation at sustainable heights.

Even if the reform were carried out satisfactorily, the problem of the political system is still open. The reformed market-oriented economic system can function and exist permanently only under circumstances of a parliamentary, multiparty system and consensus between all Yugoslav republics, which is still under question. Although by the end of December 1990 all republics have carried out free elections, especially in Serbia and Montenegro the communist party still has absolute role in taking political and economic decisions. Some steps taken, *e.g.*, by the Serbian political leadership and government (several economic blockades of Slovenia, duty taxes on Slovene and Croatian products sold in Serbia, Serbian incursion into the monetary system etc.) are jeopardizing not only the unity of the Yugoslav market but also the further existence of Yugoslavia as a united state.

### Abstract

O sistema econômico da Iugoslávia permite aumentos de renda dos fatores (agentes) de produção por unidade de sua contribuição ao PNB. O impulso inicial deste processo é dado por certos fatores (agentes) agressivos, mediante a majoração de seus preços. Isto, por sua vez, leva à imitação ou adaptação por outros agentes, os quais elevam seus preços (rendas) para evitar perdas sofridas com a inflação. Permite-se que a inflação, como resultado de causas do sistema econômico, prossiga sem controles através da criação da base monetária. Assim, a inflação iugoslava é determinada por elementos de oferta, isto é, pela pressão de custos de produção e pelo modo de se financiar estes custos (renda pessoal e impostos) e os investimentos. Não convém a “terapia de choque” para eliminar a inflação na Iugoslávia, porque a inflação é do tipo custo e por causa da rigidez do sistema econômico, que provoca tanto reações inelásticas por parte dos agentes aos impulsos da política econômica, quanto efeitos sócio-econômicos bastante negativos. A melhor solução seria uma estratégia passo a passo, ou seja: uma reforma do sistema econômico é pré-requisito para a eliminação da inflação iugoslava. Em geral, tal reforma deveria significar uma afirmação da economia de mercado. Na conjuntura iugoslava, isto significaria a formação da propriedade privada dos meios de produção, agora sob “propriedade social” e outros tipos de propriedade; a formação de mercados para todos os fatores de produção (principalmente o mercado de trabalho); a independência do banco central; a reorganização dos bancos comerciais; a liquidação de todos os

déficits descobertos, etc. Ao efetuar a reforma, a política econômica deve assegurar que não haveria aumentos na renda individual real e impostos, e que apenas a política monetária seria restritiva. Tal estratégia permitiria esperar o início definitivo do novo sistema econômico num nível de inflação sustentável. Após o início definitivo do novo sistema econômico é que a terapia de choque poderia ser empregada para eliminar a inflação.

## References

Bajt, A. *Mehanizmi inflacije u Jugoslaviji, Savremeni problemi ekonomske stabilizacije*. Titograd, 1983.

\_\_\_\_\_. *Alternativna ekonomska politika*. Globus, Zagreb, 1986.

\_\_\_\_\_. *Netržni sistem plačevanja kot dejavnik hiperinflacije*. Delo, *Ljubljana*, nov. 25, 1989.

\_\_\_\_\_. *Decembrski šok — odkod vztrajnost inflacije?* *Gospodarska gibanja*, EIPF, *Ljubljana*, n. 203, 1990.

Bole, V. *Tecajno sidro in proračunsko jadro ali presidranje ladje*, *Gospodarska gibanja*, EIPF, *Ljubljana*, n. 209, 1990.

Dornbusch, R. *Experiences with extreme monetary instability*. Paper presented at the World Bank's Conference in Vienna. Mar. 1990.

Fischer, S. *Seignorage and the case of national money*. *Journal of Political Economy*, 1982.

Furubotn, E. & Pejovich, S. *Property rights and the behaviour of the firm in a socialist state: the example of Yugoslavia*. *Zeitschrift fuer Nationalökonomie*, 1970.

Gregory, P.R. & Stuart, R.C. *Comparative economic systems*. Boston, Houghton Mifflin, 1985.

Vanek, J. *The general theory of labour-managed economies*. Ithaca & London, Cornell University Press, 1970.

Žizmond, E. *The slovene economy: the past, the present and the future*. *Est-Ovest*, n. 5, Triest, 1990a.

\_\_\_\_\_. *Particularities about the Yugoslav inflation*. Paper presented at the Fifth Annual Congress of the European Economic Association. Lisbon (Books of Abstracts, Session C.59.4), 1990b.



Yagci, F. & Kamin, S. *Macroeconomic policies and adjustment in Yugoslavia: some counterfactual simulations; economic modelling in the OECD countries*. London, Chapman & Hall, 1988.