

## SUMMARY

### Hyperinflation

In the period between 1992 and 1994 Yugoslavia experienced a hyperinflation which in the world economic history ranks third in terms of its 22-month duration (March 1992 - January 1994), as well as in terms of maximum monthly level of 314 million or, more precisely, 313,563,558 percent (January 1994).<sup>1</sup> Daily inflation was 62%, and that of one hour only (60 minutes) 2.03% which was higher than annual rates of inflation of many developed countries. It is worth noting, just for reasons of peculiarity, that January 1994 inflation was 116,545,906,563,330 percent at annualized level.

During the early nineties of the last century there were five dinar denominations, of which the last three occurred in only a few months. In early October of 1993, 1,000,000 dinars were replaced with a single new dinar, and by the end of the same year now one dinar substituted for 1,000,000,000 dinars, whereas on January 24<sup>th</sup>, 1994, through a new denomination, 12 million dinars were replaced with a new dinar (popularly called "avram", after the Governor of the National bank of Yugoslavia – prof. Dragoslav Avramovic, PhD).

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<sup>1</sup> Longer hyperinflation was recorded in Nicaragua (48 months in the period 1987-1991) and China (26 months in the period 1947-1949). A higher maximum monthly level was reached in Hungary in 1946, at 420 billion percent and in Greece in 1944, at 855 million percent. Besides, Yugoslavia, Poland and Hungary are the only European countries that had two hyperinflations during the XX century. In addition to the one already mentioned, Yugoslavia experienced hyperinflation in 1988-91 as well.

At the time of such high hyperinflation in Yugoslavia, the prices in stores were shown in conditional units - point, and the coupon equaled one Deutsche Mark. Trade was carried out in DM or in dinars at current „black“ exchange rate which was changing frequently, sometimes several times during one day. Thus, for example, on 13 January in the morning, street sellers - "dealers" were selling the DM for 500,000, about noon for 600,000, and in the evening hours for 800,000 dinars. The noon „black“ exchange rate of the DM was on 14 January 900,000, on 15 – 2,500,000, on 16 – 3,500,000, on 17 – 5,000,000, on 18 - 5,500,000, on 19 - 10 million, on 20 - 14 million, and on 21 January - 15 million dinars.

The money got so quickly devalued, that absurd situations occurred. In early 1994 appeared a metal coin of 1 dinar, so that for one dollar one had to give 700 tons of those coins. Pensions paid on 17 January were such that average pension amount of 4.8 million dinars was not enough to buy with it one DM in the „black“ market. At the same time, the price of one kilo of beef was 70 million dinars, while a 3-kilo sack of a detergent cost 67 million dinars.

The destructive hyperinflation was pushing the national currency unit – the dinar – out of the economy. The money supply in January 1994 was only 0.4% in relation to social product, while this percent ranges between 25% and 30% in normal circumstances. The dinar stopped to fulfill the money functions as a measure of value, the means of payment, the stock of value and, to a large extent, the function of the money as a medium of turnover, and/or a medium of trade. Everybody was trying to get rid of dinars so that the velocity of money at the time when the hyperinflation was at its peak reached a fantastic figure of 3,673, and/or in just one day the dinar „changed hands“ 10 times.

Such devastating hyperinflation had as a consequence a drastic deterioration in all essential economic indicators. Only in 1993, the fall of 30% in the social product was recorded, investments and industrial output went down by 37%, each, while unemployment reached as much as 24.1%.

At the same time an enormous budget deficit was created in a situation where public revenues were rapidly decreasing (the drop of the tax base due to the fall in the economic activity and because of the international sanctions a substantial growth of the "gray economy" due to which a significant part of the already reduced social product remained untaxed, etc.), and public expenditures were significantly growing (larger allocations for social needs caused by deteriorated economic situation in the country, economic and war assistance to the Serbian population in Bosnia and Herzegovina and Croatia where a civil war erupted, aid to refugees, etc.). Budget deficit was mostly financed by reserve money, and that monetization of the budget deficit<sup>2)</sup> is the basic cause of hyperinflation.

In early 1994, after the record hyperinflation experienced by Yugoslavia in the preceding months, a „Program of Monetary Reconstruction and Economic Recovery“ was adopted. A team of experts which prepared this Program was headed by Prof. Dr. Dragoslav Avramović, after whom this Program would be named in general public. Prof. Dr. Dragoslav Avramović was later appointed as Governor of the National Bank of Yugoslavia, and he gave an enormous contribution to implementation of his self-worked out Program.

The principal measures of the Avramović Program were primarily linked with monetary and fiscal spheres so that it was actually an orthodox stabilization program.

The Stabilization Program was intended to accomplish, first and foremost, the following objectives:

- Curbing of the hyperinflation, and restitution of the lost money functions to the dinar,

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2) Destructive hyperinflation pushed the dinar out of the economy and it stopped almost fully to meet its basic functions. The dinar was almost exclusively used for payment of fiscal obligations to the state. However, budgetary revenues raised in hyperinflationary environment devalued literally during one day. They actually accounted for only 1% (during the highest hyperinflation), while the remaining 99% of necessary budget expenditures was financed from reserve money, and/or with credits of the National (Central) Bank of Yugoslavia.

- Allowing an accelerated and steady economic growth,
- Important increase of salaries (drastically devalued during the hyperinflation era), and provision of minimal security of all citizens,
- Reform, of substance, of the economic system, particularly in the financial area, and acceleration of the transition process, etc.

It was necessary at the same time to create the conditions as early as possible (by political factors in the country, in the first place) for the lifting of international sanctions and to open up the economy towards abroad, as a prerequisite for the Program's implementation in full. As it was clear that the lifting of international sanctions could not be waited for in order to only then start curbing the destructive hyperinflation, it was decided to prepare a program of stabilization and implement it in two stages.

The first, short-term stage, envisaged a monetary reconstruction and anti-inflationary measures aimed at curbing the inflation. It had to be implemented in the first 6 months by relying on our own forces, even in the circumstances of economic sanctions imposed by the international community.

The second, long-term stage, envisaged the economic reforms, in substance, which would lead (by preserving the stability accomplished in stage one) to economic recovery of the country, or which would ensure a steady economic growth in the long run. This stage, as emphasized by the Program authors, supposed the lifting of the economic sanctions and inflow of „fresh“ capital necessary for its realization.

As the above supposition did not materialize, the second stage did not stand any chance for a notable success, unlike the first stage of the Program in which extraordinary results were achieved. That is why only the first stage of the Avramović program will be highlighted in greater detail because, in the meantime, international economic sanctions were not abolished.

The first stage of the Program - Program of Monetary Reconstruction – was implemented in the conditions of economic sanctions, without foreign assistance and without any capital inflow, with initial foreign exchange reserves of about 300 million Deutsche Marks. Conditionally speaking, the basic measures within the monetary reconstruction program were oriented to monetary policy and monetary reforms, and fiscal policy.

Monetary policy had to play an important role in curbing the hyperinflation and in stabilizing the prices. For that purpose were introduced positive interest rates, while selective credits were abolished. Financial and monetary discipline was significantly tightened and independent role of the Central Bank strengthened (allowed by adequate, very good law adopted in mid 1993).

Monetary reform was also carried out by introduction of the new dinar with fixed exchange rate of 1:1 in relation to the Deutsche Mark<sup>3)</sup> and 1:12 million in relation to the hitherto (old) dinar.<sup>4)</sup> The issue of the old dinar stopped on 17 January 1994, and seven days later (on 24 January) a new monetary unit – the new dinar was floated. Internal convertibility of the dinar was introduced, and the issue of the new dinar was covered by foreign exchange reserves of the National Bank of Yugoslavia.

Fiscal policy envisaged a significant growth of budgetary revenues from real sources (by expanding the tax base, shortening of the tax collection period and introduction of new tax forms – the excise tax, for example)<sup>5)</sup> but also the keeping of the budget deficit in the first months. Namely, it was held that the level of public expenditures was very low and that their major reduction was not acceptable. According to the Program,

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3) Fixed exchange rate was intended not only to restore confidence in the national currency, but also represented a nominal anchor for other nominal aggregates.

4) In that way, two national currencies were in circulation: the old and the new dinar.

5) Tax rates were also lowered as it was believed that with a simultaneous expansion of the tax base in a new economic environment a substantial portion of the "gray" economy would be legalized.

budget deficit in the first six months had to be covered from the available foreign exchange reserves.<sup>6)</sup> Expectation was that in the new economic circumstances economic activity would grow and that an important portion of the "gray" economy would move to legal flows that would entail an increase of budgetary revenues and create the prerequisites necessary for a balanced budget.

It was precisely the keeping of the budget deficit in the first six months, and its financing with available foreign exchange reserves what made the Avramović program conceptually different from a standard orthodox stabilization program.

The first phase of the Avramović program produced fascinating results.<sup>7)</sup> The hyperinflation was curbed „overnight“, prices were stable and inflationary expectations were eliminated. The dinar soon recovered its earlier lost functions. Interest rates became real positive. The newly established exchange rate remained stable, and foreign exchange reserves

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6) The issue of new dinars for covering the budget deficit was covered by the available foreign exchange reserves. Moreover, new dinars were also issued on the basis of the foreign exchange purchased by the National Bank of Yugoslavia from the corporate and retail sectors. In that way, in the first stage of the Program implementation the new dinar was issued on the basis of full foreign exchange coverage, and did not have any inflationary consequence.

7) A great many exceptionally affirmative texts have been written about it worldwide. Here will be quoted only a part from one of such texts: "Usually, when seeking an example of a genius in economics we mention Milton Friedman. However, if I were asked, I would say it is Dragoslav Avramović, Governor of the Central Bank of Yugoslavia and pensioner of the World Bank. The main difference between Friedman and Avramović can be summarized by one word that Avramović is a real genius, but he has no chance to be a Nobel Prize winner because he is a Serb. What is it where this Serbian genius in economics manifests? In spite of the strict economic sanctions against Yugoslavia, the abundance has in the recent months been visible in Belgrade in each store, counters are full of consumer goods ... There are even traffic jams in Belgrade, and it is happening in a country which has been under a strict oil embargo for the last two years ... The most brilliant part of Avramović's magic was his success to put a stop to the hyperinflation which was 60% per day." (Davar, Tel Aviv, 3. 6. 1994).

were rising. A substantial part of the "gray" economy was brought back to the legal sector. Budget deficit was going down from month to month and at the close of the first stage of the Program implementation it was practically eliminated. Industrial output registered relatively high rates of growth, and at the same time the salaries of the employees increased significantly in real terms.

It is a great pity that conditions were not created (lifting of international economic sanctions and, in that connection, inflow of "fresh" capital) for implementation of the second stage of the Avramović program. It would have probably been as successful as the first one. The argument supporting this assumption is primarily the fact that the Program had been well designed, but also the determination of Prof. Dr. Dragoslav Avramović (proven during the implementation of the first phase of the Program) not to accept any theoretical economic concept as a dogma, and his skill to find the right solutions to new problems emerging on a daily basis, and to permanently adapt to them his own Program.

### THREE TRUE STORIES

First story:

*Petar K. – one of the managers of a big production company:*

Due to hyperinflation that had developed to gigantic proportions in the country, especially in the last few months of 1993 and in January 1994, the use of cheques was eventually officially suspended, which meant that salaries could not have been paid to employees by money transfers, but in cash exclusively. We used to send a truck to the Public Audit Service so that it could carry the immense amount of banknotes to pay out salaries to more than 4,000 of our employees. The truck would leave early, before dawn, to get into line in front of the Public Audit Service in order to manage to obtain pay money

during the office hours. When the truck arrived at the company with the money, then a several hour classification and enveloping of the salaries for each employee would entail. As a rule, the employees would get the money in early evening hours and then would rush to stores (in case they were not closed by then due to the end of working hours) in order to buy something, or to street money dealers (who worked non-stop) to change dinars into German marks. At the entrance to my building “my” street dealer was always there and when I received my salary I regularly converted all the dinars into German marks, and then back to dinars when I would need them to go shopping.

At the beginning, before hyperinflation reached gigantic proportions, I changed most of my salary into German marks, leaving a smaller part in dinars so that I could buy the newspaper and cigarettes at the newsstand tomorrow morning. However, inflation was gaining speed and, by force of habit, coming back from work I converted my salary with “my” street dealer for 30 German marks (at the “black” exchange rate of 2.5 million dinars for a German mark), and left the rest in dinars. Climbing up the stairs it occurred to me that I still had too many dinars, and that I could buy 2 more marks, leaving me with enough dinars to buy the morning paper and a pack of cigarettes. I went to my apartment, left my things and immediately went out with 5 million dinars with the intention of buying 2 more German marks. But this time the dealer insisted on 6 million dinars for 2 German marks. I reminded him that it was only five minutes ago that I bought marks at the exchange rate of 2.5 million dinars, but he replied that just a couple of minutes ago “the bosses” informed him that the exchange rate was changed from 2.5 to 3 million dinars for one German mark.

Ever since then not only have I started changing all my dinars into marks right away, I even change marks back into dinars immediately before going to a restaurant for the family Sunday lunch, and I ask the waiter for the bill when ordering and pay it before the meal even arrives. Prices in restaurants are expressed in points, and the point worth could change several times during the day, meaning that it would be quite possible for the lunch to cost a several million dinars more after the meal.

Second story:

*Vinko K. - one of the managers of a big, at that time still successful export-import company.*

A few days before the New 1994 my employees spent the whole night preparing payroll records so that we could try to pay out salaries in the morning. At the time my salary amounted to several billion dinars, and in the morning my wife and I decided that I should buy two suckling pigs for my salary, as we were expecting a lot of guests for the New Year's Eve. However, there were not enough banknotes in the Public Audit Service that day so my company could not pay out salaries. At the time salaries were already paid out in cash (and delivered in vans loaded with money), as otherwise I would need several dozen cheques to withdraw the money, and banks did not have enough of them and were unwilling to issue them to clients, and eventually by the end of 1993 and beginning of 1994 they were officially suspended. The payroll records had to "stay over the night" and the following morning I could afford only one suckling pig. Nevertheless, as there was a shortage of banknotes in the Public Audit Service, the salaries were paid out in the early evening, and I rushed to the butcher's only to find out to my dismay that the salary was enough to buy only 1 kg of meat. Outraged as I was, I did not buy anything. When I got home I handed out a heap of banknotes to my wife but it was too late for any shopping as the stores were closed by then. Tomorrow morning my wife managed to get two tins of sardines for my billionaire's salary.

Third story:

*Nenad D. – unemployed:*

As long as it was possible to use bank cheques I was able to support myself and my refugee family of 6 members. As hyperinflation was speeding up it was becoming increasingly easier.

I had not difficulties getting cheques in the bank as my account had never been in the red. I had a friend working in a supermarket, and every morning I would wait until there was enough money in the cash register to buy 10 German marks with the street money dealers. I would give her the cheques for the dinars. For example, if the exchange rate for the German mark was 100 million dinars that morning, I would fill out the cheque to the amount of one billion dinars. By the end of the working day, the exchange rate for the mark would increase to 160 million dinars, for example, and I would sell 7 marks and for the billion and 120 million dinars, I would immediately deposit one billion dinars on my bank account, meaning my bank balance would remain unchanged in the same day. I would still have the 3 German marks, of which I would keep 2, and I would give 1 to my friend from the supermarket, and 120 million dinars for buying the necessities in the same supermarket.