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SOURCES OF INFLATION IN YUGOSLAVIA AND IN TURKEY

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INTRODUCTION

The purpose of this paper is to analyze the sources of inflation in Yugoslavia and in Turkey. For Yugoslavia one of the main sources of inflation from 1965 to 1980 had been excess demand generated mainly by a rapid increase of fixed capital investment. Excess demand was generally supported by bank credits, by inter-enterprise credits and in last resort by the central bank. An easy monetary policy was accommodating expansion of credit and money supply increase in this period. To reduce growing external deficit and rising inflation rate towards late 1970s, stabilization measures were introduced in 1980. Following these measures there was a decline in excess demand because of a dramatic drop in fixed capital investment. Average annual decrease in fixed capital investment had been 5.8 per cent for the period of 1980-1988. However growing deficits of enterprises, growing interest payments on external debt, increasing money supply, increasing inflationary expectations and surplus in trade with the U.S.S.R. had been the main sources of increasing inflation in Yugoslavia in 1980s.

Budget deficit has been one of the main sources of inflation in Turkey. Rapid increases in fixed capital investment, deficit of state economic enterprises and agricultural support prices were the important sources of budget deficit from 1973 to 1977. Deficits of state economic enterprises and rising interest on external debt had been two most important sources of budget deficit and inflation during the crisis period of 1977-1980. There had been a decline in budget deficit and inflation rate during the stabilization period of 1980-1983. From 1983 to 1988 high growth rates of fixed capital investment had again become an important source of budget deficit and inflation. Budget deficit continued to be financed mainly through increases in money supply. However increasing internal borrowing had become an additional important source of financing budget deficit in this period.

In the first part of this study sources of inflation in Yugoslavia will be analyzed. A short summary of institutional reforms of 1965 and 1974 is a necessary introduction to the analysis of inflation in Yugoslavia. Inflation under market self-management from 1965 to 1974 will be the first period for consideration. The years between

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1974 and 1980 is the second period to analyze inflaton under self-management planing. The period from 1980 to 1988 are the years of economic crisis. The main characteristic of this period is a rapidly rising inflation rate together with economic stagnation and recession.

The second part of the study is devoted to study the sources of inflation in Turkey. Firstly inflation in the third five year plan period will be reviewed. Then rapidly rising inflation during the economic crisis period of 1977-1980 will be analyzed.

Stabilization program of 1980-1983 period and the results of that program will be the third section of this part. The years from 1983 to 1988 are the years of expansionary economic policies again. Sources of rising inflation in this period will be the last section of second part. In conclusion a comparison of sources of inflation in Yugoslavia and in Turkey will be presented.

1. SOURCES OF INFLATION IN YUGOSLAVIA

1.1. *A SHORT REVIEW OF INSTITUTIONAL REFORMS*

Our analysis of inflation for Yugoslavia begins with 1965. This year is chosen for the beginning of the analysis because from 1965 on the results of a series of reforms which were aimed at decentralization both in political and economic sphere were began to be felt. In addition, 1965 is a year which is very close to the long run economic growth trend of Yugoslavia. (Lydall p.154) The 1965 reforms paved the way for market socialism in Yugoslavia. A transition from a centrally planned to a market oriented economy has began with these reforms. One of the most important change was to abolish the federal investment fund which was the main instrument of centrally planned investment programs. Changes in the fiscal system abolished the heavy tax burden on enterprises. Taxes on enterprise personal income funds became the main source of revenue for the communities of interest to finance social services and communal activities for water, roads etc.. By a new law on banking, enterprises and to some extent socio-political communities became the owners of banks instead of federal or republican authorities. Thus with this new banking law enterprises were given the task of redistributing resources of former state capital, savings of enterprises and of citizens. Investments of self-managed enterprises began to be financed through their retained earnings and competitively attained bank loans. Self-managed enterprises became autonomous economic units to work for profit. They determined, taking into account an indicative plan, the amount and composition of investment and production. The reforms shifted the motive force in the economy from federal and republican authorities to the enterprise. Thus the decade after the 1965 reforms can be described as market socialism. A change in the pattern of demand and in the profile of production in favour of consumer goods was observed. Decentralization in political sphere took away the political power from federal authorities to republican authorities. Decentralization in economic sphere gave economic power to enterprises and to some extent to republican authorities. The Federal government began to loose her control over the fiscal policy with 1965 reforms. Since 1971 the Federal government has been deprived of almost all her control over the fiscal policy which is the main macroeconomic policy instrument of the government. Thus the whole burden of macroeconomic fine tuning fell exclusively on monetary policy. (Prout pp.39-47; Lydall pp.263-265;Raicevic pp.63-69)

In 1974 with a new constitution and with some additional laws the 1965 reforms were revised to a large extent. The main objective of the revision seem to achieve a greater macroeconomic control and more efficient microeconomic decisions without violoting the principles of market socialism and workers'self-management. (Tyson,p.10) For macroeconomic control a new planning system was introduced. In this system "... planning process begins with an obligatory exchange of information by all enterprises and government agencies on their prospective plans" (Tyson,p.6) The coordination and harmonization of these prospective plans require a continous adjustment and consultation process among enterprises, economic chambers and other government agencies. At the end of this harmonization process a set of "social compacts" which describe general policy objectives and "self-management agreements" which are contractual agreements among enterprises for the realization of specified policy objectives are signed. This new "contractual" or "social" planning system aimed at establishing **exante** coordination. Social compacts and self-management agreements seem to be substitutes for direct control and coordination of economic planning by central government.

A revision of banking law tried to eliminate the excessive power of both professional managers of enterprises and authorities of socio-political communities over the allocation of commercial bank credits. Banks ceased to have the status of enterprises and became some special organizations like credit unions to serve the need of enterprises. Contractual self-management agreements among enterprises for the "pooling of resources", for mergers or for joint self-financing of investment projects became complementary devices to bank credits. (Tyson, pp.12-19; Prout,pp.68-70).

For microeconomic efficiency there was an important change in industrial organization. The power of big enterprises were reduced by dividing them into "basic organizations of associated labour" (BOAL). In this way enterprise structure became more decentralized. Decision making was transferred from enterprise to BOAL. BOALs became the real decision making unit in the economy. Individual BOALs began to act as small enterprises within enterprise.

BOALs had their own managerial, technical and clerical staff. Decisions on how to allocate and use profit were vested to BOALs. They even had the right to secede from the enterprise if they deemed it was necessary to do so. Hence one of the main purpose of the 1974 reforms was to weaken the growing power of managerial technocratic elite which was born after 1965 reforms.

1974 reforms went further in dismantling the budgetary apparatus. Government authorities denied themselves a vital stabilization weapon by weakening their control over budget. Meanwhile demand determined character of the economy became more visible. As a matter of fact, the reforms of 1965 and 1974 have developed a demand determined economy while they have destroyed the powerful instruments of demand management. Monetary policy was the only policy for demand management which was left for the Federal government. An official policy of keeping rate of interest below the scarcity value of funds made it impossible to use interest rate to control money supply. The main monetary policy instruments of National Bank were selective rediscounting and credit quotas. However reaction of money supply to the use of these instruments was not very quick. In addition enterprises by using inter-enterprise credits were usually able to evade the consequences of such policies. In such an environment the Federal government usually had to use direct interventionary measures. Direct measures of intervention have become the main instrument of demand management since the introduction of contactual planning. (Prout,p.185-186)

1.2. *MARKET SELF-MANAGEMENT AND INFLATION: 1965-1974*

Regionalization of economic decision making and lack of economic coordination at macro level were the two important results of the 1965 reforms. Macroeconomic management power of the Federal government was significantly weakened and the cyclical behaviour of Yugoslav economy increased after the reforms. Expansions in final domestic demand gave way to rapid economic growth, increased inflationary pressures and balance of payment deficit. Periodic balance of payments difficulties and inflationary pressures required direct interventions of the Federal government in the economy. As balance of payments difficulties were eased and a slowdown in inflation was reached, expansionary policies came into effect again. Thus stop and go policies of economic growth became a prominent feature of Yugoslav economy after the 1965 reforms. For example the high growth rates of fixed capital investment and social product in 1963 and 1964 were realized at the expense of growing trade deficit and inflation. In order to decrease growing trade deficit and inflation there was a big drop in fixed capital investment and growth of social product in 1965. In 1966 fixed capital investment grew by 5.4 per cent while the growth of social product rose to 7.9 per cent. Growth of cost of living declined to 22.8 per cent in 1966 from 35.2 per cent in 1965. To be fair high growth rates in cost of living in 1965 and 1966 were partly the result of adjustments made in product prices to bring Yugoslav prices closer to world prices. In 1967 growth rate of fixed capital investment was reduced to 2.0 per cent while growth rate of social product was down to 2.3 per cent. Meanwhile growth rate of cost of living declined to 7.0 per cent in 1967 from 22.8 per cent in 1966.

Annual rate of increase in cost of living had been 13.8 per cent from 1965 to 1974. (See table 1) Final domestic demand in nominal terms had increased 20.8 per cent per annum for the period. Average annual real increase in final domestic demand had been 5.6 per cent in those ears. Money supply had increased 18.9 per cent per annum for the period. The rate of increase of money supply was just 1.9 per cent less than nominal increase in final domestic demand in this period. Average annual growth of social product had been 6.1 per cent. The increase in nominal final domestic demand was approximately equal to the sum of growth rates of social product and cost of living.

Table 1: Growth Rates of Some Important Macroeconomic Variables in Yugoslavia (Average percentage per annum)

	1965-1974	1974-1980	1980-1988
Social Product	6.1	5.3	0.5
Final Domestic Demand(N)	20.8	26.2	59.1(*)
Real Final D.Dem	5.6	5.3	-1.9
Cost of Living	13.8	19.3	74.1
Money Supply (M)	18.9	28.3	64.9
Gross fixed Capital Investment	5.9	6.2	-5.8
Industrial Production	6.7	6.7	2.2
Industrial Employment	2.6	3,8	2.9
Industrial Productivity	4.0	2.8	-0.7
Agricultural Production	3.8	1.5	0.7
Personal Consumption(Real)	5.5	4.7	-01
Real Net personal Income Per worker	4.9	0.5	-3.4
Exports	14.9	15.4	4.0
Imports	21.6	12.3	-1.5

(*) For 1980-1987
Sources: F.S.O. *Statisticki Godisnjak Jugoslavije; Indeks;* OECD, *Economic Surveys, Yugoslavia.*

An important factor behind the considerably high growth of social product was the increase in gross fixed capital investment. Avrage annual growth of fixed capital investment had been 5.9 per cent for the period. Real net personal income per worker had increased 4.9 per cent per annum while personal consumption had grown 5.5 per cent. Industrial production had increased 6.7 per cent per annum and growth in industrial employment had been 2.6 per cent. Thus growth in industrial productivity had been 4.0 per cent per annum between the years 1965 and 1974. Growth in agricultural production for this period had been 3.8 per cent per annum. Exports had grown 14.9 per cent per annum while the frowth of imports had been 21.6 per cent. The performance of Yugoslav economy for the nine year period of 1965-1974 could be considered quite successful except for the increase in inflation rate.

1.3. *SELF-MANAGEMENT PLANNING AND INFLATION: 1974-1980*

It became increasingly difficult to set up the necessary macroeconomic policy measures in Yugoslavia after 1965. When the necessary measures were set up it was not easy to implement them because of deep seated divisions among republics. The lack of effective macroeconomic policy instruments for a successful operation of the market self-management system and **ad hoc** interventions of republican authorities in economic policies weakened macroeconomic control of the economy especially towards the end of the period. For greater macroeconomic control of the economy, a revision of the 1965 reforms seemed to be unavoidable. Federal authorities desired to reform the economic system in order to strengthen planning and to reduce the role of market in resource allocation. One of the aims of the 1974 reforms seems to be to attain a greater macroeconomic policy-making power at the Federal level. However, contrary to the desired aim of the authorities the reforms "... produced a noticeable transfer of policy-making authority from federation to the individul republics and autonomous provinces. The new planning system which was an important innovation of the reforms "... required prior consultation with an approval by republican and provincial governments before federal action could be taken." (Tyson,pp.4-5) As a matter of fact the 1974 reforms while reducing the decentralized coordination of market introduced a new system of contractual planning to reconcile a market economy with planning. However unsystemic **ad hoc** interventions in the economy became usual and **ex ante** coordination of the economy could not be achieved in practice. Economic policy setting through social compacts allowed a great deal of discretion to individual republics, provinces and communes. Frequent intervention in the economy resulted in a lack of coordination.

Direct interventions in the economy seemed to be the usual way to control inflationary pressures. However direct interventions involved a trade-off between economic growth and price stability.. Expansionary economic policies resulted in rapid economic growth, growing inflationary pressures and increasing balance of payments deficit. Price controls, investment controls and foreign exchange controls were introduced to reduce growing inflationary pressures and balance of payments deficit. A slowdown in economic growth was the inevitable result of these controls. For example in 1973 social product growth was 4.9 per cent while cost of living increase was 19.5 per cent. Growth rate of social product rose to 8.5 per cent and increase in cost of living rose to 21.3 per cent in 1974. Control on imports and policies to restrict investment growth were put into effect. Growth rate of social product declined to 3.6 per cent in 1975 and to 3.9 per cent in 1976. Growth rate of cost of living which was 24.5 per cent in 1975 dropped sharply to 12.1 per cent in 1976.

After reducing the growing inflationary pressures of the first oil price shock of 1973 Yugoslavia tried to stop further slow down of social product growth. An import substituting development strategy and a policy of forced economic growth was chosen in the five year plan of 1976-1980. The new development strategy aimed to reduce import dependency and to develop heavy industries in Yugoslavia. Import substitution policy required a growing domestic demand. Expansionary economic policies came into efect again. Average annual growth of fixed capital investment rose to 8.8 per cent from 1976 to 1979. Average annual growth of social product and real final domestic demand were both 7.3 per cent for these years. A second sharp rise in oil prices in 1979 had increased inflationary pressures and trade deficit of Yugoslavia. Trade deficit rose to 7225 million dolars in 1979 while the rate of increase in cost of living rose to 21.0 per cent in 1979 and to 29.6 per cent in 1980.

Foreign trade volume of Yugoslavia was around one third of social product in 1970s. Yugoslav domestic prices especially those of tradeable goods and services were strongly influenced by rising world oil prices and raw material prices. Increasing import prices directly or indirectly affected the costs of goods in all sectors. Since there was a little wage drag in Yugoslavia the rise in import prices increased costs and prices which in turn increased personal incomes. (Lydall, p.254) Thus one of the most important factor affecting inflation in 1970s had been rising world prices of oil and raw materials. On the other hand illiquidity crises which mainly depended on defaulted or delayed payments of inter-enterprise credits and lax financial discipline of enterprises were forcing monetary authorities to increase money supply. Increasing final domestic demand was an additional important source of money suply increase. Consequently, the main sources of money suply increase in 1970s were rising world prices, illiquidity crises of enterprises and increasing final domestic demand. In this framework money supply was an endogenous rather than an easily controlable exogenous variable for Yugoslavia.

Average annual rate of increase in cost of living rose to 19.3 per cent in 1974-1980 period. Increase in nominal final domestic demand had been 26.2 per cent per annum for this six years period. The increase was 5.3 per cent per annum in real terms. Average increase of money sply for the period was 28.3 per cent per annum. Growth in social product slightly decreased to 5.3 per cent per annum while fixed capital investment growth slightly rose to 6.2 per cent in this period. The share of gross fixed capital investment in social product rose from 28.8 per cent in 1974 to 35.1 per cent in 1980. Average annual growth of real net personal income fell sharply from 4.9 per cent in 1965-74 period to 0.5 per cent in 1974-1980 period. Meanwhile growth of personal consumption did not show a sharp decline. It decreased to 4.7 per cent in 1974-1980 period and was only 0.8 point below the growth of previous period. Average annual growth rates of industrial production and industrial employment had been 6.7 and 3.8 per cent respectively. Industrial productivity had increased 2.8 per cent per annum from 1974 to 1980. Annual growth of agricultural production had been 1.5 per cent for the period.

In this period of self-management planning Yugoslavia tried to continue her development process by a forced growth policy. However the gap between total domestic saving and total domestic investment began to increase in the period. Adverse economic conditions in world economy which followed 1973 oil price shock contributed to the increase of saving-investment gap. Increase in imports had been almost twice that of exports from 1976 to 1979. A current account surplus of 165 million dollars in 1976 had turned very quickly into a current account deficit of 3661 million dollars in 1979. The accumulated current account deficits of 1977, 1978 and 1979 had been 6.5 billion dollars. This amount was almost wholly financed by financial credits and credits for import. Consequently total net external debt of Yugoslavia rapidly rose from 5.8 billion dollars in 1975 to 17.3 billion dollars in 1980. (National Bank,p.56) Rapid increase in external debt, growing inflationary pressures and huge current account deficit of 1979 compelled the authorities to change their economic policies.

1.4. *ECONOMIC CRISIS AND INFLATION: 1980-1988*

A stabilization program was introduced in 1980 and the dinar was devalued by 30 per cent against the U.S. dollar. Current account deficit declined sharply from 3.7 billion dollars in 1979 to 2.3 billion dollars in 1980 and to 0.5 billion dollars in 1982. Since 1983 there has been a growing surplus in current account. However a decline in rate of inflation has not been realized yet. On the contrary rate of inflation has continued to rise in 1980s except for 1982. Inflation rate had risen to three digit level in 1987 and to a four digit level in 1989. Meanwhile Yugoslav economy had stagnated in 1980s. Average annual growth rate of social product had dropped to 0.5 per cent from 1980 to 1988. Thus 1980s had been the years of stagflation where inflation and stagnation has been observed together. As a matter of fact stagnation had turned into a recession after 1986. social product had declined 1.1 per cent in 1987 and 1.7 per cent in 1988.

Decline in gross fixed capital investment and imports have been two important sources of economic stagnation and recession. Average annual decline in gross fixed capital investment had been 5.8 per cent from 1980 to 1988 whereas decline in imports had been 1.5 per cent per annum for the same period. Growth in industrial production was 2.2 per cent while industrial employment grew 2.9 per cent per annum for the period. Thus average annual decline in industrial productivity had been 0.7 per cent per annum. Meanwhile real net personal income per worker had declined 3.4 per cent from 1980 to 1988. Decline in real final domestic demand had been 1.9 per cent per annum.

What are the reasons for declining fixed capital investment, declining imports and rising inflation in Yugoslavia since 1980? Intead of a quick response to oil price shock of 1973 and ensued changes in world economic conditions, Yugoslavia tried to avoid an economic recession immediately after 1973.

A forced economic growth and an import substituting strategy for economic development were preferred to prevent a recession. Forced development of some domestic sectors in intermadiate goods and heavy industries were possible because of easily available foreign credit especially after 1973. Electrical energy, coal extraction, oil and gas extraction and refining, ferrous and non-ferrous metals, extraction of non-metalic minerals were the sectors of priority in intermadiate goods. In heavy industries manufacturing of basic chemicals and machinery and shipbuilding were given priority to receive preferential access to investment funds. (World Bank,Adjustment Policies ... p.8)

The drive of enforced growth was not costless. Imports of Yugoslavia had doubled from 7.4 billion dollars in 1976 to 15.1 billion dollars in 1980. Accumulated current account deficit of four years after 1976 had become 8.8 billion dollars. External debt of Yugoslavia had almost tripled from 1975 to 1980. External financing of enforced growth was possible and easy upto 1979 because of very low and even negative real interest rates in rapidly expanding Eurodollar market after 1973. The cost of servicing external debt has risen after 1979 because of increased interest rates on external debt. Interest payment on external debt was 281 million dollars in 1975 . It rose to 1084 million dollars in 1980 and 1979 million dollars in 1988. The increase in international interest rates has resulted in increasing interest payments of Yugoslavia. Total interest payments from 1980 to 1988 had been 14.7 billion dollars. On the other hand net transfers from Yugoslavia to the rest of the world had been 11.7 billion dollars from 1981 to 1987. Average annual net transfers was 1.67 billion dollars between these years. This amount is around 2.7 per cent of social product of Yugoslavia.

Table 2: External Debt, Interest Payment, Net Transfers and Current Account Balance of Yugoslavia ($ million)

Years	External Debt	Foreign Lending	Interet Palments	Net Transfers	Current Account Bal.
1980	18873	1526	1084	+1132	-2291
1981	21096	1585	1710	-235	-750
1982	20265	1718	1773	-1514	-464
1983	20501	1848	1532	-653	274
1984	20200	1917	1638	-2459	504
1985	19837	1902	1664	-1613	833
1986	20591	2162	1749	-2663	1100
1987	21961	2412	1710	-2555	1248
1988	20220	3390	1797	n.a	2487

Source: National Bank of Yugoslavia, *Quarterly Bulletin*, March 1989; OECD, *Economic Surveys Yugoslavia, World Bank* World Debt Tables 1988-89.

The problem of external debt servicing has been at the center of economic policy considerations since 1980. The great burden of external debt has inhibited the working of contractual planning in 1980s. As a matter of fact the main aim of the five year plan of 1981-1985 had been to stabilize Yugoslav economy. Inportant policy objectives of the plan were to promote exports, to restrict imports and thus to reduce current account deficit. Due to restrictions on imports there was a sharp decline in gros fixed capital investment during 1980s. Real net personal incomes declined 6.2 per cent per annum while the decline in final domestic demand was 3.6 per cent per annum from 1980 to 1984. The fall in final domestic demand and real net personal incomes were necessary to direct resources from domestic use to external use. However in 1985 and 1986 real net personal incomes increased by 3.9 and 10.0 per cent per annum respectively. There was a 4.2 per cent rise in final domestic demand in

1986. Fall in real net personal incomes had been 7.2 per cent per annum from 1986 to 1988 while fall in final domestic demand was 1.8 per cent. External adjustment and debt servicing policies were major policy objectives of Yugoslavia during 1980s. Restrictions on imports paved the way to a decline in imports. The decline in imports became an important source of stagnation and thus of inflation. Net transfer of resources from Yugoslavia was another important source in decreasing domestic supply and creatig inflationary pressures.

The borrowers of rapidly increasing external debt in the second half of 1970s were the banking system and selfmanagement enterprises. External borrowing were almost wholly used by Yugoslav enterprises to finance their increased import needs. Since external borrowing in the second half of 1970s had been mostly on floating interest rates, the rises in Eurodollar interest rates after 1979 has increased the burden of external debt. Increased interest payments after 1979 has thus contributed to the losses of banking system and selfmanagement enterprises.

Forced economic growth and import substituting development strategy of the 1976-1980 plan required a substantial rise in growth of investment. Growth of fixed capital investment was 8.8 per cent per annum from 1976 to 1979. This high rate of growth in investment was financed by easily obtained bank credits. As a matter of fact self-management enterprises could always create their own credit by issuing or transferring promissory notes for goods and services they bought. Enterprises could default on or delay their payments on their contractual obligations without facing any legal sanctions. The effective guarantee against enterprise closure made it easy, especially for weaker and loss making enterprises to default an outstanding credit without any serious consequence. (Estrin,p.54) Loss making enterprises could use not only their own reserves but also reserves of other enterprises, pooled reserves at commune and republican levels, bank loans and reschedulings, writeoffs of debts and postponement or cancelling of tax and contribution obligations to commune and republic. (Knight, p.2) Thus liquidity troubles of loss making enterprises were easily passed on other enterprises, banks, communes and republics. In this way a more general liquidity crisis became easy to arise in the economy.

As a matter of fact budget constraint for Yugoslav enterprises has been a very soft constraint since the early 1970s. Soft budget constraint reflects a loose relationship between expenditure and income. If excess expenditure over income of an enterprise can easily passed onto other enterprises and at last resort to state then the enterprise is said to have a soft budget constraint. Softening of the budget constraint can be accomplished by soft credit conditions, soft subsidies, soft taxation conditions and soft administrative prices for enterprises. (Kornai, pp.4-6) Soft budget constraint has been the most important source of inefficient investment and inefficient enterprises especially since the plan of 1976-1980 in Yugoslavia. The doors were wide open for deficit financing of enterprises. Deficits of inefficient and insolvent enterprises have been financed through the bankıng system in Yugoslavia. (Mates,p.240) In 1980s no solid attempts were made either in stabilization programs or in economic policy measures to harden "the soft budget constraint" and no attempt to abolish" socialization of inefficiencies and loses" of enterprises. (Mencinger,p.413)

As we noted earlier extreme federalization of government especially in the area of fiscal policy made it impossible to use fiscal policy as a method of aggregate demand control. So the Federal government has to rely on monetary policy as the only instrument of restricting aggregate demand. (Lydall,p.263)

Average growth of money supply had been 64.9 per cent per annum from 1980 to 1988 while cost of living growth had been 74.1 per cent. Meanwhile there had been 1.9 per cent average annual decrease in real final domestic demand from 1980 to 1988. In a sense the Federal government had tried to control money supply growth. However the Federal government has lost the control of money supply especially after 1983 and inflation has sharply risen since then. One of the most important reasons for losing control over money suply was the growing habit of soft budget constraint among enterprises. Growing numbers of self-management enterprises were no longer reacting to monetary control by decreasing their demands. Thus demand deflation throgh monetary restrictions became more ineffective in the second half of 1980s. As a matter of fact the Federal authorities fearing of bankruptcies and closures of many enterprises in case of a very tight monetary policy were generally forced to supply the necessary amount of money to prevent bankruptcies. Thus money supply has been a validating endogeneous or passive variable rather than a causal, exogeneous or active variable of inflation in Yugoslavia especially since 1983. (Kornai, pp.12-13; Lydall,p.253;Tyson,pp.83,84 and Mencinger p.415)

On the other hand attempts to restrict domestic demand by restrictive monetary policy has been undermined because of a substantial foreign currency deposits of households. Due to rapid depreciation of the dinar against hard currencies, foreign exchange deposits of households rose in dinar value much quicker than the nominal increase in social product. This rather quick increase in dinar value of high yielding foreign exchange deposits and the interest paid on them has reduced the effect of the decline in real personal income and relatively restricted money supply. Meanwhile because of this quick increase in dinar value of foreign exchange deposits and rather high interest paid on them, deficits of the banking system has grown and required additional money to be pumped in the economiy.

Continuous and rapid rises in inflation rate in 1980s has increased inflationary expectations in Yugoslavia. Increased inflationary expectations have paved the way for increase in income velocity of money. Income velocity of money was 3.4 in 1980. It rose to 6.1 in 1985 and reached to 6.3 in 1987. This rise in income velocity of money had been another source of rising inflation in 1980s. (Mencinger, p.415)

Lastly one should mention the trade surplus of Yugoslavia with the U.S.S.R. as another source of inflation in 1980s. The trade with the U.S.R.R. is made on a clearing basis. So a surplus in this trade creates inflationary pressures in Yugoslavia. There was 209 million dollars trade deficit of Yugoslavia with the U.S.S.R. in 1980. However this deficit turned into a surplus of 678 million dollars in 1981. From 1981 to 1988 each year Yugoslavia had a trade surplus with the U.S.S.R. Cumulative trade surplus of Yugoslavia with the U.S.S.R. in these eight years had been 5893 million dollars. This means 737 million dollars average yearly surplus which is around 1.3 per cent of Yugoslavia's social product for those years.

Sources of inflation in Yugoslavia in 1980s may be summarized as follows.i) Increased interest payments on external debt resulted in a net transfer of resources from Yugoslavia. On the average about 2.7 per cent of social product had been transferred to abroad between the years 1981 to 1987.ii) Soft budget constraint for enterprises had been an important source of inefficiency and losses of enterprises. Losses of enterprises which were about 3 per cent of social product in 1981 rose to about 7 per cent in 1986 (OECD, Economic Surveys Yugoslavia 1987,p.29) Growing losses and deficits of enterprises had been financed by the banking system. Financing of losses and deficits of enterprises had usually required printing of money.iii) Although the Federal government had tried to restrict money supply increase, it was unable to do so. The Federal government fearing of bankruptcies of enterprises was led to increase money suply. A rapid increase in income velocity of money had played an additional role in increasing inflation.iv) Trade surplus with the U.S.S.R. which was around 1.3 per cent of social product from 1981 to 1988 was another source of inflation in 1980s.

Table 3: Trade of Yugoslavia with the U.S.S.R.: 1980-1988 ($million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
- Imports (cif) from the USSR	2698	2966	2737	2463	1964	1977	1874	1926	1809
- Exports (fob) to the USSR	2489	3644	3424	2699	2797	3397	3122	2222	2304
- Trade Balance	-209	678	687	236	833	1420	1248	296	495

Source: OECD, *Economic Surveys, Yugoslavia;* FSO, *Statistics of Foreign Trade.*

2. SOURCES OF INFLATION IN TURKEY

2.1. *THIRD FIVE YEAR PLAN AND INFLATION*: 1973-1977

Development planning in Turkey has begun in 1963. An import substituting strategy had been chosen for planned development. This strategy had been strictly followed in the first three five year development plans in Turkey. In 1977, the last year of the third five year plan, current balance deficit of Turkey had reached 3.4 billion dollars. An external payment crisis had arisen. Economic growth had stopped and rate of inflation had begun to increase very rapidly. Therefore a short review of the economic performance in the third five year plan period is considered a good start to analyze the sources of inflation in Turkey.

Turkey like Yugoslavia, tried to avoid a stagnation after the first oil price shock in 1973. In order to continue in import substituting development, a forced growth in fixed investment had been followed. Easily available external credits had helped the forced growth in third five year plan period. Growth rate of fixed capital investment had been 13.2 per cent per annum from 1972 to 1977. Annual average growth of gross national product (GNP) had been 6.5 per cent per annum in this period. Industrial production had grown 9.7 per cent per annum while growth of industrial employment had been 3.9 per cent. Thus there was 5.7 per cent average annual growth in industrial productivity in the period.

Average annual growth of money supply was 31.6 per cent from 1972 to 1977. Increase in nominal final domestic demand was 31.0 per cent while increase in wholesale prices was 19.8 per cent per annum for the period. Growth of real final domestic demand was 7.8 per cent. These figures show that the sum of average annual real growth in final domestic demand and wholesale prices is 4 point less than the growth in money suply. Average annual growth of GNP was 6.5 per cent and 1.3 point less than real growth in final domestic demand. These rather high growth rates in GNP and real domestic demand were mainly a result of a very rapid growth in fixed capital investment which was 13.2 per cent per annum for the period.

Forced growth of fixed capital investment were financed basicly through external borrowing and expansionary economic policies in third plan period. Rapid fixed capital investment growth required a rapid import growth and became a reason for accelerated growth of inflation toward the end of the period. Average annual growth of imports reached 30 per cent in third plan period. Meanwhile there was a continous rise in real exchange rate and consequently a contraction in traditional export markets of Turkey. Average annual growth of exports was less than half of import growth and was 14.6 per cent. Thus current account deficit of Turkey rose from 0.7 billion dollars in 1974 to 3.4 billion dollars in 1977. Cumulative current account deficits in four years from 1974 to 1977 was 8.3 billion dollars. (OECD, Economic Surveys Turkey 1986,p.62) Average current account deficit in these four years was about 4-5 per cent of GNP. This rather high percentage of current account deficit in GNP was a sign of a coming economic crisis.

Table 4: Growth Rates of Some Important Macroeconomic Variables in Turkey (Average percentage per annum)

	1972-1977	1977-1980	1980-1983	1983-1988
Gross National Product	6.5	0.4	4.0	6.0
Final Domestic demand (N)	31.0	69.1	37.8	54.1
Real Final D. Demand	7.8	-1.2	4.2	6.1
Wholesale Prices*	19.8	73.1	30.8	47.8
Money Supply (M)	31.6	49.9	40.2	42.3
Fixed Cap.Investment	13.2	-4.8	1.6	12.5
Industrial Production	9.7	-1.7	6.7	7.6
Industrial Employment	3.9	-0.6	2.6	4.6
Industrial Productivity	5.7	-1.2	4.0	2.9
Agricultural Production	3.2	2.4	2.0	4.6
Private Consumption (Real)	5.9	0.4	5.8	4.7
Real Daily Wages**	na	-11.6	-2.6	-5.1
Exports	14.6	18.4	25.3	14.9
Imports	30.0	10.9	5.3	8.9

(*) Consumer prices since 1983;
(**) Turkish Employment Confedaretion.
Sources: Central Bank, *Annual Reports;* OECD, *Economic Surveys Turkey;* DPT, *Dördüncü Beş Yıllık Kalkınma Planı;* TOBB, *İktisadi Rapor. (Economic Report).*

High growth rate of fixed capital investment in third plan period had been the most important source of budget deficit and of increasing inflation. (OECD, Economic Surveys Turkey 1980 p.16-17) In addition to external borrowing a second important source of finance for fixed capital investment had been contributions from general budget to state economic enterprises during the period. Contributions from general budget to state economic enterprises had been 2.0 per cent of GNP in 1973. This rate rose to 3.2 per cent of GNP in 1977.

Table 5: General Budget Contributions to state Economic Enterprises in Turkey (1973-1977)

	1973	1974	1975	1976	1977
– Budget Contributions to SEE (billion TL)	6.1	7.2	10.3	16.2	27.8
– Share of budget Contributions in GNP	2.0	1.7	1.9	2.4	3.2

Source: OECD *Economic Surveys Turkey 1983* p. 72

Agricultural support policies had been another source of budget deficit and inflation from 1973 to 1977. Support prices of main agricultural goods showed very rapid increases in 1973 and 1974. The influence of these increases had been felt during the last years of third plan period.

2.2. *ECONOMIC CRISIS AND INFLATION: 1977-1980*

Growing current account deficit developed into an external payment crisis after 1977. Difficulties in earning or borrowing foreign exchange to pay for required oil imports, raw materials and intermediate goods had resulted in a fall of industrial capacity utilization between 1978 and 1980. There was a 2.4 per cent decline in fixed capital investment in 1978. Fixed capital investment level did remain same in 1979. However there was an additional big drop of 11.7 per cent in 1980. Growth of GNP slowed down to 3.9 per cent and 2.9 per cent in 1977 and 1978. There was a 0.4 per cent decline in GNP in 1979. Decline in GNP continued in 1980 and rate of decline in that year became 1.1 per cent. Industrial production declined 5.7 per cent in 1979 and 5.8 per cent in 1980. On the other hand there was a rapid rise in wholesale prices. Wholesale prices rose from 23.9 per cent in 1977 to 52.6 per cent in 1978 and to 63.9 per cent in 1979. The peak level for wholesale price increase in Turkey was realized in 1980. Increase in wholesale prices was 107.2 per cent in that year.

There had been two attempts at economic stabilization in 1978 and 1979. These attemts failed to stop price increases. Current account deficit was somewhat reduced in 1978 and 1979. However these reduction in current account deficit was a result of acute cuts in imports due to lack of foreign exchange in those years. Cuts in imports created great bottlenecks in supply of industrial goods and thus became an important source of price increases. Years from 1977 to 1980 were the years of economic crisis in Turkey. Average annual decline in capital investment had been 4.8 per cent in those years.

Thus the share of fixed capital investment in GNP dropped from 22.9 per cent in 1977 to 19.5 per cent in 1980. Industrial production had decreased 1.7 per cent annually while the decrease in industrial employment had been 0.6 per cent. Decline in industrial productivity had been 1.2 per cent per annum for the period. Average annual decline in real final domestic demand had been 1.2 per cent. There also had been a great drop in real daily wages in this period. Average annual decrease in real daily wages had been 11.6 per cent from 1977 to 1980.

Average annual growth in wholesale prices had been 73.1 per cent in the crisis period of 1977-1980. Nominal final domestic demand had increased 69.1 per cent per annum during the period. Average annual growth of money supply had been 49.9 per cent. Deficits of state economic enterprises and rising interest payments on external debt had become two important sources of budget deficit and inflation in this period.

Contributions from general budget to state economic enterprises was 3.1 per cent of GNP in 1978. This share rose to 3.8 per cent in 1979 and became 3.4 per cent in 1980. On the other hand budget deficit was 3.7 per cent of GNP in 1978. It declined to 1.9 per cent in 1979 and rose to 2.9 per cent in 1980. (OECD, *Economic Surveys 1983* p.72 and Central Bank, *Annual Reports.)*

External debt of Turkey increased rather quickly after 1974 because of growing current account deficits. Total long term debt of Turkey (excluding use of IMF credit) rose from 3.3 billion dollars in 1975 to 15.5 billion dollars in 1980 (World Bank, *World Debt Tables* vol.II p.398) The rise is almost equal to cumulative current account deficit of Turkey from 1976 to 1980. Interest payments on external debt showed a rapid increase and rose from 124 million dollars in 1975 to 489 million dollars in 1978, to 1010 million dollars in 1979 and to 1138 million dollars in 1980. (OECD, *Economic Surveys Turkey)* Thus share of external interest payments in GNP rose from around 0.3 per cent in 1975 to around 1.9 per cent in 1979, and to around 2.0 per cent in 1980. These rather high amounts of external interest payments became an important source of inflation in those years. Meanwhile Turkish lira devalued in 1978, 1979 and 1980. Rate of overall devaluation from September 1977 to January 1980 was 263 per cent. Thus Turkish lira prices of imports had increased accordingly and fueled inflation in those years.

2.3. *STABILIZATION PROGRAM: 1980 - 1983*

In the last three years of 1970s Turkey had been in a deep economic crisis. In order to deal with external payment crisis, to stop increasing inflation and to revive economy a comprehensive stabilization program was introduced in January 1980. The program aimed also at strengthening market forces and reducing state intervention in the economy. Another important objective of the program was to change the inward-looking development strategy of Turkey to an outward-looking strategy. Liberalisation of foreign trade regime and export promotions directed economy toward external markets. The stabilization program was "supported by a three-year stand-by arrangement with the IMF and OECD special assistance." (OECD, *Economic Surveys Turkey 1983* p.7) Stabilization measures were more prominent than the long term development strategy during the stabilization period. A stricter monetary and fiscal policy was able to decrease average annual growth of final domestic demand from 69.1 per cent in 1977-1980 period to 37.8 per cent in 1980-1983. Money supply growth declined from 49.9 per cent to 40.2 per cent per annum in those years. Wholesale price increase dropped from 107.2 per cent in 1980 to 36.8 per cent in 1981 and further to 25.2 per cent in 1982. There was a slight rise in wholesale price increase in 1983. It rose to 30.6 per cent in that year. Thus average annual increase in wholesale prices were 30.8 per cent from 1980 to 1983. A relative improvement in current account deficit had been observed in those years. Average export growth was 25.3 per cent while import growth was just 5.3 per cent per annum during the period.

Fixed capital investment began to rise again. Average annual increase in fixed capital investment was 1.6 per cent from 1980 to 1983. However the level of fixed investment in 1983 was about 9.5 per cent lower than the level of 1977. Industrial production began to grow again. Average annual growth of industrial production was 6.7 per cent in the period. Growth of GNP was 4.0 per cent per annum in those years. Industrial employment had grown 2.6 per cent while growth in industrial productivity had been 4.0 per cent per annum from 1980 to 1983. In spite of the rise in industrial productivity real daily wages continued to decline. Real daily wages declined on the average by 2.6 per cent per annum in this period. Thus decline in real daily wages became an important source of declining rate of inflation from 1980 to 1983. (OECD, Economic Surveys Turkey 1983.pp.20-21) Meanwhile increases in agricultural support prices were kept relatively low especially after 1981. The share of contributions from general budget to state economic enterprises which was 3.7 per cent of GNP in 1981 fell to 2.3 per cent in 1982 and became 2.5 per cent in 1983. The share of budget deficit in GNP was just 0.4 per cent in 1981. This share rose to 2.4 per cent of GNP in 1982 and it became 1.6 per cent in 1983.

To sum up, the declining rate of inflation from 1980 to 1983 was due mainly to; i) decline in contributions from general budget to state economic enterprises, ii) decline in the rate of increase of agricultural support prices iii) overall average decline in the share of budget deficit in GNP, and iv) continuing decline in real daily wages.

2.4. *EXPANSIONARY ECONOMIC POLICIES AND INFLATION: 1983-1988*

Following the introduction of economic stabilization program in 1980 relatively restrictive economic policies had been implemented. Thus average annual growth of wholesale prices had dropped to 30.8 per cent during the stabilization program. Although rate of inflation had been decreased it was still high to make rational economic calculation. There also was some improvement in current account deficit. However annual average current account deficit continued to be around 1.9 billion dollars. On the other hand economy had been revived. There was a 4.0 per cent average annual growth in GNP, a 6.7 per cent growth in industrial production and a 4.0 per cent growth in industrial productivity during the period. Growth in industrial production and in GNP was mainly a result of rising industrial capacity utilization because of a rising export volume.

Towards the end of 1983 a new set of economic policies were introduced. The objective of these policies were to complete 1980 measures for further strengthment of the market forces and competitiveness of the economy. Emphasis has been put on reducing state intervention in the economy. Share of state in the economy was to be reduced. New measures aimed at further lliberalization of foreign trade and foreign exchange transactions. Outward-looking and export led growth strategy has been emphasized. Export promotion policies have been given high priority.

On the other hand although not explicitly stated among policy objectives, an expansionary economic policy has begun to be implemented. Some new developments on the fiscal sphere were helping the expansionary policies. One should first mention the establishment of special investment funds. With the help of these special funds, investment in infrastructure and housing was increased. In addition a greater fiscal autonomy was given to local municipal administrations. Investment expenditures of municipal administrations increased more rapidly than their revenues and thus contributed to expansionary policies of central government (OECD, Economic Surveys 1987 p.45)

Expansionary economic policies have paved the way for a sharp rise in fixed capital investment. Average growth of fixed capital investment had risen to 12.5 per cent per annum from 1983 to 1988. Average annual growth of real final domestic demand had risen to 6.1 per cent per annum. Growth in GNP began to increase and reached 8.1 per cent in 1986. Average growth in GNP had been 6.0 per cent per annum from 1983 to 1988. Improvement in current account deficit has continued during the period because of a relatively high export growth. Average annual export growth was 14.9 per cent while average annual import growth was 8.9 per cent. In 1988 a current account surplus of 1.5 billion dollars was realized for the first time since 1973.

Because of continous current account deficits upto 1987,external debt of Turkey continued to rise until 1987. Total external debt of Turkey had shown a remarkably rapid increase in the period and it rose from 18.4 billion dollars in 1983 to 38.3 billion dollars in 1987. In 1988 external debt of Turkey ceased to increase and in fact decreased to 37.7 billion dollars. (OECD, Economic Surveys; C.B. Annual report 1988) Amount of average annual increase in external debt was very close to 5 billion dollars from 1983 to 1987. This amount is about four times of the average current account deficit of those years. In the meantime there was a rather rapid growth in domestic debt. Consequently interes payments on external and domestic debt had shown a rather rapid rise in this period. Interest payments on external debt was around 3.0 per cent of GNP in 1983. This rate had risen continuously and reached 4.2 per cent of GNP in 1988. The rise in interest payments on domestic debt was even more rapid. Interest on domestic debt rose from 0.4 per cent of GNP in 1983 to 3.2 per cent in 1988. Total share of external and domestic interest payments in GNP which was 3.4 per cent in 1983 more than doubled in five years and became 7.4 per cent of GNP in 1988. The rapid increase in total interest payments had naturally been an important source of budget deficit and of inflation after 1983.

Table 6: Interest on External and Domestic debt: 1983-1988

Years	Interest on Ext. Debt ($ million)	Interest on Dom. Debt (TL. billion)	Interest on Ext. D. / GNP	Interest on Dom.D. / GNP
1983	1511	50	3.0	0.4
1984	1586	177	3.2	1.0
1985	1753	247	3.3	0.9
1986	2134	649	3.6	1.7
1987	2507	1260	3.7	2.2
1988	2799	3159	4.2	3.2

Source: OECD, *Economic Surveys* and C.B. *Annual Reports.*

Consolidated budget deficit of Turkey was, on the average, about 1.8 per cent of GNP in the stabilization period of 1980-1983. The deficit rose after 1983. In 1984 it was 5.3 per cent of GNP. It dropped to 2.8 per cent in 1985. In the following years of 1986, 1987 and 1988 it was 3.6, 4.4 and 3.4 per cent respectively. Thus budget deficit was, on the average, about 3.9 per cent of GNP in 1984-1988 period and became an important source of inflation.

Table 7: Consolidated Budget Deficit and Budget Contributions to State Economic Enterprises: 1983-1988

	1983	1984	1985	1986	1987	1988
Contributions to SEE / GNP	2.5	1.3	0.7	0.4	0.8	1.0
Budget Deficit / GNP	1.6	5.3	2.8	3.6	4.4	3.4

Source: OECD, *Economic Surveys Turkey;* C.B. Annual report 1988.

Two main sources of finance of budget deficit had been central bank and domestic borrowing in this period. Central bank continued to be the main source of finance by printing money. Growth of money supply which was 42.4 per cent in 1985 rose to 56.3 per cent in 1986 and further rose to 64.7 per cent in 1987. Domestic borrowing became a second important source of financing budget deficit especially after 1984. In 1984 net domestic borrowing was financing just about 14 per cent of budget deficit. It rose to about 63 per cent in 1985. About one third of budget deficit was financed by net domestic borrowing in 1986 and 1987. In 1988 more than two thirds of budget deficit was financed by net domestic borrowing. (C.B. Annual Report 1988, p.92) Increased domestic borrowing had increased interest payments on domestic borrowing. In this way it became an important item of budget expenditures and thus of budget deficit. On the other hand increased domestic borrowing to finance budget deficit had decreased loanable funds for private sector and thus became a cause for rises in interest rates. Rising interest rates increased costs and became another source of increasing inflation.

Since 1983 a realistic pricing policy for state economic enterprises' goods has been implemented. Therefore transfers to state economic enterprises from the consolidated budget has been kept at a minimum. In 1983 budget transfers to state economic enterprises was 2.5 per cent of GNP. It dropped to 0.4 per cent in 1986. It was 0.8 and 1.0 per cent of GNP in 1987 and 1988 respectively. Meanwhile increases in agricultural support prices were generally held below inflation rate and thus ceased to be a source of inflation especially after 1984. Objective of reducing share of the state in the economy began to be realized during the period. Share of public in total fixed capital investment dropped from 60.3 per cent in 1983 to 48.3 per cent in 1988. (TOBB, İktisadi Rapor 1989, p.20) Growth of public consumption was about half of the growth of private consumption from 1983 to 1988. Share of consolidated budget expenditures in GNP was held almost constant at about 21 per cent during the period.

Acceleration of economic activity during the period was mainly a result of rapid growth in final domestic demand and especially in fixed capital investment. High liquidity injection into the economy was accomodating rapid growth of fixed capital investment. Financial autonomy given to municipal administrations and growing sources of special funds loosened central control over infrastructure and housing investment. Thus growth of public fixed capital investment was 11.7 per cent per annum from 1983 to 1987. Expansionary economic policies and accelerated economic activity had led to high capacity utilization in industry and even to capacity bottlenecks in some sectors. Meanwhile there was net transfers from Turkey to abroad in 1983, 1985 and 1987 totalling about 1.9 billion dollars. (World Bark, World Debt Tables vol.I1,p.398) On the other hand a rather high growth of exports to improve current account deficit had become another source of rapid growth of total demand for the period. Thus while there was a rapid growth in total demand, industrial supply was faced by capacity limits. Thus there was growing inflationary pressures from both demand and supply sides.

Income velocity of money was quite high during the period. It was 6.0 in 1983 but quickly rose to 8.7 in 1985. Then there were slight declines to 7.8 and 7.1 in 1986 and 1987 respectively. Income velocity of money rose again to 8.8 in 1988. There was about 1.7 point rise in average income velocity of the period compared to the previous period's average. Thus increasing income velocity of money was an additional factor of increasing inflationary pressures.

Average annual growth of consumer prices had been 47.8 per cent from 1983 to 1988. This rate was about 50 per cent more than the average rate of the stabilization period. Growth rate of consumer prices was 31.4 per cent in 1983. It rose to 48.4 per cent in 1984 and dropped to 45.0 per cent in 1985. There was a further drop to 34.6 per cent in 1986. A slight increase in 1987 was followed by a big jump in 1988. Growth of consumer prices reached 75.3 per cent in 1988.

Average annual growth of industrial production had been 7.6 per cent while employment growth in industry was 4.6 per cent. Thus average growth of industrial productivity had been 2.9 per cent per annum from 1983 to 1988. Real daily wages was continuing to decline during the period. Average annual decline of real wages had been 5.1 per cent for the period. Decline in real daily wages, while there had been a rise in industrial productivity was unable to decelerate average rate of inflation. On the contrary there had been an acceleration in average rate of inflation in this period compared with the previous period.

To sum up one could underline the sources of inflation in this period as follows. A remarkably high growth of fixed capital investment together with an increasing interest payment on external and domestic debts have caused an increase in average budget deficit and average rate of inflation for the period. Increase in budget deficit had been the basic source of acceleration in inflation. Rapid increases in money supply and high economic growth rates of 1986 and 1987 together with high utilization rates in industry and bottleneck signs in some sectors had become additional sources for the acceleration of inflation.

CONCLUSION

In developing countries the basic source of inflation has almost always been budget deficit. On the other hand the main cause of budget deficit has usually been rapid growth of fixed capital investment which is supported by public investment drive. Budget deficit has generally been financed by the central bank through increasing money supply. Yugoslavia and Turkey are not exceptions to this generalization.

There was no formal budget deficit in Yugoslavia for the period of analysis because of Yugoslavia's peculiar self-management and federal system. However deficits of socially owned enterprises are not very different than budget deficit in creating inflation in Yugoslavia. Deficits of socially owned enterprises are financed by commercial bank credits, inter-enterprise credits and in last resort by the central bank through increasing money supply. In this sense deficits of enterprises might be considered as budget deficit.

During market self-management period of 1965-1974 excess demand for investment was the most important source of inflation in Yugoslavia. Excess demand for investment was encouraged by low and even negative real interest rate. Substantial investment in social infrastructure, enterprise objective of maximizing personal incomes and absence of risk were important causes of ambitious investment plans. (Schrenk et. al. p.178) Growing control of banks and professional managers of enterprises over investable resources made it easy to support the ambitious investment plans of enterprises. Growing bank credits and increasing money supply became an important source of finance of excess demand for investment. On the other hand average growth of real net personal income was 0.9 point higher than growth of industrial productivity in this period. Thus growing bank credits, increasing money supply and incerase of real net personal income over industrial productivity might be counted as the sources of inflation for the period of 1965-1974.

For self-management planing period of 1974-1980 excess demand for investment continued to be the main source of inflation. Low or even negative real interest rates continued to encourage excess demand for investment. Priority sectors were given additional support by preferential access to investment funds at substantially negative real interest rates. To attain a high growth of investment required enterprises to increasingly rely on savings of other sectors of the economy, on expansion of money supply, on growing inter-enterprise credits and on external borrowing. Erroneous investments, growing inefficiencies and losses of enterprises were the results of the drive for rapid investment growth in this period. Meanwhile average growth of real net personal income declined to 0.5 per cent per annum and thus was 2.3 point below the growth of industrial productivity. Thus increase in real net personal income ceased to be a source of inflation in this period. However in addition to growing bank credits and increasing money supply there were two new sources of inflation in this period. The first of these new sources was rising world prices. Around one fourth of inflation was attributable to increases in the world prices of Yugoslav imports and exports in 1970s. (Tyson,p.77) Secondly growing inter-enterprise credits which were a sort of quasi-money, substantially increased the effects of growing bank credits and money supply in rising inflationary pressures.

1980s were the years of economic crisis and stabilization measures for Yugoslavia. From 1980 to 1988 there were declines in fixed capital investment, final domestic demand, industrial productivity and real net personal income. As a matter of fact there was a rise in real net peronal income in 1985 and 1986 because of a slight loosining of stabilization measures towards 1985. Fixed capital investment and final domestic demand also rose in 1986. Hovever stabilization programs of 1980s were unable to prevent rising inflation. One of the most important source for rising inflation in 1980s had been lax financial discipline in enterprises. Abuses in the practice of inter-enterprise credits were quickly rising in 1980s. As a matter of fact enterprises were increasingly using promissory notes as means to pass the burden of stabilization measures from one to another. The right of workers' councils to manage social resources and to distribute income generated in BOALs had been an additional factor of rising inflation. There was no control on personal incomes except for 1987. Frequent changes in price controls were rising inflationary expectations and thus were contributing to rising inflation. Increases in foreign exchange denominated liabilities of enterprises and banks during 1980s had been another source of increasing losses and lax financial discipline in enterprises and even in banks. Rising interest payments on external debt were weakening the financial structure and financial discipline in enterprises and banks.

On the other hand absence of a unified Yugoslav market, low inter-republican trade, regional aspirations and interference in economic sphere were important obstacles in implementation of the Fedeal economic policies. These kind of obstacles together with lax financial discipline, abuses of inter-enterprise credits and growing losses of enterprises were making it very difficult, if not impossible, to control money supply. Thus money supply had been an accomodating factor of rising inflation. Continuous trade surplus with the U.S.S.R. had been another factor which made money supply uncontrollable in 1980s.

Inflation in Yugoslavia in 1980s might be considered as a symptom of real political and economic difficulties. As a matter of fact in all important political, economic and social matters, the Federal constitution requires consensus of all Republics and autonomous Provinces for decision making. On the other had deep-rooted political and economic conflicts among Republics usually prevent such a consensus. Economic claims of Republics and of major enterprises within Republics are generally not easy to reconcile in real terms. Conflicting claims seem to be reconciled temporarily through inflation. However these kind of temporary reconciliations accelerate inflation as long as economic and political conflicts of real claims and real power continue.

The main source of inflation in Turkey has been budget deficit for the period of analysis. Public investment drive of third plan period had resulted in a very rapid growth of fixed capital investment and thus had created an excess demand for investment from 1973 to 1977. Excess demand for investment had increased budget deficit during the period. In addition to growing defices of state economic enterprises, rapid increases in agricultural support prices had become an important source of growing budget deficit. Budget deficit had been financed by increasing money supply during the period.

Rapid growth of fixed capital investment and high oil price increase in third plan period had quickly increased imports and current account deficit of Turkey. Growing current account deficit had developed into an external payment crisis after 1977. Due to a growing foreign exchange shortage there had been a 20.7 per cent drop in imports in 1978. Although there was an increase in imports in 1979, imports for 1979 was still 12.6 per cent below from 1977 level. Decline in imports had resulted in decline in fixed capital investment. Thus excess demand for capital investment had quickly disappeared during 1977-1980 crisis period. However deficits of state economic enterprises had risen and continued to be an importan source of budget deficit during the period. Cuts in imports had created some bottlenecks and substantial decreases in capacity utilization rate of industry. On the other hand interest payments on external debt had more than doubled in 1979 and had reached about 2 per cent of GNP. Therefore sources for increasing inflation for the crisis period of 1977-1980 could be summarized as; growing deficits of state economic enterprises, bottlenecks and declining capacity utilization rate for industry and growing interest payments for external debt.

The stabilization program of January 1980 was launched to stop increasing inflation, to revive the economy and to solve external payment crisis. The program was rather successful in solving external paymant crisis, in reviving the economy and in decreasing rate of inflation to around 30 per cent. The main factor in decreasing inflation rate had been declining budget deficit. Declining contributions to state economic enterprises, declining rate of increase of agricultural support prices and declining real wages had been the most important factors in decreasing budget deficit.

Expansionary economic policies began to be implemented again after 1983. Rapid growth in fixed capital investment together with growing interest payments on external and domestic debt were two important sources of increasing budget deficit after 1983. Following the rise in budget deficit inflation rate began to rise in the second half of 1980s.

APPENDIX 1-TABLES FOR YUGOSLAVIA

Table 1: Social Product, Final Domestic Demand and Fixed Capital Investment (Million Dinar)

Years	Social Product 1972 prices	Final Dom.D. Current Prices	Final Dom.D. 1972 Prices	Fixed Capital Investment 1972 Prices
1965	164658	68035	157906	50056
1974	279685	373536	258858	84054
1980	380864	1507553	352868	120717
1981	386371	2026461	337431	108885
1982	388174	2625618	331057	102892
1983	384265	3462446	316013	92900
1984	391836	5189888	305094	83979
1985	393742	9238150	302536	80903
1986	407748	18162889	315264	83706
1987	403124	38861083	311037	79391
1988	396254	n.a	303793	74777

Sources: FSO, *Statisticki Godısnjak* and *Indeks.*

Table 2: Industrial and Agricultural Production, Industrial Employment and Industrial Productivity (1972 Prices)

Years	Industrial Pr. Million Dinar	Agricultural P. Million Dinar	Industrial Emp. (1000)	Ind.Productivity (Dinar)
1965	56362	33224	1375	40991
1974	100725	46627	1726	58357
1980	148820	51018	2162	68834
1981	155270	52378	2242	69255
1982	155084	56293	2313	67049
1983	157335	55816	2374	66274
1984	165365	57003	2445	67634
1985	169830	52880	2529	67153
1986	176400	58761	2625	67200
1987	177812	56179	2706	65710
1988	176624	54152	2716	65031

Sources: FSO, *Statisticki Godısnjak* and *Indeks.*

Table 3: Prices, Real Wages and Personal Consumption

Years	Consumer Price Index, 1955=100	Real Net Personal Income Index, 1955=100	Personal Cons.Total 1972 prices, Million Dinar
1965	246	189	93196
1974	787	291	151030
1980	2273	300	198481
1981	3226	283	196496
1982	4167	279	196345
1983	5882	250	192919
1984	9091	232	190990
1985	15636	241	190933
1986	29567	265	199448
1987	65135	247	200046
1988	191889	228	197386

Source: FSO, *Statisticki Godinsjak* and *Indeks.*

Table 4: Money Supply and Income Velocit of Money

Years	Money Supply(M_1) (Billion dinar)	Income Velocity of M.
1965	21.8	3.6
1974	103.4	3.9
1980	461.7	3.4
1981	584.9	3.8
1982	739.8	4.0
1983	888.6	4.6
1984	1272.0	5.0
1985	1863.6	6.1
1986	3895.9	5.7
1987	7786.1	6.3
1988	25193.5	5.6

Source: OECD, Economic Surveys Yugoslavia; NBY, Quarterly Bulletin.

Table 5: Balance of Payments ($ Million)

Years	Exports (fob)	Imports (cif)	Trade Bal.	Current Acc.Bal.
1965	1094	1289	- 195	70
1974	3805	7520	- 3715	- 1183
1980	8978	15064	- 6086	- 2291
1981	10929	15757	- 4828	- 750
1982	10241	13334	- 3093	- 464
1983	9914	12154	- 2240	274
1984	10254	11993	- 1739	504
1985	10622	12223	- 1601	833
1986	11084	13096	- 2012	1100
1987	11425	12603	- 1178	1248
1988	12779	13329	- 550	2487

Sources: OECD, *Economic Surveys, Yugoslavia;* NBY, *Quarterly Bulletin.*

APPENDIX 2-TABLES FOR TURKEY

Table 1: Gross National Product, Final Domestic Demand and Fixed Capital Investment (TL Billion)

Years	GNP 1968 Prices	Final Dom.Dem. Current Prices	Final Dom.Dem. 1968 Prices	Fixed Capital Investment 1968 Prices
1972	148.5	237	146.3	25.0
1977	203.4	915	213.2	46.5
1980	206.1	4426	205.7	40.1
1983	231.9	11580	232.5	42.1
1984	245.6	18625	249.3	44.0
1985	258.2	28098	261.1	51.6
1986	279.0	39821	282.6	64.7
1987	299.7	58509	300.3	72.4
1988	309.8	100660	311.9	76.0

Sources: OECD, *Economic Surveys Turkey;* CB, *Annual Reports;* TOBB, *Economic Reports,* SPO, *Development Plans Annual Programs.*

Table 2: Industrial and Agricultural Production, Industrial Employment and Industrial Productivity (1968 prices)

Years	Industrial Prod. (TL Billion)	Agricultural P. (TL Billion)	Industrial Emp. (1000)	Ind.Productivity (TL)
1972	27.1	36.1	1491.0	18176
1977	43.1	42.2	1801.3	23927
1980	40.9	45.3	1770.8	23097
1983	49.7	48.1	1910.7	26011
1984	54.7	49.8	1984.1	27569
1985	58.1	51.0	2052.5	28307
1986	63.2	55.1	2174.5	29064
1987	69.2	56.2	2281.3	30334
1988	71.8	60.1	2392.2	30014

Sources: Table 1 Sources

Table 3: Prices, Real Daily Wages and Private Consumption

Years	Wholesale Price Index 1963=100	Consumer Price Index 1978-79=100	Real Daily* Wages-TL 1968 prices	Private Cons. 1968 prices Billion TL
1972	199	—	—	104.1
1977	492	—	58	138.7
1980	2551	—	40	140.2
1983	5708	539	37(64)	166.2
1984	—	800	60	183.2
1985	—	1160	56	187.5
1986	—	1561	56	193.1
1987	—	2168	62	200.6
1988	—	3801	52	208.7

(*) Turkish Employers Confederation. From 1983 on a new'wages cost' index was developed. Table 1 sources.

Table 4: Money Supply and Income Velocit of Money(TL Billion)

Years	Money Supply(M_1)	Income Velocity of M.
1972	52.9	4.6
1977	209.1	4.2
1980	704.0	6.3
1983	1941.0	6.0
1984	2252.7	8.1
1985	3208.7	8.7
1986	5016.6	7.8
1987	8262.6	7.1
1988	11311.5	8.8

Sources: Table 1 sources

Table 5: Balance of Payments ($ Million)

Years	Exports (fob)	Imports (cif)	Trade Bal.	Current Acc.Bal.
1972	885	1563	- 678	- 8
1977	1753	5797	- 4044	- 3387
1980	2910	7909	- 4999	- 3680
1983	5728	9235	- 3507	- 2193
1983*	5905	8895	- 2990	- 1898
1984	7389	10331	- 2942	- 1407
1985	8255	11230	- 2975	- 1013
1986	7583	10664	- 3081	- 1528
1987	10322	13551	- 3229	- 982
1988	11846	13646	- 1800	+ 1503

(*) In 1984 the Central Bank of Turkey changed the presentation of the balance of payments. Imports are (fob) from 1983 on.

Sources: Table 1 Sources.

REFERENCES

Central Bank of Turkey, **Annual Report.** various issues. Ankara.

D.P.T., **Dördüncü Beş Yıllık Kalkınma Planı. (SPO, Fourth Five Year Development Plan.)** Ankara.

Estrin, S. (1983). **Self-Management: Economic Theory and Yugoslav Practice.** Cambridge, Cambridge Un. Press.

F.S.O., **Indeks.** Various issues. Belgrade.

F.S.O., **Statistics of Foreign Trade.** various issues. Belgrade.

F.S.O., **Statisticki Godisnjak Yugoslavije. (Statistical Yearbook Yugoslavia)** various issues. Belgrade.

Knight,P.T. (1984), **Financial Discipline and Structural Adjustment in Yugoslavia.** World Bank, Staff Working Papers. Washington.

Kornai,J.(1986), "The Soft Budget Constraint" **Kyklos vol.**39 Fasc.1.

Lydall,H.(1984), **Yugoslav Socialism Theory and Practice.** Oxford, Oxford Un. Press.

Mates, N.(1987), "Some Specific Features of Inflation in a Heavily-Indebted Socialist Country" **Economic Analysis and Workers' Management.**vol.21, no.4.

Mencinger,J. (1987), "Acceleration of Inflation into Hyper-inflation-The Yugoslav Experience in the 1980's" **Economic Analysis and Workers' Management.vol.**21 no.4.

National Bank of Yugoslavia, **Quarterly Bulletin.**various issues. Belgrade

OECD, **Economic Surveys, Turkey.** various issues. Paris.

OECD, **Economic Surveys, Yugoslavia.** various issues. Paris.

Prout,C.(1985), **Market Socialism in Yugoslavia.** Oxford, Oxford Un. Press.

Raicevic,B. (1977), "the Fiscal System" **Yugoslav Survey.** vol.18 no:4.

Schrenk,M.et.al. (1979), **Yugoslavia, Self-Management Socialism-Challenges of Development.** Baltimore, The John Hopkins Un.Press.

TOBB (Turkish Union of Chambers) **Economic Report. various** issues. Ankara.

Tyson,L.D'A. (1980), **The Yugoslav Economic System and Its Performance in the 1970s.** California, University, Institute of International Studies.

World Bank (1983), **Yugoslavia, Adjustment Policies and Development Perspectives.** Washington.

World Bank (1988). **World Debt Tables.** Two volumes. 1988-89 edition. Washington.