Infaltion and the balance of payments in Turkey: 1950-1965

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INFLATION AND THE BALANCE OF PAYMENTS IN TURKEY: 1950 - 1965

by

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P R E F A C E

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A B S T R A C T

This thesis examines the relationships between domestic inflation and the balance of payments in Turkey between 1950 and 1965. The period chosen is interesting in that it encompasses a period of relatively stable prices from 1950 to 1954 and then a period of rapid inflation. It is argued that inflation during the whole period aggravated balance of payments difficulties rather than caused them. Exports of primary commodities, especially after 1954 were adversely affected by climatic conditions and imports, even with a rapidly depreciating currency, were not unduly affected by domestic inflation. However, inflation did affect the borrowing capacity of the economy; both private foreign and public foreign credits decreased, as internal economic stability was requested by donor countries.

This stability was achieved in 1958. The main aspect of the stabilization programme was an expenditure reducing policy through cuts in monetary expansion. From 1958 the economy entered a stagnant phase, suggesting that both internal and external stability was achieved at the expense of economic development.

C O N T E N T S

C H A P T E R 1

INTRODUCTION

1.1 THE SCOPE OF THE STUDY

This study will examine the relationship between inflation and the Balance of Payments in Turkey during the period 1950-65. The period studied has largely been dictated by the availability of the data. In addition to this, the period chosen covers one inflationary phase and one stable phase, providing a comparison between them.

This study is written against a background of two contemporary controversies. The first is the Keynesian - Monetarist debate which has two aspects; one concerns the demand for money and the other relates to the stability of investment and monetary multipliers. The interest elasticity of the demand for money and the long run trend of income velocity are the main issues of this controversy.

The second controversy, concerning developing countries, relevant to this study is known as the Monetarist-Structuralist debate, developed by a number of Latin American economists. Although the issues are less clear, two main arguments can be drawn from the debate; the first is whether inflation affects economic growth in a positive manner and the second is whether monetary expansion should be attributed to substantial government deficits and easy credit policies, stemming mainly from agricultural and

import and export bottlenecks.[1] It seems that there is an agreement that without monetary expansion, inflation can not be sustained. As for the causes of inflation, structuralists contend that monetary expansion is a result of irresistible pressure in the process of economic growth, and inflation can not be curbed through monetary policy without provoking unemployment or stagnation of growth because of supply rigidities. Yet, it has been argued that some countries managed at times to control inflation despite the bottlenecks. Thus it is difficult to construct a general model on the basis of the structuralist argument since bottlenecks and inelasticities have different intensities in different countries. Moreover, the proponents of the structuralist view have not offered any policy dealing with inflation; a policy that meets the requirements of economic development at the same time. As described by Felix:

> ". .. the structuralists are critics without as yet power and responsibility to make and implement policy"[2]

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1. See for the Structuralist-Monetarist views
- J. GRUNWALD. "The Structuralist School on Price Stabilization and Economic Development: the Chilean Case". In Latin American Issues edited by A. O. HIRSCHMAN. (The Twentieth Century Fund, New York, 1961).

D. SEERS. "A Theory of Inflation and Growth in Underdeveloped Economies Based on the Experience of Latin America" Oxford Economic Papers March 1966.

2. D. FELIX. "An Alternative view of the Monetarist-Structuralist Controversy" in Latin American Issues, edited by A.O. HIRSCHMAN. (The Twentieth Century Fund, New York, 1961).

The post war Monetarist view (developed by the Chicago School) is said to be more suitable for economies without highly developed financial structures than the Keynesian view based on interest rates mechanisms. Regarding the financial structure of Turkey this idea can be supported. However, one aspect of the Monetarist view, in general, is hardly acceptable from the point of developing countries as it does not offer any income determination model. However, it is a fact that money in the financial structure of Turkey has a very important place and accounts for a very large share of financial assets. Therefore, it may be suggested that changes in the stock of money affect expenditures. But it should be pointed out that the rate of interest in Turkey is fixed by the authorities and isolated from market forces. Therefore, it can not be argued that the rate of interest is effective as much as it is in developed countries as there is no possibility of assessing the real effect of interest rates on expenditures. In this case, it may be suggested that there may be elements of both ideas in the Turkish case.

In this study inflation is defined as a sustained rising level of prices. This definition provides us with the analysis of the effects of money income and prices on the balance of payments. However, this definition involves a difficulty that not all price increases are inflationary in the sense that they are not contributing to the inflationary process. In this case, the problem, suggests

H.G. Johnson;

> ". . . is not a scientific question but a political question determined by public opinion; and public opinion vacillates on the issue".[3]

Under the conditions of Turkey, a rate of inflation exceeding 5% per annum may be regarded as an excessive inflation for the 1950-65 period. In the 1950-53 period prices rose only 5% per annum on average and then jumped in 1954 to 13% and reached a 17% increase per annum between 1954 and 59. (See Table 1.2).

The concept of the balance of payments is a vague one, but is generally defined as a systematic record of all economic transactions between the residents of a country and foreign residents for any specified period. Surpluses and deficits can be defined in terms of accommodating and autonomous transactions. In this respect, for a developing country, autonomous transactions are widely dominated by exports and imports. However, in order to take the invisible items into account, the deficit can be defined in terms of the result of current account.

This study consists of two parts. Part one develops a number of theoretical ideas concerned with Balance of Payments adjustment mechanisms. In particular a distinction is made between a Classical adjustment mechanism relying on relative price adjustments and a Keynesian adjustment mechanism relying on aggregate expenditure

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3. H.G. JOHNSON "Inflation: A 'Monetarist' View" in Further Essays in Monetary Economics edited by H.G. Johnson, (Allen and Unwin Ltd., 1972,) p.326.

adjustments. In both cases the role of inflation in these adjustment mechanisms is examined. Part two attempts to apply these and other ideas to the Turkish economy from 1950 to 1965.

However, before examining these issues in more detail, some general comments are introduced on the role of inflation in economic developmentand a general review of the balance of payments and inflation between 1950 and 1965 in Turkey is presented. It is against this background that a more detailed examination of cause and effect can be conducted.

1.2 INFLATION AS A TOOL OF ECONOMIC DEVELOPMENT

The problem of economic development has received much attention in economic theory. Intensive study of economic development has produced a long list of factors affecting the development process. For a long time, natural resources were regarded as the principal factor of economic development. Later on, capital accumulation came to be considered as the most important factor in development. Although research and education are being emphasized recently, capital accumulation is still an important aspect of the economic development process.[4]

Capital accumulation naturally involved investment

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4. See for example the role of capital accumulation in:
W. ELKAN. "An Introduction to Development Economics", Penguin, Books Ltd., 1973, pp.19-20.
G. MEIER. Leading Issues in Development Economics (2nd ed.) Oxford University Press, 1971.

expenditures. If a high rate of growth is to be achieved the required funds for investments have to be obtained. In this context, inflation is regarded by some economists as a way of financing investments. A mild degree of inflation transfers income from the social classes with the low propensity to invest to the entrepreneurs; and by raising the nominal rate of return on investments with respect to the rate of interest induces investment expenditures.[5]

These two Keynesian propositions rest on the assumption that while entrepreneurs are realizing inflation, the other classes are not. However in the facee of persistent inflation the other classes can come to anticipate inflation and raise the prices of services, so that no significant distribution of income will take place.[6] As far as the rate of interest is concerned, the theoretical expectation is that the free market rate of interest will rise either because the additional money can only be obtained from the balances kept for speculative purposes at a higher rate of interest than it was before,[7] or, the rate of interest will rise sufficiently to compensate holders of

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5. N.K. ALOOR. "Economic Growth and the Problem of Inflation" Economica, Vol.26, No.13, pp.212-226.

6. H.G. JOHNSON. "Is Inflation the Inevitable Price of Rapid Development or a Retarding Factor in Economic Growth", The Malayan Economic Review, Vol. XI, No.1, April 1966, pp.21-28.

7. J. BALL. Inflation and the Theory of Money. (George Allen and Unwin, London 1964) p.65.

interest yielding assets for the expected rate of inflation.[8] Nevertheless, inflation can be successful at the early stage of development process, before the other classes realize the increasing rate of inflation. Even if all prices have risen in the further stages of an inflationary process, the costs of entrepreneurs can be reduced by keeping the rate of interest and wages at a low level. In the case of Turkey between 1950-65 it can be observed that both interest rates and wages remained at a low level. All rates of interest were reduced in 1950 and were not changed over the whole period studied. As for wages, wage labour in Turkey constitutes a small proportion of the total working population, and both in and outside the agricultural sector a large portion of total output is produced by self employed persons. Thus their incomes depend on the prices of commodities, not their wages.[9] On the other hand there is no indication that the increases in money wages were greater than the increases in prices.[10] The main reason for this concerns

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8. H.G. JOHNSON, op. cit., p.286.

9. Y. AKYUZ. "Money and Inflation in Turkey, 1950-68". (The Faculty of Political Sciences, Ankara University, 1970) p.7.

10. D. SAGLAM. "Türkeye'de Kamu Iktisadi Teşebbüsleri" (The State Economic Enterprises in Turkey). (The Faculty of Political Sciences, Ankara University, 1967) pp.166-67.

institutional factors. Until 1963 the fundamental means of achieving higher wages, the right to strike, had not been granted to the working class. In this respect, it may be argued that the two pre-requisite within the Keynesian framework were fulfilled.

Another suggestion based on the redistributive effect of inflation is that inflation transfers income not from workers as savers to the entrepreneurs, but from the holders of money balances to those responsible for inflationary policy. The basic postulate is that there is a stable demand function for money; in order to maintain desired level of cash balances in the face of inflation the public must accumulate money balances. This accumulation of money balances is achieved at the cost of reducing the consumption of real income. Thus inflation constitutes a tax on real balances; in turn becomes revenue to the beneficiaries of the inflationary increase in the money supply.

This analysis of inflation as a fact of economic development relates to purely domestic considerations. Even in this case, inflation becomes harmful to the development process. It induces speculative actions and even reduces savings. Because their real value falls in the face of inflation and savers can allocate savings to consumption. Uncertainties and instability created by

inflation prevents long term investments, because:[11]

> "First, the long gestation period involved increases the risk in an environment of unstable prices and rising costs. In fact, the longer the planning horizon, the greater the budgetary and financial difficulties due to instability of costs and the risk of changes in overall supply and demand conditions".[12]

If the effects of inflation on the balance of payments are taken into account the disadvantages of inflation as a tool of development increase: at the beginning of the development process at least, the dependence of investments on imports is well known. In this respect the balance of payments constitutes a constraint on economic development. It is generally agreed that inflation always leads to a deficit in the balance of payments and aggravates the existing one.[13]

> "But whatever the causes, inflation has invariably had immediate effects in intensifying import demand or reducing exportable supplies; and where a general inflation of prices and costs has ensued, increased imports have also been induced by the changing price relationship between imports and domestic goods, while exports have been depressed by their uncompetitive prices and reduced profitability".[14]

As is suggested in the quotation, inflation affects the balance of payments through income and price effects. Increases in money income can absorb the export goods of

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11. See for the disturbing effect of inflation, E.M. BERNSTEIN and I.G. PATEL "Inflation in Relation to Economic Development". IMF Staff Papers, Nov. 1952, pp.363-98.

12. R.O. CAMPOS. "Inflation and Balanced Growth", in Economic Development For Latin America. Edited by HOWARD ELLIS and HENRY C. WALLICH (Macmillan, 1961) pp.94-95.

13. If there is a deficit in the balance of payments because of real factors, inflation tends to increase this deficit.

14. UNITED NATIONS. "World Economic Survey 1956", (United Nations, New York) p.102.

the economy and put pressure on the balance of payments through the import propensity. On the other hand, rises in prices impair the international competitiveness of the economy in international trade.

Despite these disadvantages, inflation is generally resorted to as a way of financing investments.

> "In practical experience, resort to inflationary taxation as a method of financing economic development is generally prompted by the inability of the developing country to raise enough revenue by taxation and by borrowing from the public to finance its development plans - either as a result of the low income and taxable capacity of the economy, or more commonly as a result of inability to command the necessary political consensus in support of the necessary sacrifices of current income".[15]

This has been the case for Turkey over the last two decades. Tax policy has always been neglected despite intentions that an efficient tax system will be applied. Thus inflation can be seen as a possible positive aspect of economic development. But, clearly, it is a two-edged sword. Mild inflation may stimulate entrepreneurial expectations and lead to an increase in investment, but rapid inflation may increase pessimism amongst investors, reducing the rate of fixed domestic capital formation. Apart from these internal effects, inflation may operate through the balance of payments to adversely affect domestic output.

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15. H.G. JOHNSON, op. cit., p.26.

1.3 A GENERAL REVIEW OF THE BALANCE OF PAYMENTS AND INFLATION IN THE 1950-65 PERIOD

The economic policy followed by the Turkish Government prior to 1950 was based on "orthodox" considerations in that budget policy was basically neutral in character. An expansionary policy was avoided. In the 1946-50 period the general level of prices rose by only 1.5% per annum on average.[16]

In 1950 a major political change took place and a more liberal policy was associated with it. The Democrat Party came to power after the 1950 elections, taking over from the Republican People's Party. The Democrat Party Programme was based on full support for private enterprise. The new government formed by the Democrat Party declared that:

(a) the agricultural sector would be given priority in the development process.

(b) the private sector and private foreign capital should constitute the basis of the economy

(c) investment expenditures should be increased and financed by the government budget

(d) economic development must be realized through monetary expansion and thus monetary policy should be the main policy for economic development.[17]

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16. For a full account of the 1946-50 period see, Z.Y. HERSHLAG, Turkey an Economy in Transition (Leiden, 1968) and S. AREN, "Para ve Fiotlar 1950-1961" (Money and Prices 1950-61) The Faculty of Political Sciences, Ankara, 1963).

17. S. AREN, op. cit., pp.1-8

During the period 1950-60 investments increased rapidly. Investment expenditures rose from TL 889.8 million in 1948, to TL 1064 million in 1950 and to TL 7516.2 million by 1960 - indicating a 15% increase per annum on average (in current prices). Despite the original intention in the government programme, the share of the private sector did not increase overwhelmingly in terms of total investments. The share of the State Economic Enterprises, other than the public sector investing agencies, in total investments, rose to TL 1399.3 million in 1960 from TL 91.8 million in 1950.[18] Foreign capital did not invest as much as it had been expected. Although it rose to $3.39 million in 1959, while it was only $0.11 million in 1950, the annual inflow of foreign capital fluctuated over the 1950-65 period. The highest inflow was recorded in 1964; $11.8 million. During the 1954-59 inflationary period it fluctuated between $3.39 and $2.16 million.[19] (Exchange rate was TL 2.80 = $1).

Monetary expansion in the economy was rapidly achieved. The total volume of credits increased continuously between 1952-60. It was TL 3753 million in 1952 and rose to RL 13110 million in 1960, which amounted to a 35% increase

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18. D. SAGLAM. "Türkiye'de Kamu Teşebbüsteri", (Public Enterprises in Turkey), The Faculty of Political Sciences, 196

19. The figures were taken from the Ministry of Commerce.

per annum on average. But it declined to TL 8713 million in 1961 as a result of the 1958 Stabilization Programme. In 1963 it rose again to TL 13771 million and did not show any decline in the final two years of the period studied. The money supply was TL 1145 million in 1950, and rose to TL 5089 million by 1965,[20] indicating a 9.7% increase per annum.

An easy credit policy and a price support programme were applied to the agricultural sector. The agricultural Bank credits increased by 19.0% per annum in the 1950-60 period. The price support programme was financed through Central Bank credits. In the 1950-60 period Central Bank credits for this purpose accounted for 40% of total Central Bank credits,[21] as indicated by Table 1.1.

The public sector expenditures increased rapidly. Total public sector expenditures were TL 2034 million in 1950; they rose to TL 9049 million by 1959. Although expenditures increased, the government income did not rise as much as expenditures did. For example, the ratio of taxes to GNP remained almost the same, 11.5 - 12% in the 1950-65 period. The budget deficits rapidly increased until 1956, but later on started falling as a result of the measures taken in 1956. Thus, the recourse to the

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20. The money supply was calculated on the basis of the official definition of money: commercial demand deposits plus currency plus the free reserves of the Banks at Central Bank.

21. The figures were computed from the Monthly Bulletin of the Central Bank, April-May 1972.

Table 1.1 The Money Supply and Central Bank Credits 1950-1965

	Money Supply	Central Bank Credits	The Agricultural Credits	Central Bank Credits For Price Support
1950	1145	1140	412	--
1951	1392	1448	637	547
1952	1646	1862	1049	830
1953	1903	2164	1195	1005
1954	2078	2928	1475	1117
1955	2651	3574	1536	1024
1956	3324	4191	1874	1423
1957	4079	5157	2095	1995
1958	4424	5846	2142	2378
1959	5089	6137	2292	2290
1960	5574	6389	2392	2419
1961	6058	6425	1682	2482
1962	6477	7092	1953	2708
1963	6925	8419	2408	3041
1964	8065	9408	2991	4005
1965	8906	10074	3206	3648

Source: Compiled from The Monthly Bulletin, The Central Bank, April-May 1972.

Notes: 1. Money Supply is the official definition of money.

Central Bank became a usual way of financing both investments and consumption expenditures of the Government. Besides the Central Government Agencies, the State Economic Enterprises usually resorted to the Central Bank to close their operating deficits and finance their investments. Total credits from the Central Bank to the Central Government Agencies and the State Economic Enterprises amounted to TL 3487 million in 1957, while it was TL 745 million in 1950. However it fell sharply in 1961 and 1962, to TL 453 million and TL 630 million respectively. Later on it started increasing again and reached TL 1349 million in 1966, after a decline in 1965.[22]

Despite the monetary expansion, prices did not rise significantly in the first years of the period studied due mainly to the increases in agricultural output. This increased by 39% in the 1950-53 period, and real income rose by 13%. Moreover, Turkey had accumulated a considerable amount of exchange reserves during the 1940s and in 1947 started receiving Marshall Aid financing its imports. In addition to this the Korean Boom increased the demand for Turkish exports. Turkey entered 1950 with $126 million exchange reserved. Starting from 1950 the terms of trade turned in favour of Turkey. However, from 1953 on started declining and in 1960 turned against and never improved, (see Table 1.2).

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22. Computed from the Monthly Bulletin of the Central Bank.

Table 1.2 Price Indices, Exchange Reserves and the Terms of Trade 1950-1965

	Wholesale Price Index (1)	Import Price Index (2)	Exchange Reserves in Million $ (3)	Terms of Trade 1958 = 100 (4)
1950	100	100	126	120.3
1951	106.5	111.4	98	130.7
1952	107.6	107.6	6	134.1
1953	109.8	96.2	69	136.8
1954	121.9	93.7	2	131.1
1955	130.7	124.3	-70	109.2
1956	152.2	125.3	-33	111.1
1957	181.3	122.8	-58	111.3
1958	208.7	126.5	15	100.0
1959	249.4	116.4	-15	98.9
1960	262.6	122.8	32	83.5
1961	270.3	116.4	95	104.3
1962	285.7	138.0	79	89.0
1963	297.8	156.4	36.2	89.0
1964	295.6	145.4	50.4	88.7
1965	321.9	141.6	57.4	94.6

Sources: Column (1): Ministry of Commerce

Column (2): SERIN N. "Kalkinma cu Dis Ticaret", (The Faculty of Political Science, Ankara, 1972) p.204.

Column (3): Figures were obtained personally.

During the 1950-65 period the share of agriculture in national income never fell below 30%. Thus it is obvious that fluctuations in agricultural production will affect income considerably. Agricultural production fell by 20% in 1954 due mainly to bad weather conditions. As the monetary expansion was taking place very rapidly, the decrease in agricultural output disturbed general equilibrium in the economy and started a substantial inflation period.

The general level of prices started rising significantly from 1954 onwards. The wholesale price index, with 1950 as a base year, rose from 121.9 in 1954 to 249.4 in 1959, indicating a 13% increase per annum on average. With the rises in prices, the Government attempted to take some measures in 1954. An official committee, the Banks Credit Regulation Committee, was established to assert an effective control on the banks. However, it did not work effectively. In 1955 the Central Bank discount rate was increased from 3% to 4.5%. Yet this was not an effective policy, firstly because the Central Bank was not prepared to accept all the bills presented,[23] secondly the degree of the liquidity of the banking system was high[24] and they were meeting all credit demands without

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23. In 1955 the credit possibilities of the Central Bank were widened. The credit possibilities of the Central Bank were opened to real and legal persons engaged in industry and mining and the Bank was able to meet the credit needs of small artisans and tradesmen.

24. S. AREN, op. cit., p.26.

going to the Central Bank. The year 1956 was an important one. The Central Bank discount rate was raised again, from 4.5% to 6%. The first credit restriction was imposed by a government decree that bank credits were frozen at the maximum level reached in three years prior to 1956. But prices did not stop rising, and in the same year the National Protection Law was enacted. The Law authorized the government and its agencies to impose direct controls on prices and restrictions on profit margins; the margin had not to be greater than 5%. The products of the State Economic Enterprises were rationed and this caused black market activities.[25] Despite the measures, prices continued rising. The wholesale price index rose to 181.3 in 1957 from 152.2 in 1956. In 1958, it registered 208.7 point increase. Thus more strict measures had to be taken. In August 1958, a stabilization programme was declared.[26] Bank credits were frozen without any reservation. The public sector was not allowed recourse to the Central Bank. In order to increase the resources of the State Economic Enterprises, the prices of their products were increased. The programme was primarily directed at stopping

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25. The black market rate was reported to be TL 18 = $1, whereas the official rate was TL 2.80. See K. KURDAS, "Kambiyo Kuni Politikasi ue Türkiye'nin Iktisodi Gelismesi" (Exchange rate policy and Economic Department of Turkey). In Dis Ticaret and Ekonomik Gelisme (Foreign Trade and Economic Development) (The Board of Economic and Social Studies, 1968) p.390.

26. See for the Stabilization Programme, OECD Economic Conditions in Turkey 1958, p.30.

the causes of inflation and was remarkably successful in doing this. At the same time the Turkish Lira was devalued from $1 = TL 2.80 to $1 = 9.00 TL. Following the application of the 1958 stabilization programme the economy underwent a stagnation. The real rate of growth slowed down, from 4.35% in 1959 it fell in 1960 and 1961 to 2.38% and 0.57% respectively. The 1950-60 period ended with a military intervention. In the previous paragraph the reason for inflation seems to be structural (or real) in its nature. However, sometimes the reasons for inflation, whether they are structural or monetary, can not be distinguished. In my belief, the inflationary process started with monetary expansion and disturbances were caused by persistent monetary expansion. In this case, I share the monetarist view in the Structuralist-Monetarist debate.

With the declaration of the 1961 Constitution a State Planning Organisation was established; thus a development plan had to be prepared. After a transitory programme for 1962, the First Five-Year Plan was put into operation in 1963. The plan laid stress on financial stability as a prerequisite for economic development. This was realized, at least, during the First Plan period, the general level of prices did not rise significantly until 1965.

Turning now to the balance of payments, the year 1950 was a turning point for the Turkish trade regime. Turkey

Table 1.3 The Visible Trade Balance 1950-1968
(million Turkish Lira)

	Exports	Imports	Deficit in the Trade Balance
1950	737.6	799.9	- 62.3
1951	879.4	1125.8	- 246.4
1952	1016.2	1556.6	- 540.4
1953	1019.0	1491.1	- 382.1
1954	937.8	1339.4	- 401.6
1955	877.4	1393.4	- 516.0
1956	854.0	1140.6	- 286.6
1957	966.6	1112.0	- 145.3
1958	692.4	882.3	- 189.9
1959	990.6	1316.0	- 325.3
1960	1721.2	2213.7	- 492.6
1961	3120.7	4585.1	-1464.5
1962	3430.8	5599.8	-2169.0
1963	3312.8	6261.1	-2903.3
1964	3696.9	4878.0	-1181.1
1965	4173.6	5193.3	-1019.7

Source: Various Annual Bulletins of the State Institute of Statistics

had become a member of the OECD in 1948. In the frame of this international cooperation Turkey had to make its trade regime more liberal.[27] As early as November 1949 the OECD requested its members to free at least 50% of their imports from quantitive restrictions. In September 1950, Turkey declared a "Free Import List" by raising the ratio for free imports up to 60% and a further 15% increase in the ratio was envisaged for 1951. However, the liberation policy did not turn into a long run policy due to balance of payments difficulties.[28] The first difficulties were felt as early as 1952. From 1952 onwards mounting restrictions were imposed on imports. The liberation policy de facto ended in September 1952 and de jure in April 1953 (see Table 1.3).

Starting from 1950 imports increased rapidly. In 1952 they reached a peak of TL 1556 million, for the 1950-1960 period. However, from then they fell continuously until 1959. As imports declined the share of imports of consumer goods in the total fell. It was 24.8% in 1952, and fell to 12.2% in 1957. In 1965 it was only 4.4%; however, the share of investment goods and raw materials never declined below 77% in the total.

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27. E. BENER, "Turkiye'de Dis Ticaret Rejimi", in "Dis Ticaret ve Akonomic Kolkinma" Sosyal ve Edonomik Etutler Konferens Heyeti, pp.162-180.

28. Z.Y. HERSHLAG, op. cit., p.

As for exports, in 1950 in accordance with the liberation policy, the restrictions on exports were considerably reduced. During the first four years of the period 1950-65 exports increased rapidly due mainly to the Korean Boom. They reached a peak in 1953, TL 1109 millions, indicating 139% increase from the 1950 value of TL 737.6 million.

Increases in imports always exceeded those in exports. The deficit was widely financed by exchange reserves. Turkey had $126 million in exchange reserves in 1950. This amount fell to $4.0 million by 1958, with net losses of $70 million, $38 million and $58 million in 1955, 1956 and 1957.[29] By the second quarter of 1958, the government was unable to meet its foreseeable obligations for even a few weeks. Import licencing was virtually suspended. This speeded up the enactment of the 1958 Stabilization Programme. The Turkish Lira was devalued. All imports, except for a few government transactions, were also placed in the new rate.

It may be said that the devaluation decision should have been made long before 1958.[30] Because the rising level of prices with respect to the international price

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29. The figures were taken from the Central Bank.

30. S. AREN, op. cit., p.27.

level made imports very profitable, as the rate of exchange was kept very low. The import price index registered a 22.8% increase, while the wholesale price index rose 81.3% between 1954 and 1959. Overvaluation of the Turkish Lira was significant. In July 1958 the price of the dollar, on the basis of the gold price, was calculated at $1 = TL 21.50, whereas the official rate was being kept at $1 = TL 2.80. One of the important consequences of the overvaluation was that it caused black market activities, diverting exchange reserves from official channels.

On the export side, the prices of major export goods such as cotton, tobacco and raisins rose compared to the international price level. In this respect, devaluation seemed an appropriate policy. In 1960 exports rose to TL1721 million from TL 990.6 million in 1959. During the 1960-65 period they remained around TL 3500 million.

The preliminary evidence suggests that monetary expansion was the main reason for the 1954-58 inflation. Increases in money income exceeded real income appreciably from 1952 onwards. The main reason for the increases in money income was the expansionary monetary policy pursued by the government. Investments were met through deficit financing and credit expansion; thus the rate of growth of imports exceeded both those of exports and foreign resources, leading to further difficulties in the balance of payments.

This general review of the balance of payments indicates some of the relationships between monetary expansion, the balance of payments and the levels of output and employment. Chapters 2 and 3 now examine these relationships in more detail.

C H A P T E R 2

THE RELATIONSHIP BETWEEN INFLATION AND THE BALANCE OF PAYMENTS IN CLASSICAL THEORY

This chapter examines the relationship between the balance of payments and inflation in the context of a classical gold standard model. The basic features of the model are reviewed and its applicability to a developing economy is discussed.

Classical theory involves the application of the static equilibrium analysis to the problems of the balance of payments on the grounds that in the adjustment process the movements of internationally traded goods are assumed to be dependent on the changes in relative prices and is explained in terms of the theory of Comparative Costs.[1] International differences in production functions causing internationally different cost structures create trade amongst countries.[2] The fluctuations of the absolute level of prices relative to each other changes the direction and the volume of goods traded. Therefore we would expect the following basic relationships between

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1. W.M. SCAMMEL, International Monetary Policy, (Macmillan, 1961).

2. J. BHAGWATI, "The Pure Theory of Internation Trade" in "Surveys of Economic Theory, Vol. II, published by the American Economic Association (Macmillan, 1967).

inflation and the balance of payments: that movements in absolute prices in country A would alter relative international prices; thus influencing the direction of trade and the volume of goods traded. In this context the adjustment process following from the increase in absolute prices is very important.

Classical theory in this context can be considered in terms of the quantity theory of money; given full employment, increases in the stock of money will raise the general level of prices in the same proportion as the increase in the stock of money. This is only possible if the velocity circulation is constant and price flexibility exists.

The constancy of velocity stems from the fact that money is a convenient asset being universally acceptable as a means of exchange and some amount of money has to be held to carry out transactions. In both versions (Fisherian and Cambridge) of the quantity theory of money velocity is assumed to be constant. The Fisherian approach was based on institutional factors; changes in the habitual payments and in the industrial structure of the economy can reduce transactions and thus affect the velocity.[3] However this was a long run effect, and in the short run the velocity could be assumed to be constant.

The Cambridge approach emphasizes the "desire to hold"

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3. J. BALL, op. cit., p.41.

rather than the "turnover rate", that is, why does money rest in transactor's hands for a certain length of time before being used.[4] Although they recognized that wealth, the rate of interest and the expectations about the future could affect velocity, they did not show any relationship between these factors that might be expected to prevail and they did not say much about which ones might have been important as expected. The way followed in this approach is to assume the volume of transactions, the level of wealth and the level of income, at least in the short run, are in stable proportions to one another. Thus it was argued that the velocity in nominal terms would be proportional to nominal income not only for each individual, but also for the economy as a whole.[5]

Therefore, given full employment, increases in the stock of money will raise the absolute level of prices in the same proportion, leading to inflation. On this relationship between the general level of prices and the quantity of money, the relation between inflation and the adjustment process can be established. Assuming that between two countries, A and B, the volume of goods and services traded is constant and the domestic money stocks are 100% backed by gold, then if the stock of money increases in A, this raises the general level of prices,

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4. D. LAIDLER, The Demand For Money: Theories and Evidence" (International Textbook Company, July 1970) p.48.

5. H.G. JOHNSON, Macroeconomics and Monetary Theory, (Gray-Mills 1971) Ch. 6.

making B's goods and services relatively cheaper. Thus the goods and services of B are substituted for the goods and services produced by A. The ensuing trade deficit causes the stock of money in A to fall; the absolute level of prices falls. Individuals in A receive a smaller amount of money than they received before for their physically unchanged exports. The total amount of money spent by A on imports from B slightly increases due to inflationary tendencies in B. The worsening balance of payments results in larger money flows, greater deflation in A and inflation in B. This situation, however, does not continue indefinitely: the relative changes in the national price levels induces money exports from A, reducing the quantity of money. The cash balances of individuals in A becomes smaller as money income declines not only in nominal terms but also in real terms at least until prices have fully adjusted to monetary deflation. Individuals in A, therefore, reduce their imports to maintain cash balances.[6]

There are two ways in which international and national price levels might become equal: either the national level of absolute prices might be adjusted upward and downward to conform to the international level or alternatively exchange rate might alter periodically. In the classical system the former way was regarded as the corrective in

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6. L. YEAGER, International Monetary Relations, (Harper and Row, 1966) p.63-82.

the adjustment process and it was believed that as long as the measures ensuring money flows between two countries were taken, price movements would ensure the adjustment process automatically: countries losing money should allow their money income and prices to fall, and countries importing money should allow their incomes and prices to rise.[7] The automatic adjustment process was strengthened and accelerated by Central Banks through the so-called "rules of the game". Discount rate policy and open market operations would raise the interest rate and dtighten credit in the deficit countries, while lowering the interest rate and expanding credit in the surplus countries.[8] This would induce compensatory short term capital movements from the surplus to the deficit countries, and accelerate the desirable downward adjustment of prices in the surplus countries, and upward adjustment in the deficit countries.

In the classical system the adjustment process was heavily dependent on quick and considerable reactions of both demand and supply to price changes. However, the tests of the Gold Standard showed that the demand elasticities were much less sensitive than it had been thought.[9] The

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7. W.R. ALLEN & C.L. ALLEN, Foreign Trade and Finance: Essays In International Economic Equilibrium and Adjustment, (Macmillan, New York, 1959).

8. R. TRIFFIN, "The Myth and Realities of the So-called Gold Standard", in International Finance, edited by R.N. Cooper, (Penguin Books 1969), pp.38-61.

9. A. METZLER, "The Theory of International Trade" in A Survey of Contemporary Economics, Vol. I, (Richard Irwin, Inc., 1949) pp.210-228.

elasticity of demand for individual products almost without exception was low. The quantities sold were much less sensitive to changes in prices.[10] This could be attributed, in my view, to the static price expectations in classical theory that eventually the level of prices would reach an equilibrium. Thus the expected price changes in future may not be sufficient to substitute cheap foreign goods for domestic goods.

If the price elasticities are to be successful in the adjustment process a set of conditions need to be fulfilled. In determining how the price changes affect trade between countries, four elasticities are relevant: For depreciating countries these are:

a) the elasticity of supply of exports
b) the foreign demand elasticities for exports
c) the home demand elasticity for imports
d) the foreign supply elasticity of imports

If the price elasticities are to be successful in the adjustment process, the sum of the demand elasticities for both exports and imports of the depreciating country should exceed unity, as the assumption that both supply elasticity of imports and exports of the depreciating country are infinite. This condition is known as the Marshall-Lerner Condition.[11]

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10. G. GRUBEL, The International Monetary System, (Penguin Books, 1970) pp.90-106. Also

11. See L. YEAGER, International Monetary Relations, (Harper and Row, 1966) pp.38-50. Also, A. KRUEGER, "Balance of Payments Theory", Journal of Economic Literature, Vol. 7, March 1969, pp.1-26.

It seems that the classical assumption of a stable equilibrium for the balance of payments is subject to the Marshall-Lerner condition. In the context of developing countries, a system of adjustment based on price elasticities can not be expected to work. It is generally argued that the demand for exports of developing countries is low, probably less than unity.[12] The supply elasticity can not be expected to be infinite, at least in the short run, as developing countries export agricultural products; the production of agricultural commodities takes time. Another factor reducing the relevance of the price elasticities for developing countries is that as long as they maintain a high rate of growth, they can not reduce the import of capital goods and raw materials and this makes the demand elasticity rather rigid, and we have already noted the high dependence on such imports in the Turkish case.

Moreover, it has been argued by Prebisch that, in the long run, the terms of trade have a tendency to move against developing countries. According to Prebisch technical progress is taking place in developed countries. It is normally expected that developing countries will

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12. G.K. HELLEINER, "International Trade and Economic Development" (Penguin, 1972) pp.132-134.

benefit from this technical progress because the prices of their imports will fall. But prices do not fall because the producers in developed countries work under the conditions of imperfect competition, and thus they are able to fix prices as they want. Moreover, trade unions in developed countries are able to claim for their members part of the gains of technical progress. Therefore technical progress in developed countries results in higher profits and higher wages, and thus export prices of developed countries rise. In developing countries the situation is reverse, if there is a technical progress in these countries, their export prices do not rise, because the producers in developing countries work under competitive conditions both internationally and domestically. Consequently prices are reduced by technical progress, leading to a tendency of the terms of trade against developing countries. If this argument is relevant, it can cause a cost inflation in developing countries as they are dependent on imports from developed countries. On the other hand due to higher prices they paid for import than they receive for exports, balance of payments difficulties can easily takekplace, and these difficulties can lead to an inflation as the import capacity falls and therefore aggregate supply of the economy.[13]

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13. See for the Prebisch Thesis, R. PREBISCH, "Towards a New Trade Policy for Development", in Leading Issues in Economic Development, edited by G. MEIER, (Oxford University Press, 1971), pp.484-492. See for criticism, W. ELKAN, op. cit., pp.45-49.

After the Second World War the terms of trade moved in favour of primary producing countries especially during the Korean War. Since the mid-fifties they have moved adversly, although the degree of adverse movement has varied from commodity to commodity.

The terms of trade turned in favour of Turkey over the 1950-57 period. However, they started turning against from 1958 onwards. In Table 2.1 the export price index, the import price index or investment goods, raw materials and consumer goods and the terms of trade are shown.[14]

As it can be seen from Table 2.1, the import price index of investment goods remained the same in two years during the 1954-59 inflationary period, and remained relatively stable through to 1965. The import prices of raw materials fluctuated more than investment goods; but again the overall absolute changes over the whole period were not large.

Table 2.1 suggests that the decline in the terms of trade against Turkey was caused by falls in export prices rather than increases in import prices. The competing countries with Turkey in international trade are mostly developing countries such as Greece, Brazil, Spain, etc. In this respect, it may be suggested that the decreases in export prices of Turkish goods were a result of the

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14. This Table is the only available data indicating the import prices of consumer goods, raw material, investment goods.

Table 2.1 Export and Import Price Indices and the Import Price Indices of Investment and Consumer Goods, and Raw Materials, 1956-1965 (1963 = 100)

	Export Price Index	Import Price Index	Investment Goods	Raw Materials	Consumer Goods	Terms of Trade
1956	113.7	89.8	77.7	99.9	104.1	126.6
1957	108.1	95.4	77.0	109.4	109.9	113.3
1958	101.7	99.0	90.3	105.6	105.1	102.7
1959	91.7	94.5	92.0	96.1	95.3	97.0
1960	82.3	93.4	88.1	98.8	92.1	88.1
1961	78.6	93.2	92.9	93.4	93.4	84.3
1962	81.6	91.9	88.6	93.9	94.9	88.8
1963	100.0	100.0	100.0	100.0	100.0	100.0
1964	95.4	100.0	102.6	98.8	97.1	95.4
1965	93.6	101.0	104.6	99.2	98.7	92.7

Source: H. Çetin and U. Egeci, Türkiye Ticaret Hodleri Çelismari, A Study of the Turkish Terms of Trade (State Planning Organization, October 1965)

competition from some other developing countries, and thus the "Prebisch Thesis" is supported in terms of declining export prices; but not supported in terms of rising import prices.

Classical theory proposed a theory based on price elasticities, and it was assumed that the adjustment process would work automatically. But, as has been explained in the previous paragraphs, the evidence suggests that the classical adjustment process can not be relevant to developing countries. However, it should be pointed out that the "price effect" in the adjustment process did not disappear in economic theory. In an inflationary process, it is recognized that rises in prices affect the balance of payments. But, the changes in prices are not attributed to the changes in the stock of money but rather to increases in expenditures. As explained by E. Bernstein;

> ". . . Most of the additional expenditure will affect home prices. If the elasticity of substitution of import goods for home goods is moderate (although greater than unity), the secondary effects on imports will also be moderate . . . On the other hand, in countries where the marginal propensity to import and substitutability of import goods for home goods are relatively high, the aggregate balance of payments deficit that may be expected will manifest itself rather quickly".[15]

There are two aspects of the price changes in the adjustment process: the first may be called the "disturbing effect" which impairs the "internal competitiveness" of the economy in international trade and increases the demand

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15. E.M. BERNSTEIN & I.G. PATEL, "Inflation in Relation to Economic Development", I.M.F. Staff Papers, Vol. 2, 1951-52, pp.363-398.

for imports.[16] The second effect that may be called the "corrective effect", namely, devaluation. It should be pointed out that these two effects do not involve an automatic adjustment mechanism. Particularly devaluation is a policy matter rather than an automatic adjustment mechanism. This characteristic of devaluation becomes more clear in an inflationary process. If a devaluation is carried out under the conditions of less than full employment output and employment can increase without price increases as aggregate demand increases and idle resources are utilized. If a devaluation is carried out in an inflationary period aggregate demand increases. However, in this case further rises in the price level are unavoidable. The only remedy is to reduce domestic expenditures through monetary and fiscal policies to obtain real resources to meet increased foreign demand.[17] In this respect in an inflationary process, price changes based on price elasticities seem to be subsidiary and the manipulation of expenditures occupies a central place in the adjustment process.a The relationship between inflation and the balance of payments can be examined within the framework of the modern quantity

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16. See for the concept of "international competitiveness" E. BERNSTEIN, ibid.

17. See for this point H.G. JOHNSON, "The Monetary Approach to Balance of Payments Theory" in Further Essays in Monetary Economics (Allen and Unwin, Ltd., 1972) p.231.

theory.[18] The modern quantity theory suggests that there is a stable demand for money, or, a stable velocity function. But, the concept of velocity in the modern quantity theory is different from the one in the old quantity theory. The former does not involve institutional factors, it is an application of the general theory of choice.[19] Velocity in the modern quantity theory include five different forms in which wealth can be held: money, bonds, equities, physical non-human goods and human capital. In this context, a theory of inflation can be generated: If there is a stable demand function for money in real terms, the rate of inflation enters as a cost of holding real balances. Given this function, the rate of increase of the nominal stock of money determines the rate of inflation. Money holders eventually come to expect that rate of inflation and adjust their stocks of real balances to it. The money holders, to maintain their real balances constant, being determined by the velocity function, have to accumulate money balances at a rate equal to the rate of inflation. As inflation proceeds this accumulation of money balances is achieved by reducing the consumption of current real

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18. See for the Monetarist Inflation Theory, M. FRIEDMAN, "The Quantity Theory of Money: A Restatement", in Studies in the Quantity Theory of Money, edited by M. FRIEDMAN (Chicago University Press, 1957), pp.3-21. M. FRIEDMAN, "Statement on Monetary Theory and Policy" in Inflation edited by R.J. BALL and P. DOYLE (Penguin Books, 1970) pp.136-145. H.G. JOHNSON, Macroeconomics and Monetary Theory, (Gray-Mills Publishing Ltd., 1971) pp.148-162.

19. H.G. JOHNSON, "Monetary Theory and Policy", in Essays in Monetary Economics, (Allen and Unwin Ltd., 1969) p.26.

income. Thus inflation constitutes a tax on real balances, which in turn becomes revenue to the makers of the inflationary increase in the money supply. In this process a relationship between inflation and the balance of payments can be established. If the stock of money is increased the additional money received by money holders is spent, some parts of these spendings put pressure on the balance of payments. Thus deficits (surpluses) represent phases of adjustment in the velocity function. As long as money creation continues, this leads to a "flow" deficit in the balance of payments.[20] The question here is that why is the stock of money increased or money created? From an historical point of view an expansion of the money supply has always been associated with the needs of Governments.[21] Perhaps inflation and balance of payments difficulties that most of developing countries are experiencing can be explained in this context.

To summarize, classical theory proposed an adjustment process based on price elasticities; that the absolute level of prices was determined by the changes in the stock on money. The contemporary theory, Keynesian in its spirit, although recognizing the "price effect", gave it a subsidiary krole. In the modern quantity theory, Keynesian

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20. H.G. JOHNSON, "Towards a General Theory of the Balance of Payments", in International Finance edited by R.N. COOPER, (Penguin Books, 1969), p.243.

21. See for this point, P. CAGAN, "The Monetary Dynamics of Hyperinflation" in Studies in the Quantity Theory of Money edited by M. FRIEDMAN (Chicago University Press, 1957) pp. 25-120.

in its spirit, although recognizing the "price effect", gave it a subsidiary role. In the modern quantity theory, the role of prices in the adjustment process may be less clear, as changes in the stock of money governs money expenditures and the changes in and the level of prices is explained by the present and past changes in and the levels of the money supply.

So far, it has been argued that the "price effect" in the adjustment process is given a subsidiary role. This has been a result of Keynesian criticism of classical theory.[22] We now turn to the examination of the adjustment of expenditures to balance of payments and the role of inflation in this process.

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22. M. LETICHE, "Balance of Payments and Economic Growth" (Augusts M. Kelley Publishers, New York, 1967) pp.74-103.

CHAPTER 3

THE RELATIONSHIP BETWEEN INFLATION AND THE BALANCE OF PAYMENTS IN KEYNESIAN THEORY

In this chapter the relationship between inflation and the balance of payments will be examined in Keynesian theory. The analysis will be presented within the framework of the absorption approach. In the first section the relationship between inflation and the balance of payments will be analysed and in the second section suitable policies to deal with the balance of payments under conditions of inflation will be studied.

3.1 THE ABSORPTION APPROACH

Classical theory was discredited by Keynesian theory on the grounds that the automatic tendency towards full employment did not exist because of the absence of price-wage flexibility. Money wages rather than real wages were determined by wage bargaining so that the level of employment could not be considered independently of the absolute level of prices. Thus the classical dichotomy was no longer relevent. Moreover, wages were sticky and determined by factors outside current economic factors. Therefore, the determination of the level of employment in the labour market in real wage terms was abolished and the concept of effective demand was introduced. At less than

full employment the rate of output and employment was governed by effective demand.

In Keynesian theory, the theory of the level of prices was reduced to a relatively minor role;[1] the direct link between the absolute level of prices and the quantity of money was discredited as the velocity was not constant. On the assumption of a closed economy; there could be three reasons for a change in the price level - a change in employment, a change in wage units, a change in production techniques. Keynes was concerned primarily with changes in the level of employment.[2]

In its original formulation Keynesian theory suggested neither a theory of inflation nor a theory of the balance of payments. However, the inclusion of the concept of effective demand into the analysis led to inflation and balance of payments' theories on the basis of the income-expenditure model.

In Keynesian theory, a theory of inflation can only be obtained on the assumption of full employment. Assuring that the economy is an open economy by the use of the well known formula,

$$Y = C + I + X - M \qquad (1)$$

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1. H. BALL, op. cit., p.62. G. ACKLEY, Macroeconomic Theory (Macmillan, 1961) pp.105-155.

2. H.G. JOHNSON, "Monetary Theory and Keynesian Economics", in Monetary Theory edited by R.W. CLOWER (Penguin Books, 1969) pp.226-47.

the relation between inflation and the balance of payments can be established. Assuming the Y is full employment output, consumption C and investment I include imported consumption and investment goods, X represents value of all exports and M the value of all imports of goods and services in the trade balance.[3]

The formula (1) can be rearranged so that,

$$X - M = Y - C + I \qquad (2)$$

If we define X - M as the trade balance (B) and C + I as aggregate expenditure (E), then equation (2) reduces to:

$$B = Y - E \qquad (3)$$

This general formula is the basis of the absorption approach to balance of payments analysis. From equation (3) it can be seen that a deficit in the balance of payments consists of an excess of aggregate expenditure over full employment output. As long as money expenditures exceed full employment output, a deficit in the balance of payments will ensue.

How does an inflationary process in the economy start?[4] There are two possibilities in the Keynesian framework. Firstly, rises in costs can cause inflation. In Keynesian

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3. G. MEIER, "International Trade and Development", op. cit., H.G. JOHNSON, "Towards a General Theory of the Balance of Payments", International Trade and Economic Growth, (George Allen and Unwin) 1958), pp.153-68.

4. This analysis follows that presented by, J. BALL, op. cit., pp.63-78, and, G.M. BRON FENBRENNER and F.D. HOLZMAN, "A Survey of Inflation Theory", in Surveys in Economic Theory Vol. 1 (Macmillan, 1968) pp.46-107.

theory costs, particularly wages, are assumed to be constant. Given the level of employment and marginal costs, there is only one level of prices consistent with that level of employment from the point of view of profitability. The goods market is assumed to be purely competitive, ensuring maximum profit. As the level of employment increases, marginal costs start rising because of the law of diminishing returns on the one hand; as full employment is reached the obtaining of factor of production only becomes possible by offering higher prices for them, on the other hand. If costs rise, prices in the goods market have to rise to render the level of existing employment profitable at the new level of costs. As prices rise, money income increases; thus the demand for money for transaction purposes increases. If the stock of money is fixed, additional money can only be found through idle balances kept for speculative purposes of a higher rate of interest. If the rate of interest rises, the equilibrium in the goods market is disturbed, leading to a reduction in the level of effective demand at the existing level of production. Therefore, the current level of employment with respect to the current level of demand is excessive and the level of employment is likely to fall. Rises in costs result in some increase in prices and some decline in employment. The actual combination of a fall employment and the rise in the price level that will restore

equilibrium depend generally on the situation in individual markets. If investment expenditures are highly elastic with respect to the rate of interest then the level of expenditures in the goods market will decline. This reduces the transactions demand for money. Despite the decline in the demand for money, if the rate of interest does not fall, the equilibrium will likely take place through changes in employment.

As long as the rate of interest is assumed to be affecting expenditures, a sustained inflation based on costs can not be generated, unless it is assumed that the monetary authority provides additional money required to circulate the national income at ever rising prices. This point raises a crucial question, whether cost inflation is the result of policies pursued by governments to maintain full employment. By increasing the money supply sufficiently to finance them governments approve cost inflation on the grounds that without creation of money, or new purchasing power, a continuing price increase would be impossible. In discussion of the cost inflation thesis it has been argued that a rising level of prices and wages induce the increase in the money supply or, at least, adds impetus to the rate of credit creation.[5]

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5. F. MACHLUP, "Cost Push and Demand Pull", Inflation, edited by J. BALL and P. DOYLE (Penguin Books, 1969), pp.149-176, and W.A. MORTON, "Trade Unionism, full employment, inflation", in Inflation, op. cit., pp.99-116.

Rises in the price level may come from another source; demand conditions. If the economy is fully employed, rapid increases in expenditures create excess demand over the capacity of the economy. If money income rises more than real income, this generates an inflationary process. Assuming that the nominal stock of money increased, the initial impact of this increase is to reduce the rate of interest and to raise the level of investments in real terms. Given that consumption depends solely on real income and that government expenditures do not increase in real terms, the total demand on real resources will now be greater than the resources available. These demanding investment goods will be ready to pay higher prices to achieve the desired increase in real investments, thus there will be monetary excess demand created by monetary expansion. As full employment exists, monetary expansion immediately affects the balance of payments, leading to a deficit.[6]

As long as investment expenditures are not increased by inflationary ways, it will not create any deficit in the balance of payments as the output created by the investments allows aggregate supply to keep pace with aggregate demand. The interesting point here is that an expansion of income is assumed not to affect the balance of payments, as Nurkse has commented;

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6. J. BALL, op. cit., pp.70-72.

> "It may seem strange that an expansion of income in this model is not necessarily accompanied by any net increase in imports. The marginal propensity to import would seem to be zero, which looks like a rather unnatural result. But there is nothing strange about it if we remember that in this case there has been a structural change in the economy, the creation of a new industry. The usual concepts of income analysis in international trade, just like those of the Keynesian income analysis in general, assume a given economic structure. Development means changes in economic structure and in this dynamic context the functional relationships between income and imports need not behave in the usual manner."[7]

The suggestion by Nurkse seems to be based on the assumption that as soon as the products of the new industry are sold on thedomestic market, expenditures will be diverted from imported goods and there will not be any balance of payments difficulties. However, it should be pointed out that this can only be possible if inflation is avoided. If expenditures are not increased through credit expansion, dishoarding or a reduction in savings, income will remain limited at the level dictated by macro-economic equilibrium, and thus any purchase of the products of the new industry will reduce expenditures on imported goods. Assuming full employment exists, if money income increases by inflationary methods, money expenditure will exceed the increases in output, leading to a deficit in the balance of payments.

As monetary expansion is viewed as the main reason

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7. R. NURKSE, "Trade Theory and Development Policy", in Economic Development for Latin America, edited by HOWARD S. ELLIS, assisted by HENRY C. WALLICH (Macmillan, 1961) p.260.

for both inflation and the balance of payments the role of the rate of interest in this context should be examined. In the previous paragraphs it was explained that in an inflationary process the rate of interest is expected to rise and to check expenditures, reducing the inflationary pressure in the economy. Moreover, if the rate of interest rises relative to foreign rates of interest, international funds are attracted to the inflation country, closing the deficit in the balance of payments by adjustments of the capital account. This relates to "the assignment problem".[8] Proper use of monetary policy can ease balance of payments difficulties. However one thing should be pointed out that this suggestion assumes the independence of the monetary authority. This is hardly acceptable from the point of view of developing countries as the monetary authorities are a part of developmentpprogrammes on the one hand, and

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8. The assignment problem follows from the observation that governments give responsibility for the pursuit of policy objectives seperately to different government authorities. For instance, the Central Bank, controlling monetary policy, is assigned responsibility for external balance, and the Treasury (or ministry of finance in the case of Turkey), controlling fiscal policy, is given responsibility for full employment. The assignment problem is that which objective should be assigned to which agency, to guarantee the most efficient operation of policy. The solution to this kproblem is the use of the "principle of effective market classification".

In the context of the balance of payments and inflation, the independency of the monetary authorities is important. If the monetary authority is given autonomy, it exerts influence through the monetary base on the rate of interest and thus the balance of payments. As is known, the concept of the monetary base involves the independency of the monetary authorities. This broad issue is discussed in, R.A. MUNDELL, "Appropriate use of Monetary and Fiscal policy for Internal and External Stabiltiy", IMF Staff Papers, Vol. 9, No. 1, 1961.

the structure of developing countries is not suitable for the proper working of the rate of interest, as described by A. Bloomfield, on the other hand:

> "It follows from the underdeveloped nature of the money and capital markets that the interest rate structure in underdeveloped countries is largely unintegrated and that over a large part of the economy interest rates are relatively insensitive to the actions of the monetary authorities. Even within given sectors or localities of the market there is often a wide diversity of interest rates because of wide differences in the type and quality of risk or because of the forces of custom and tradition. There is an especially wide gap between interest rates in the so-called organized and unorganized sectors of the money market. Interest rates undeniably play a lesser role than they do in more developed countries in influencing the volume and direction of investments. In the modus operandi of monetary policy, the availability of credit factor is likely to be more important, relative to the cost factor, than it is in more developed countries. (In some cases, in fact, the authorities fix maximum loan rates for banks or official lending institutions)".[9]

Thus it cannot be assumed that even if interest rates are influenced by excess monetary demand, that all sectors in the economy will respond, through organized money markets, in the appropriate fashion. Equally interest rate policies pursued by governments in the pursuit of some broad economic development strategy may exacerbate balance of payments problems. Therefore, not surprisingly, in many developing countries credit restrictions are selective credit controls

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9. A. BLOOMFIELD, "Monetary Policy in Underdeveloped Countries", in Readings in Economic Development, edited by T. MORGAN, G. BETZ and N.K. CHOUDHRY (Wadworth Publishing Company, U.S.A., 1963) p.367.

are preferred to interest rate policies. The reasons can be sought in terms of the assignment problem or, more generally, in terms of the fragmented nature of the financial system.

Given these sorts of policy constraints we can now look at possible management policies resulting from a balance of payments deficit.

3.2 BALANCE OF PAYMENTS MANAGEMENT POLICIES

A deficit in the balance of payments is the difference between expenditures and real income as shown in equation (3) where Y indicates output, B the trade balance and E aggregate expenditures. If a deficit exists in the balance of payments, namely, E is negative, two sets of policy can be employed, either Y is increased, output increasing policies, or, E is reduced, expenditure reducing policy.[10] It should be pointed out that income and expenditure are inter dependent and hence this distinction refers to the initial impact of the policy as any change in either income, as expenditure will start multiplier changes in both. However, so long as the marginal propensity to spend is less than one, the effect of an expenditure reducing policy or output increasing policy will always improve the balance on current account.[11] But this is

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10. L. YEAGER, International Monetary Relations, (Harper and Row, 1966) pp.87-136, and H.G. JOHNSON, "Balance of Payments", in Money Trade and Economic Growth, (Allen and Unwin, 1968) pp.15-27.

11. H.G. JOHNSON, ibid.

hardly acceptable from the point of view of developing countries as a high rate of growth depends on a high level of investment expenditures.

Another way to increase output is to divert the expenditures from abroad on the grounds that output is governed by the demand for it. This policy is known as an expenditure switching policy.

An expenditure reducing policy can be applied through monetary restrictions, budgetary policy and direct controls. Since any policy of this kind tends to reduce income and employment, it could be useful for an economy experiencing both inflation and balance of payments difficulties.

Expenditure switching policies can be applied by the use of devaluation and trade controls in the form of exchange restrictions, quantitative and qualitative controls, generally imposed on imports.

Under inflationary conditions there are two targets to be achieved in the economy: a stable level of prices (internal balance) and an equilibrium in the balance of payments (external balance). In this case the policy variables can not be less than two,[12] and each policy

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12. Tinbergen made an important observation that the number of policy variables must not be smaller than the number of targets. This means that the authorities responsible for international and domestic equilibrium must in general make use of at least two policy variables at all times. See J. TINBERGEN, On the Theory of Economic Policy, (North Holland Publishing Company 1952), and J. TINBERGEN, "The Relation between Internal Inflation and the Balance of Payments", Banca Nazionale del Lavoro, Quarterly Review, October-December 1952, pp.187-194.

variable should be paired with the target on which it has the greatest relative impact. However, it should be pointed out that each policy variable has an effect on both internal and external equilibrium. Expenditure reducing policies, for example, may also have incidental switching effects, to the extent that they influence the relative structure of prices as well as their absolute level. However, the relative impact of each instrument on each of the two targets tends to be different. In general, expenditure reducing policies tend to have a relatively greater impact domestically, whereas switching policies tend to have a relatively greater impact externally, since their most direct effect is on the volume and direction of international transactions. But the point about expenditure reducing policies deserves much closer examination in the context of developing countries, the effects of expenditure reducing policies on the balance of payments may be greater than expenditure switching policies as they are heavily dependent on imports of investment goods.

Under inflationary conditions, a policy model can be obtained on the basis of formula (3). In the formula Y will be assumed to be full employment output and can not be reduced in the short run. In this case a deficit resulting from inflation is to be moved, money expenditures should be reduced to the level of real output. However, to the extent that exchange reserves are available, an economy can run a deficit. In this case, a deficit con-

stitutes a leakage of excessive spendings, exerting a stabilizing effect.

In an inflationary process expenditure switching policies, in the form of devaluation and trade controls, are likely to prove ineffective. The effectiveness of devaluation depending as it does on the Marshall-Lerner conditions is rather questionable under the conditions of developing countries. Even if this condition is fulfilled, it is necessary, in an inflationary process, that devaluation has to be associated with a fall in aggregate expenditures to meet the shifted demand from abroad. If, when a country devalues, it does not also adopt measures to keep aggregate domestic expenditure constant, any increase in exports or decrease in imports will lead to an inflation of expenditures and renewed pressures on the balance of payments. It is therefore essential that monetary expansion should not be allowed to offset the equilabrating effects of devaluation. However, the effects of devaluation in an inflationary process should not be belittled. If the money supply is kept constant, expenditures will be automatically reduced by the rise in the price level and the reduction in the real value of cash balances as a result of the devaluation.[13] Besides the effects on expenditures of the rise in the level of prices, the relative price changes associated with a change in the terms

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13. S.S. ALEXANDER, "Effects of a Devaluation on a Trade Balance", IMF Staff Papers, Vol. 2, April 1952, pp.263-278.

of trade will also affect expenditures, through both the "income effects" and the "price effect" (substitution) of the change in the terms of trade. When devaluation is complemented by monetary and fiscal policies reducing expenditures, it may be possible to remove the deficit in the balance of payments.

As for trade controls, imposed on imports, they do not reduce expenditures, only keep them within the economy and thus this aggravates inflationary pressures. If import controls are retained on a long run basis, it can affect production adversly; behind the protection of import controls monopoly elements or inefficient production units can emerge.[14] Moreover, on the short run basis, import control can hamper production as they prevent the necessary raw materials spare parts from reaching the production units. These were the cases for Turkey during the 1954-59 inflation.[15]

All this suggests that in an inflationary process, balance of payments difficulties can only be avoided by giving weight to expenditure reducing policies, on the assumption that by reducing aggregate expenditure both the demand for domestic goods and the demand for imported goods can be reduced simultaneously. If the demand for domestic production is decreased significantly this may create an

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14. E. LUNDBERG, "International Stability and the National Economy" in Stability and Progress in the World Economy, edited by D. HAGUE, (St. Martin's Press, 1958) pp.216-218.

15. Z.Y. HERSHLAG, op. cit., p.253.

additional effect of increasing the volume of exports, thus assisting the reduction of the balance of payments deficit.

Thus Keynesian analysis provides a very useful linkage between internal prices and external trade, and provides indications of the policy measures necessary to restore price stability and balance of payments equilibrium. However, when this broad analytical framework is applied to the Turkish case, then considerable attention has to be paid to the "transmission mechanisms" by which policy operates on the economy. In this context chapter 4 now looks closely at the financial structure in Turkey and monetary expansion in the period under study.

CHAPTER 4

MONETARY EXPANSION IN TURKEY DURING THE 1950-65 PERIOD

4.1 THE FINANCIAL STRUCTURE OF TURKISH ECONOMY

In this chapter the monetary expansion in the 1950-65 period will be examined. Firstly, a suitable definition of money for the analysis will be sought, and secondly a balance sheet analysis of the banking system will be presented to reveal which sectors of the economy contributed to monetary expansion in this period.

Before analysing this monetary expansion, it will be useful to examine the financial structure of the economy to show the importance of money in the economy. The phrase "financial structure" refers to the financial assets and the financial institutions of the economy. In Table 4.1, the percentage distribution of financial assets is shown. Regarding the Table, the economy can be identified as a monetary economy in that money and monetary liabilities are widely used. The banking system has a large share in the financial structure. However, in 1950-62 period the share of the banking system did decrease. The position of the banking system in the financial structure seems to be typical of economies at the early stages of development. As the economy develops the share of the banking system in the financial structure has a tendency to decline.

Table 4.1 Financial Assets Held by the Nonbank Public
(Percentage Distribution)

	1952		1962	
Currency and Deposits	100.0	88.9	100.0	71.6
Central Bank Notes	42.4		36.0	
Coins	1.6		1.3	
Deposits	56.0		62.7	
a. Demand Deposits	48.9		53.1	
b. Time Deposits	7.1		9.6	
Securities	100.0	8.5	100.0	10.6
Bonds	100.0		83.5	
Stocks			16.5	
Insurance Funds	100.0	2.6	100.0	17.8
Life Insurance			1.0	
Pension Fund	100.0		32.0	
Social Security			63.0	
Army Fund Pension			4.0	
Total Financial Assets		100.0		100.0

Source: Derived from S. KORUM, "Financial Structure, Economic Growth, and Monetary Policy in Turkey", in Symposium on Central Banking, Monetary Policy and Economic Development, (Central Treaty Organization, Izmir, 1971) p.126.

In this respect, changes in the financial structure of the Turkish economy have some similarities with the experiences of developed countries.[1]

Despite this decreasing share the banking system still accounted for a large part of the financial assets in the economy by 1962 (72%). The lack of non-financial institutions and their primary securities are significant; government bonds, private bonds and corporate stocks only account for a small portion of total financial assets. Government bonds accounted for 9.89% of total financial assets in 1965; private securities and corporate stocks 2.33% and 1.28% in the same year respectively.[2] This characteristic of the economy can be related to a large extent to the legal structure of the production units. The dominant legal form of ownership outside the agricultural sector is individual proprietorship and general partnership. This situation suggests that the savers and investors are not separated to any significant extent.

This property of the financial structure puts the economy into a very close relationship with monetary

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1. R. GOLDSMITH, "Financial Structure and Economic Growth in Advanced Countries - An Experiment in Comparative Financial Morphology", Capital Formation and Economic Growth, (New York, National Bureau of Economic Research, 1955).

2. Y. AKYUZ, "Money and Inflation in Turkey 1950-68", (The Faculty of Political Science, Ankara University, 1972).

phenomena in Turkey. It may be suggested that the stock of money is one of the most important factors affecting the expenditures. Equally the narrowness of the domestic capital market has meant that the major commercial banks have been active in industrial finance, and, therefore, monetary expansion, working through the banking system, has had a direct impact on industrial investment.

4.2. THE DEFINITION OF MONEY

The main controversies around the definition of money are whether or not it can be uniquely defined[3] and how the demand for money is considered. In the latter aspect the problem turns around whether or not time deposits will be included.[4]

The attribute of money, liquidity, can be defined as the length of time to convert an asset at its full price into another asset to be used for transactions.[5] Thus currency and cheque accounts are as money since the "length of time" is almost zero with respect to these assets. However, the distinction between "liquidity" and "illiquidity" is rather vague, even time deposits can rapidly be converted into currency. Therefore it is more reasonable to speak of a liquidity spectrum.

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3. See N. KALDOR, "The New Monetarism", Lloyds Bank Review, July 1970, pp.1-8.
4. J. BALL, Inflation and the Theory of Money, (Allen and Unwin Ltd., London 1964) p.165.
5. J. BALL, op. cit., p.170

In Turkey deposits are classified as (a) saving deposits, (b) commercial deposits, (c) official deposits and (d) inter-bank deposits. Each has time and demand components. The official definition of money includes currency plus commercial demand deposits plus the free reserves of the banks at the Central Bank. The reasoning behind this definition seems to be that commercial demand deposits are cheque accounts and the free reserves are considered as currency.

The official definition of money may not be sufficient, and time deposits, in my view, should be included in the definition. Firstly, the use of a cheque can not be taken as a criteria for "moneyness", as the use of a cheque is rather narrow in Turkey; the majority of payments being made in cash. Thus the distinction between demand and time deposits seems to be less important as the arrangements to draw time deposits can easily be made.[6] Therefore it can be suggested that the "moneyness" of time and demand deposits is identical. Thus through this chapter a broad definition of money which includes currency plus commercial demand and time deposits plus saving time and demand deposits will be employed.

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6. O. YENAL, "Development of the Financial System", in Four Studies on Economic Development of Turkey, edited by C.F. SHORTER, (Frank Cass, 1963).

4.3 A BALANCE SHEET ANALYSIS OF THE BANKING SYSTEM[7]

The basic principle of the analysis in this section is based on a simple accounting identity that the assets side of a balance sheet is always equal to the liabilities side, and thus any change in the asset (liabilities) side creates an equivalent change in the liabilities side (assets).

Firstly the monetary base will be examined on the assumption that there is a stable relation between the monetary base and the money supply. The hypothesis in this section is that the public sector is the main source for the expansion in the monetary base and thus the money supply. The monetary base if defined as currency in circulation plus the free deposits of the banks at the Central Bank. In order to see which sectors contributed to the expansion of money base, the economy will be divided into five main sectors: the Central Government, the State Economic Enterprises, the Organizations for Price Intervention, the private sector and the foreign sector.

The organizations for price policy consist of two State Economic Enterprises and one Central Government agency; the State Economic Enterprises dealing with price

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7. The methodology used in this chapter was originally adopted by Yilmaz Akyuz in his book, Money and Inflation in Turkey 1950-68. Although the same methodology has been used in this chapter the sectors into which the economy has been divided are different from Akyuz's distribution. The Monopoly Administration was considered as an organization for price intervention.

policy are the Soil Products Office and the Sugar Company. The former is engaged in the stock and price regulation of the main cereal crops, the latter deals with the purchase of sugar beet and production of sugar. The Central Govemment agency dealing with price policy is the State Monopoly administration engaging in tobacco purchase and the price policy for the crop. Besides these three organisations, there is another institution; the Agricultural Sales Cooperative consisting of a number of small cooperatives. The Agricultural Sales Cooperatives are under the control of the Agricultural Bank of Turkey.[8]

The Central Bank issues notes in the following way:

(a) 120 days commercial bills of real and legal persons engaged in industrial and mining business may be accepted by the Bank for rediscount when presented by a commercial bank; and also 9 month bills presented by banks which are legally assigned to meet the credit needs of small artisans and tradesmen;

(b) 9-months agricultural bills presented by a bank;

(c) 9-months Treasury Guaranteed Bills of the institutions established by a special act, with capital owned by the state,

(d) 9-months Treasury bonds presented by a bank;

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8. A full account of the price intervention policy and the organisations concerned is found in the work by A.O. FORKER, "Agricultural Price Policy in Turkey", Vol. 2, USAID, Ankara, 1970.

(e) Short term advances to treasury;

(f) Advances on government bonds, on gold and foreign exchange;

(g) Issues based on gold and foreign exchange earnings, including transfers.

The Central Government agencies are eligible to borrow from the Central Bank through the (d) and (e). These borrowings have to be repaid within the same financial year, and the maximum amount to borrow is limited and subject to legislation.[9]

The State Economic Enterprises can obtain credits through the operations (a) and (c). However, in practice borrowings were made only through the operation (c).

The private sector can borrow through rediscounting, gold and foreign currency.

The Central Bank Balance Sheet can be divided into the items shown below:

Assets	Liabilities
- Credits and Advances	- Deposits
- Gold and Foreign Exchange Assets	- Currency in Circulation
- Claims to be liquidated	- Gold and Foreign Exchange Liabilities
- Other assets	- Capital Account and other liabilities

In the balance sheet Gold and Foreign Exchange assets and liabilities refer to the Foreign Sector. The item

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9. S. AREN, op. cit., p.12.

"Claims to be liquidated" involves two consolidation operations undertaken in 1955 and 1961: In the former year TL 550 million of Treasury guaranteed bonds of the Soil Products Office was cancelled and TL 54 million was settled between the Treasury and the Central Bank. The remaining TL 496 million was transferred into a liquidation fund. In 1961 TL 5003 million outstanding debt of the Central Government, the State Economic Enterprises, and the Organisations for price intervention was transferred into the same fund. In return the Central Bank obtained the Treasury Bonds with 0.5% interest to be repaid over a one hundred year period. As for the gold and exchange item, the Central Bank is the only authority for dealing with foreign currency. In order to see the effects of the foreign sector, the counterpart funds will be taken into account and treated as a liability. Thus net foreign assets cover net gold and foreign exchange assets and counterpart funds.

Thus changes in the Monetary Base equal:

a) changes in Central Government Credits minus deposits, plus

b) changes in the State Economic Enterprises Credits, plus

c) changes in the organisations for Price Intervention Credits, plus

d) changes in Private Sector Credits,

e) changes in net foreign assets, plus

f) changes in (net) other assets.

Table 4.2 Changes in the Monetary Base 1951-1965 (in million TL)

	Monetary Base	Central Government Agencies	State Economic Enterprises	Price Supporting Organizations	Private Sector	Gold and Exchange	Other Assets
1951	255	18	42	175	55	-4	31
1952	99	-57	28	289	194	-244	-111
1953	228	-75	49	175	48	230	-199
1954	35	250	129	112	255	-190	-521
1955	522	142	219	408	-100	-253	106
1956	634	202	132	357	-116	120	-91
1957	761	111	264	565	1	-298	148
1958	172	-253	186	322	66	290	-439
1959	573	163	-21	-135	63	-553	1062
1960	557	-139	27	77	-67	475	178
1961	345	780	16	-290	-55	59	-467
1962	210	372	-9	226	112	-249	-242
1963	438	461	1	628	344	-425	-571
1964	1231	366	-15	719	-142	904	-465
1965	710	672	-15	407	349	154	-234

Source: Derived from Türkiye Istatistik Yilligi, various years.

On this classification changes in the Monetary Base are shown in Table 4.2. The claims to be liquidated were allocated to relevant sectors. As it can be seen from Table 4.2 the changes in the monetary base were dominated by public sector borrowings. Of the three sectors of the public sector, the most important was the organizations for price intervention. Particularly in the 1950-58 period the relationship between the changes in the monetary base and the changes in the borrowings of the organizations for price intervention is very marked.

In the 1951-58 period the resources of the Central Government Agency, The State Economic Enterprises and the Organizations for Price Intervention rapidly increased. The total credit to these three was TL 1008 million, in 1956. It rose to 5156 million by 1959. In the following paragraphs the reasons for the recourse of these three sectors to the Central Bank will be examined. First, the Organizations for Price Intervention are examined.

The Soil Products Office deal with main cereal crops, such as wheat, barley, rye. The share of these crops in the total crop production was 55% on average in the 1950-65 period. The intervention by the office aimed at stabilizing market prices. More important than this, the office attempted to protect both the consumers in urban areas and the income of the producers who constitute the largest section of the population. Such a policy of securing low

prices in the market and a regular and relatively high income in the agricultural sector led to the large deficits of the office. In the 1950-65 period, with the exception of 1952, the accounts of the office showed large deficits.

As can be seen from Table 4.33 the losses of the office continued throughout the period. In 1954 the loss was the highest for the whole period. In that year agricultural production fell sharply, by 20%. This can be accepted as evidence of the income policy by the office. Also in Table 4.3 it can be seen that the price paid to the producers was always higher than the office sale price.

The Sugar Company has a monopoly in the sugar beet market. The company influences production directly by its price and allocation policy. The production of sugar increased rapidly and self-suffiency was achieved, in the early 1950s. Despite this fifteen new factories were built up with the hope of exporting sugar. This could not be realized as Turkey was unable to compete on the world market for exports against cane with her more expensive beet derivative. The surplus sugar had to be sold on the world market at a loss. On the other hand the domestic sale price of sugar did not keep pace with increases in the price of its main raw materials. (See Table 4.4).

The export price of sugar rose in 1963 due to the Cuban crisis. However, it fell in the next year again. The protective price and production policy led the company

Table 4.3 Deficits of the Soil Product Office and the Factors Causing the Deficits 1950-1963

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
The losses of the soil product office (in million TL)	8.3	11.1	15.8	48.2	103.1	35.4	50.9	3.4	15.6	9.7	42.0	2.5	47.5	2.5
The price of flour for making bread (Kurus/Kg)	25.2	26.2	28.0	28.0	28.0	28.0	28.0	38.0	38.0	38.0	48.0	52.0	71	71
The price paid to producers (Kurus/Kg)	28.2	27.7	23.4	29.9	31.95	33.2	35.1	44.6	44.9	51.6	59.1	72.9	82.1	81.4

Source: adapted from A.O. FORKER, op. cit.

Table 4.4 Sugar and Sugar Beet Prices 1954-1965

	Price Index 1953 = 100			Sugar Cost and Price Per KG (In kurus's)		
	Sugar Beet	Sugar		Domestic Price	Export Cost	Export Price
1954	120	100	1956	200	n.a	36
1957	170	153	1962	250	180	53
1959	196	230	1963	250	180	223
1963	231	192	1964	250	180	178
1965	267	192				

Source: Y. AKYUZ, op. cit., p.177.

into large operating deficits which were largely financed by the Central Bank credits. Central Bank credits to finance these deficits rose rapidly in the 1954-1959 period, as can be seen from Table 4.2.

Price intervention in tobacco is accomplished through the State Monopoly Administration. There is no comprehensive data to analyse the recourse of the administration to the Central Bank. However, in Table 4.5 the price paid by the Administration and the private sector is shown. In the 1961-1965 period the administration prices were above the private sector prices. Starting from 1954 onwards tobacco stocks increased rapidly. To some extent borrowings of the Monopoly Administration may be attributed to meeting the costs of the stocks.

Table 4.5 The Factors Affecting the State Monopoly Administration's Deficits 1954-1965

	Adminis. Prices	Private Sector Prices	Stocks	Central Bank Credits
	(1)	(2)	(3)	(4)
1954	-	-	168	110
1956	-	-	219	200
1958	-	-	213	215
1960	-	-	589	319
1961	769	806	553	50
1962	1175	1152	692	-
1963	908	872	747	75
1964	806	675	960	335
1965	897	845	1455	423

Sources: Column; 1-2; A. FORKER, op. cit.,

Column 3; U. KORUM, "Ekonometrik Modeller ve Türk Ekonomisi ian Bir Deneme" (Econometric Models and an Application to the Turkish Economy), The Faculty of Political Sciences, Ankara, 1969.

Column 4; The Monthly Bulletin of the Central Bank, May-April 1972

Columns 1 and 2 in Kurus/Kg..

Column 3 in 000's tons.

Column 4 in million TL.

The State Economic Enterprises in the 1950-65 period widely resorted to the Central Bank. The reason for this was the operating deficits and the finance of investment expenditures. The main factor behind the operating losses of the State Economic Enterprises was the price policy dictated by the authorities concerned: the prices of the products of the State Economic Enterprises were determined below the prices of similar goods produced by the private sector. Particularly this was the case in cement, coal, textiles and transports. Losses of the State Economic Enterprises are shown in Table 4.6. As the prices of the

Table 4.6 Losses of the State Economic Enterprises 1954-1959

	Operating Losses (in million TL)	Investment (in million TL)
1954	15.7	91.8
1955	60.9	253.8
1956	155.5	5539.9
1957	206.5	1104.9
1958	345.9	1692.0
1959	470.5	1883.0

Source: 1) P. SAGLAM, "Turkiye'de Kamu Teşebbüsteri (Public Enterprises in Turkey). The Faculty of Political Sciences.

2) O.E.C.D. Reports - various.

state of economic enterprises were kept low, it was necessary to ration. Rationing was applied to coal, steel, sugar, textiles and cement in the second half of the 1950-60 period. This caused further bottlenecks as described by A. Krueger.[10]

> "The fact that State Economic Enterprises attempted to hold their prices down below the costs of production not only added fuel to the inflation through monetary creating but also led to a reduction in the level of economic activity in the private sector; private firms were unable to compete with the State Economic Enterprises and were therefore forced to curtail production or sell at black market prices".

Thus in the economy unused capacity emerged in the late 1950's, contributing to the inflationary process. The jump in the prices of the State Economic Enterprises was due to the 1958 stabilization programme. In order to increase the sources of the State Economic Enterprises and close the operating deficits, the prices of their products were increased.

The share of investments of the State Economic Enterprises rose in the 1950-60 period. The share was 9.1% in 1950 and it rose to 18% by 1960. In 1965 it accounted for 25% of total investments. During the 1950s, the main field of investments was infrastructure. In the same period around 30% of these investments were financed from the short term credits of the Central Bank on the

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10. A. KRUEGER, "Turkish Devaluation: Promises and Pitfalls", METU Studies in Development, Spring 1971, pp.245, fn.14.

basis of the Treasury Guaranteed Bonds. This possibility was opened up to meet the short term working capital needs of the State Economic Enterprises.

The Central Bank was not the only institution financing the State Economic Enterprises. The Amortization and Credit Funds financed investments by the State Economic Enterprises. The Fund was established in 1953 to develop the money market and to administer the government debt. The main sources for this Fund were part of the legal reserves of the commercial banks, foreign credits and bond issues. The outstanding debt of the State Economic Enterprises was TL 1600 million in 1959. The interesting point is that the purpose of the legal reserves was circumvented to a greater extent as they returned to the market. The debt of the State Economic Enterprises rose in the 1960-64 period. It was 2576.4 million in 1960, rose to 3021 million and 4304 million in 1961 and 1964 respectively.

The Central Government did not have recourse to the Central Bank significantly. However, starting from 1954 the borrowings from the Central Bank rose. The main reason was the deficit in the budget. During the 1950s the average rate of increase in revenues was slightly smaller than the increase in expenditures. The accounts of the Central Government Budget are rather complex, and there are wide discrepancies in the figures for expenditures

and revenues. However Table 4.7 has been prepared on the basis of the figures given in the First Development Plan, in 1963, and the Second Development Plan in 1967.

In the first half of the 1950-60 period the deficit in the budget rose at a slower rate than in the second half. As the deficit rose the monetary transfers from the Central Bank increased rapidly. The pattern of investments undertaken by the Central Government are shown in Table 4.7. It should be pointed out that in the period 1950-60 most of the investments by the Central Government agencies were made in infrastructure and it could be argued that these are expenditures that the government would normally be very unwilling to curtail.

One of the main reasons for the budgetary deficits was the failure to increase taxation. During the 1950-65 period the ratio of tax to GNP remained almost the same, 11%. Despite recommendations by several reports, the agricultural sector was not taxed, despite its large share in the economy, although it must be recognized that there were probably considerable institutional constraints on creating a viable tax policy for the agricultural sector.

In this second stage of the analysis changes in deposit money will be examined. The Turkish banking system consists of the State Banks and the Private Sector Banks. Most of the State Banks have been established in the form of State Economic Enterprises. Private banks

Table 4.7 The Deficits in the Central Government Budget 1950-1965. (in million TL)

	Public Revenues	Public Expenditures	Deficits	Monetary Transfers from the Central Bank	Investments	Current Expenditures
1950	1670.6	1826.9	153.6	1008	298.4	1528.5
1953	2250.1	2511.8	261.7	1686	657.9	1853.9
1956	3260.2	3771.2	511.0	2736	1068.8	2702.4
1959	6012.7	6945.5	1932.8	4622	2049.7	5237.7
1962	8774.9	10479.2	1704.3	1023	3689	8076.0
1965	17073.0	11902.0		3184	6080	11855.0

Source: The First and the Second Five Year Plans, State Planning Organization.

Table 4.8 Changes in Monetary Deposits in Turkey 1951-1965 (in millions TL)

	Monetary Deposits	Net Claims on Public Sector	Changes in Private Sector Credits	Changes in Central Bank Advances and Engagement	Changes Liquid Reserves	Changes Legal Reserves	Changes in Other Assets
1951	266	-118	453	-164	110	62	-77
1952	158	-117	775	-214	2	23	-211
1953	4452	15	701	307	46	144	-147
1954	376	-14	764	-524	-5	90	65
1955	483	51	567	-185	104	69	-123
1956	669	61	567	-814	125	304	426
1957	946	1007	799	-467	161	94	-648
1958	418	90	637	-383	70	106	-102
1959	940	-116	547	-336	233	151	461
1960	378	-394	304	-936	156	254	994
1961	701	-414	140	536	66	203	170
1962	647	-376	1919	-328	-173	222	-617
1963	1223	399	1250	-411	33	199	-247
1964	1321	63	1322	-853	334	-11	466
1965	2795	601	2078	-646	204	492	66

Source: Central Bank of Turkey, Annual Reports - various.

are regulated by the Banks Credits Regulation Committee. The rate of interest on deposits and credits, the maximum amount of deposits the banks can accept are fixed by this Committee.

The balance sheet of the banking system can be divided into the items shown below.

Assets	Liabilities
-Credits	-Deposits
-Liquid Assets	-The Central Bank Advances
-Legal Reserves	-Other Engagements
-Other Assets	-Capital Account and Other Liabilities

Thus changes in deposit money can be explained by

a) changes in reserves, plus

b) changes in net claims on public sector credits, plus

c) changes in private sector credits, plus

d) changes in the Central Bank advances and other engagements

e) changes in net other assets.

Changes in bank reserves are divided into changes in currency kept in bank vaults and free deposits at the Central Bank; and changes in the legal reserves, which are partly kept at the Central Bank. Net claims on the public sector cover the credits to Central Government agencies and the State Economic Enterprises and the Organizations for Price Intervention minus their deposits.

In Table 4.8 changes in deposit money are shown. As it can be seen from the Table, in the 1950-65 period the private sector dominated the deposit money. Of the private sector credits agricultural credits were most important. The percentage distribution of credits between the various sectors of the economy is shown in Table 4.9. In the early 1950s the share of agricultural credits in total credits increased. This can be attributed to the policy followed by the government. However, in 1954-59 it fell. The interesting development that took place in the 1954-59 period was that the share of the public sector borrowings increased rapidly.

In the 1950-65 period changes in money deposits was dominated by the private sector borrowings. The public sector had a relatively small share in the commercial banking credits. During the period 1950-65 the average annual rate of change in private sector borrowing was 17% whereas changes in total monetary deposits was 18% per annum.

Table 4.9 The Percentage Distribution of Credits Between the Public and Agricultural Sectors 1950-1963

	Public Sector	Agriculture	Others
1950-53	10.60	40-80	59.20
1954-59	21.47	35.48	64.62
1960-65	13.87	26.44	73.56

Source: Monthly Bulletin of the Central Bank, May-April 1972.

Table 4.10 Changes in the Money Supply 1951-1965 (TL million)

	Total Money Supply	Central Government Agencies	State Economic Enterprises	Price Policy Organizations	Private Sector	Gold and Exchange	Other Assets
1951	414	-104	51	175	510	-4	-213
1952	356	-182	37	289	962	-244	-452
1953	639	-56	49	175	749	230	-558
1954	422	215	155	112	1032	-190	-960
1955	909	373	344	408	-509	-253	-73
1956	1186	196	285	357	434	120	-189
1957	1560	343	1054	565	807	-298	-911
1958	534	-342	366	322	736	290	-941
1959	1294	-26	97	-135	605	553	1051
1960	800	-336	-112	77	258	475	539
1961	1013	885	-735	-290	48	59	912
1962	1034	-89	26	226	2166	-249	-956
1963	1622	688	248	628	1539	-425	-893
1964	2230	556	118	719	1080	904	-803
1965	3286	869	477	407	2688	154	-576

Source: Central Bank of Turkey, Annual Reports.

In the third stage of the analysis, the balance sheets of the Central Bank and commercial banks are studied. Thus changes in the money supply can be investigated in terms of the net claims of the whole banking system on the public and private sectors.

The consolidated balance sheet of the banking system in Turkey can be formulated as follows:

Money supply = claims on the public sector plus the private sector plus net foreign assets plus other assets.

Thus changes in money supply can be explained in terms of the changes in the right hand side items of the balance sheet. Changes in money supply in the 1950-65 period are shown in Table 4.10.

The share of the claims of the private sector is greater than the public sector. A major part of these claims are due to the commercial banks. In the 1950s the claims on the Central Government Agencies remained rather negligible. However, due to the large borrowings of the State Economic Enterprises and the organizations for price intervention, the claims on the public sector continuously increased, between 1950 and 1958. After 1958, due to the 1958 Stabilization Programme undertaken, the claims on the State Economic Enterprises declined rapidly, while the increases in the organizations for price intervention were stopped. This tendency continued after 1960 and a special act was passed which made it very difficult for the State Economic Enterprises to have

recourse to the Central Bank by issuing Treasury guaranteed Bonds.

So far the evidence suggests that the claims of the Central Bank on the public sector as a whole account for most changes in the monetary base.

We now need to go on and examine the role of interest rates in the period.

4.4 THE RATE OF INTEREST

The function of the rate of interest within the Keynesian theory of inflation is to rise and to check expenditures. On the other hand, in the Modern Quantity Theory, the rate of interest is not given much importance as it may lag behind price changes and it becomes inadequate as an indicator for the cost of holding money, which is a central concept to inflation.

The credit market in Turkey consists of the so-called unorganized credit market and the organized market in which the rate of interest is fixed by the monetary authorities.

According to the official sources, the unorganized credit market works very extensively in Turkey and an important portion of the credits from this market are financed by the resources of the banking system. The share of the unorganized market credits in the total credits was estimated by State Planning Organization, to be around 28% and nearly 78% of this was provided by

Table 4.11 Official Interest Rates of Commercial Bank Loans 1951-1964

Type of Credit	Dates of Change			
	Aug. 1951	Aug. 1960	July 1961	Mar. 1964
1. General interest rate	7.00	12.00	10.50	10.50
2. Specified interest rate				
a. Open book credit rate 1/	9.00	12.00	10.50	10.50
b. Agricultural credits rate	7.00	-	-	-
i. General rate	7.00	10.00	9.00	9.00
ii. Medium & long term rate	7.00	7.00	7.00	7.00
iii. Credit rate from bond revenues of Agric. Bank under Law 5389	-	5.00	3.00	3.00
c. Export Credit rate	7.00	10.00	9.00	9.00
i. Prior sales arrangements made	7.00	10.00	9.00	9.00
ii. Goods on the tax rebate list	7.00	10.00	9.00	9.00
iii. Financed from Central Bank rediscounts	7.00	10.00	9.00	9.00
d. Preferential industry credits	7.00	12.00	10.50	9.00
e. Peoples' Bank credit to small business, artisans and craftsmen	7.00	12.00	9.00	9.00

1/ Open-book credit represents credit given without a specific collateral. Up to 1960, there was only a distinction between "open-book" credit and "other" credit. In 1960, 3 types of agricultural credit and export credit rates were distinguished. In 1961, People's Bank credit rates were distinguished. In 1964, a so-called preferential industry rate was established.

Source: Central Bank, 1970 Annual Report.

the banking system.[11] In the unorganized market, the rate of interest is known to be well above the bank rate. In western Turkey, the rate was reported to be 150% in 1970.[12] The data indicating the effects of inflation on the rate is not available, however, it can be said that in rural areas it may be responsive to inflation as the money lenders in rural areas are mostly merchants and they are supposed to be sensitive to price rises.

In the organized market, the rate of interest is fixed by the monetary authorities. The rate is kept below the market rate.[13] In Table 4.11 the official rates of interest are shown. As it can be seen from Table 4.11, all rates were reduced in 1951 in accordance with government policy and were not changed until 1960. Despite the 1954-59 inflation, the interest rate policy was not revised. Particularly, the interest rate on the medium and long term agricultural credits was

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11. Second Five Year Plan, The State Planning Organization, Ankara, 1964.

12. The interest rate in the unorganized market has been investigated several times. According to a report prepared in 1932 by the Higher Institute of Agriculture the rate was found between 39% and 90.3%. The interesting point is that despite the high interest rate, lenders are always reluctant, thus the easy agricultural policy followed by the Government in the early 1950s to a greater extent affected expenditures, that is, the availability of credit increased. Studies of the unorganized market in Turkey have been undertaken by: U. HASSAN, "Tarimsal Kredi Sorunlari (The Problem of Agricultural Credit, Review of the Faculty of Political Sciences, Ankara, Dec. 1970. pp.85-161. J. BLALOCK, "Capital and Finance in Turkish Agriculture", Economic Planning Division, (USAID 1969, Ankara) p.51-57.

13. M. FRY, "The Interest Rate Policy in Turkey", Hacettepe Bulletin of Social Sciences and Humanities".

at a low level compared to the others.[14]

The Central Bank discount rate policy did not follow the same pattern. In 1950 it was reduced from 5.5% to 3% for the first time. With the increases in prices, the rate was increased again, from 4.5% to 6% in 1956. However this was not an effective policy, firstly because the rate was low compared to the market rate, secondly, the Central Bank could not acceptall the bills presented.[15] Despite the rises in the discount rate, this was not a successful policy as one expert explained:

> "Given the spread between the rates paid on about 85 per cent of all private bank deposits (demand and saving deposits of 4 month or less maturity) and the Central Bank rediscount rates, the rediscount rate can not be used as a tool to control credit and the rate of expansion in the money supply".[16]

In Table 4.12 the interest rates on deposits are shown. Compared to the discount rate, they were rather low and thus the banks tried to avoid Central Bank borrowings since the cost of obtaining funds from demand and time deposits was low and thus the discount rate policy was ineffective.

The long term government bonds interest rate is worth

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14. One of the main important consequences of this policy can be said that mechanization of the agricultural sector was speeded up.

15. The possibility of the Central Bank Credits was widened in 1955 both by extending the maturity of the credits and by making a comprehensive definition of legal and real persons.

16. E.R. CANTERBERY, "The Turkish Financial System; Nature, Problems and Recomendations", USAID Economic Planning Division, (1967, Ankara).

Table 4.12 Interest Paid by Banks for Deposits 1951-1961 (%)

	Dates of Change		
	August 1951	August 1960	June 1961
Demand and up to 3 months (4 months) time deposits for government, commercial, and interbank. a/	2.50	2.50	2.00
Demand and up to 3 months (4 months) time deposits for individuals	2.50	3.50	3.00
All time deposits 3 months to 6 months (4 months to 6 months)	2.75	4.00	4.00
All time deposits 6 months to 1 year	3.00	5.00	5.00
Time deposits more than 1 year and less than 18 months	3.50	6.50	6.00
Time deposits over 18 months	4.00	6.50	6.50

a/ The separation of time deposits was between up to 3 months and 3 months and over until August 1960 and between up to and including 4 months and over 4 months after August 1960.

Source: Central Bank, Monthly Bulletin.

examining. In an inflationary process the rate is expected to rise. However, evidence suggests that this had not been so in the 1954-1959 inflation. The nominal rate of interest on government bonds never rose above 5.5% in the period under study, while the annual rate of inflation was hardly less than 10% in the same period.[17] In fact, the market for government bonds is very small and a policy to control inflation in this manner was not feasible. The volume of bonds transacted during a year is much less than 0.1% of the total amount of bonds, suggesting a very dormant market and in addition bonds are a small proportion of total financial assets.[18]

Another aspect of the rate of interest which was applied in the period under study is its affects on deposits, particularly in the inflationary process. It is generally argued that, due to increases in prices, the real value of deposits falls, thus encouraging depositors to liquidate their assets, leading to further increases in prices. In this case the theoretical expectation is that the rate of interest will rise sufficiently to compensate the holders of interest yielding assets for inflation. However, in 1950, as was explained before, all

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17. J. KANE, "The Role of Money in Recent Turkish Inflation" in "Türkiye'de Enflasyen, (Inflation in Turkey), (Istanbul University, The Faculty of Economics, 1968), pp.33-50

18. Y. AKYUZ, op. cit.

rates of interest were reduced and were not raised over the 1950-65 period. But in 1950-65, both commercial and saving deposits continuously increased; the 1954-59 inflationary period not being an exception to this. This could be attributed to two factors; firstly, as was explained before, monetization of the economy was going on through the price support programme and easy credit policy, so the use of money increased in the economy; secondly, banking activities increased in the 1950-60 period. The number of the banks was 34 in 1950, and rose to 58 by 1959. The number of branches or local bureaus of the banks rose to 1710 in 1959 from 535 in 1950. Thus it can be suggested that these two developments together made money holders used to the banks and to the transactions with the banks. This may explain why deposits continuously increased over the 1950-60 period, not only in absolute terms, but as a proportion of GNP.

It should be pointed out that the deposit currency ratio did not follow the same trend. It was much higher in 1954 at 1.6 than in previous and subsequent years between 1950 and 60. It fell to 1.49 and 1.47 in 1955 and 1956 respectively. This can be attributed to inflation. The decrease in 1956 can partly be attributed to the credit restrictions imposed by the government. The deposit currency ratio started rising again in the early 1960s. This may be widely attributed to the price stability which was secured in this period.

Interest rate policy was not a suitable policy during the 1954-59 inflation since such a policy in Turkey is constrained by the narrowness of the money market. However, it may be suggested that the low rate interest policy in the agricultural sector destroyed any rational resource allocation. Low level interest rates on medium and long term agricultural credits caused funds to be allocated to consumption. Thus a high interest rate policy may have controlled inflationary tendency from the agricultural sector to other sectors.

All this suggests that the rate of interest did not work in the inflationary process, the main reason was governmental action to keep it at a low level. Thus expenditures could not be reduced, leading to further inflation and balance of payments difficulties.

This chapter has examined in some detail the constituent elements of the monetary sector and the factors which have influenced changes in the money supply. The predominant feature of this analysis is the role of the public sector in securing central bank credits and maintaining aggregate expenditure at levels far above aggregate income in the public sector as a whole. The credit policies of the Central Bank towards public sector authorities must be seen as a very important element in the rapid increase in prices in the 1954-1959 period. The next chapter examines the broad impact of these inflationary policies on the aggregate supply in the economy.

CHAPTER 5

AGGREGATE SUPPLY IN THE TURKISH ECONOMY 1950-1965

In this chapter a more detailed examination of the aggregate supply of the economy is examined. The purpose of this chapter is to examine the interrelationship between aggregate supply in the economy and the general level of prices and to review the production-exports relationship. In order to do this the economy is divided into two major sectors; agriculture and industry.

5.1 AGRICULTURE

The share of agriculture in national -income was 44% in 1950. By 1965 it accounted for 31%. Despite its decreasing share the fluctuations of agricultural output still affect the economy fundamentally. Agriculture affects industry, as the farmer supplies the necessary raw materials the latter needs. Moreover, as agricultural products have the largest share in exports, the sector affects the balance of payments of the economy.

Agricultural production is shown in Table 5.1. In the 1950-53 period agricultural production rose by 39%. This increase was due mainly to the increases in the crop area; partly at the expense of meadows and pastures and partly bringing into use formerly unused or underutilised

Table 5.1 Indices of Agricultural production 1950-1965
(1948 = 100)

	Field Area	Meadows Pastures	Vineyards	Vegetables	Olive Groves
1950	104.6	98.5	104.7	87.5	107.2
1955	151.0	76.9	131.9	95.0	159.2
1960	167.1	74.8	145.9	105.0	193.9
1965	169.5	70.1	150.2	110.1	224.6

Source: Ministry of Agriculture, Summary of Agricultural Statistics.

land resources. The share of meadows and pastures in total cultivated area decreased as can be seen from Table 5.1.

The increases in crop area were largely helped by increasing numbers of tractors. The number rose from 16,585 in 1950, to 35,600 in 1953 and to 54,468 in 1965, indicating a 9.7% increase per annum on average. However in the 1950-53 period improved farming methods were also introduced, but their impact on increased production was marginal. The use of fertilizer increased. It rose to 82,000 tons in 1953 from 42,000 tons in 1950. But the share of fertilizer in the total costs of the agricultural sector was rather small not only in the 1950-53 period but also in the rest of the period. In 1950-53 its share in the total costs of the agricultural sector was 0.7% on average. The use of plant protection chemicals was

negligible in the 1950-53 period, only 2,500 tons.[1] The irrigated area remained around 3% of total cultivated area in the 1950-53 period. Thus it can be concluded that agricultural production rose in the 1950-53 by the use of extensive farming methods.[2]

In 1954, agricultural production fell sharply by 20%. This is generally attributed to bad weather conditions. However, there was another factor operating in the long run. According to research by Oakes, the available land for cultivation was 16.4 million hectares for 1953 but the limit had already been exceeded in this year as the cultivated area was 18.8 million hectares and a fall in production on this marginal land due to bad weather contributed to the decline in agricultural production in 1954. This argument can be supported by the fact that the share of fallow in the total cultivated area increased, indicating that marginal land was being used. It was 4.6 million hectares in 1950, rose to 5.7 million hectares in 1953, by 1960 it had risen to 7.9 million and by 1965 to 8.2 million hectares.[3]

After 1954, agricultural production rose. However, it

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1. J.E. BLALOCK, "Capital and Finance in Turkish Agriculture" AID Economic Planning Division, (Ankara) May 1969, p.67.
2. J. DEWDNEY, "Agricultural Problems and Regional Development in Turkey". Paper presented to a Conference on Turkish Politics. Durham, 1973.
3. G. KAZGAN, "Türkiye'de Torimsal Gelisme 1948-1962" (Agricultural Development in Turkey 1948-1962) (Faculty of Economics, Istanbul, 1966) p.5.

was not until 1958 that the 1953 level was achieved again, the rate of growth of agricultural production was slower than it was in the 1950-53 period. The rate of growth of agricultural output was 12% per annum in the 1950-53 on average, during 1955-58 it was only 4.5%. The 1955-58 period can be characterized as a stagnant period. In this period the use of fertilizer and plant protection chemicals decreased, the number of tractors declined. In 1958 production rose again, however in 1961 fell and in the rest of the period remained stable.[4]

As was explained in chapter 4, starting from 1950 the monetization of the agricultural sector rapidly increased, through the Agricultural Bank Credits and the price support programme. The Agricultural Bank credits in the 1950-53 period increased by 294-4%. As production rose rapidly in this period, monetary expansion in this sector did not create any inflationary pressure. However, despite the slower rate of increases in production after 1954 credits increased by 140%, and the price support programme went on and between 1955 and 1958, through the support programme, credits increased by 326%. This situation to a greater extent contributed to the inflationary process.

Agricultural products constitute the largest part of exports. The accounted for 93% of total exports in 1950,

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4. G. KAZGAN, op. cit., p.12.

85% in 1960 and 76% in 1965. Tobacco, cotton and hazelnuts are the major export goods. These three accounted for 70% of the total exports in the 1950-65 period. It is therefore obvious that the production of these goods is important from the point of view of the balance of payments.[5]

In the 1950-65 period the production of tobacco increased by 45%; however the land allocated to tobacco production nearly doubled. In the 1954-60 period the yield per hectare followed a rising trend. This can be attributed to the use of suitable land for tobacco production. After 1960 the yield per hectare started declining. In 1962, tobacco production fell sharply due to Blue Rust. Although it rose in 1963, the yield per hectare fell. It was 721 kgr per hectare in 1961, declining to 596 kgr despite the increase in the tobacco area. This suggests that tobacco was being grown on land not suitable to the crop, leading to a low quality of tobacco.[6]

In order to see whether the production of tobacco affects the exports of tobacco, a regression analysis was conducted between the production of tobacco and the volume

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5. See chapter 6.

6. Increases in land allocated to tobacco production is generally attributed to price support policies. The price support policy may have affected tobacco production in two ways.
Firstly, as the prices given by the price supporting organisation, the State Monopoly Administration, was high and induced the tobacco production extensively. Secondly, a secure price guaranteed by the government induced tobacco producers to expand the tobacco land.

of its exports.

The results are as follows:

The formula employed was:

$$Y = f(X) \qquad (1)$$

where X indicates the volume of production and Y the volume of exports. The linear equation without a time lag is shown below:[7]

$$Y = 77.743 - \underset{(-0.725)}{0.095635}\ X \qquad R^2 = 0.036 \qquad (2)$$

In the second stage a one year lag was used. The result is as follows:

$$Y\ 2\ 55.669 + \underset{(0.627)}{0.087980}\ X \qquad R^2 = 0.027 \qquad (3)$$

The results did not show any relationship between X and Y. This situation for tobacco may be explained by the existence of stocks. In the years when tobacco production fell, stocks may have been used and thus the negative effect of low production on exports could have been removed. However, it should be pointed out that there was no significant shortage of tobacco production reducing the volume of exports.

The production of cotton increased by 10.87 % per annum in the 1950-65 period on average. Between 1950-58 the area under cotton doubled and output rose by a similar amount. Starting from 1958, the land allocated to cotton increased by less than 20%, output doubled again. In the

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7. The figures in the brackets in all equations show t-values.

earlier phase much of the cotton was dry farmed or irrigated by simple methods. Between 1960-65, increases in yield per hectare can be attributed to intensive farming methods.

The production of cotton and the volume of exports are highly correlated. The regression analysis without any time lag gave the linear equation shown below:

$$Y = 39.996 + \underset{(7.968)}{0.65061}\ X \qquad R^2 = 0.815 \qquad (4)$$

when a one year lag was used, R^2 rose:

$$Y = 58.324 + 0.80129\ X \qquad R^2 = 0.887 \qquad (5)$$

This situation seems a normal state of affairs for cotton, as demand for cotton is high, and declines and rises in cotton production affect cotton exports.

As for hazelnuts, in the 1950-65 period hazelnut production increased. Hazelnut production fluctuates year by year, one year's excess production compensates next year's low production. In 1950-65 the number of hazelnut trees rose by 9% per annum on average. The result of a similar regression analysis to the ones on tobacco and cotton yielded the following results:

The regression analysis without a time lag:

$$Y = 35.434 + \underset{(0.571)}{0.037507}\ X \qquad R^2 = 0.023 \qquad (6)$$

When a one year lag was applied an increase in the value of R^2 was observed. The linear equation is as follows:

$$Y\ 2\ 23.422 + \underset{(3.216)}{0.17130}\ X \qquad R^2 = 0.425 \qquad (7)$$

The results of the regression analysis suggest that, apart

from cotton, production does not affect exports.

Lastly, a regression analysis was conducted between the agricultural production index and the export volume index. The results are as follows:

The linear equation without a time lag is shown below:

$$Y = 61.828 + \underset{(2.419)}{0.80833}\ X \qquad R^2 = 0.295 \qquad (8)$$

When a one year time lag was used:

$$Y = 26.980 + \underset{(3.743)}{1.2525}\ X \qquad R^2 = .500 \qquad (9)$$

The linear equation and R^2 with one year time lag indicates a relatively strong relationship. Thus it may be concluded that the time factor is important in the export-production relationship.

According to a series of reports prepared by the State Planning Organization on the major export goods of Turkey, it was suggested that any significant bottleneck of production hindering exports was not observed.[8]

In the last stage of the analysis the price elasticity of the production of three major export goods was computed. This elasticity is important in the context of the adjustment process based on relative price changes. As was explained, in the Marshall-Lerner condition the supply elasticity with respect to price changes is assumed to be infinite.

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8. These reports are known as Madde Arostirmalesi (Research on commodities). The reports covered Hazelnuts, Tobacco, Chromium and cotton.

In this section two price elasticities of production were computed, the farmer's prices and the export price.[9] The results were as follows:

Tobacco

(1) The farmer's price elasticity without any time lag;

$$Y = 1.5065513 + \underset{(3.03238)}{0.2191449}\ X \qquad R^2 = .396 \qquad (10)$$

(2) The farmer's price elasticity with a one year lag;

$$Y = 0.2939 + \underset{(2.175)}{0.51321}\ X \qquad R^2 = 0.512 \qquad (11)$$

(3) The export price elasticity without any time lag;

$$Y = 1.5475605 + \underset{(2.23456)}{0.1882912}\ X \qquad R^2 = 0.262 \qquad (12)$$

(4) The export price elasticity with a one year lag;

$$Y = 1.4704 + \underset{(2.654)}{0.22211}\ X \qquad R^2 = 0.335 \qquad (13)$$

As the results have shown, the export and the farmer's price elasticity of tobacco production is rather low. However, when a one year lag has been used, a slight increase in the price elasticities can be observed.

Although prices seem not to affect tobacco production directly, increases in tobacco production came about through an indirect way, expansion of tobacco area. However, after 1960 productivity per hectare started declining, namely, increases in tobacco area exceeded increases in tobacco production. Despite low productivity the high price support

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9. Farmer's price: this series is called "First Hand Selling Price", and is a simple arithmetic average of prices reported by the local markets.

programme continued. This may have resulted in an inflationary process. However, in 1960-65 there wasn't any strong inflationary tendency in the economy. In 1961 central bank credits to the Monopoly Administration was considerably reduced, from TL 319 million in 1960 to TL 50 million in 1961. In 1962 central bank credits to the Administration were completely reduced. It may be suggested that the Administration met the price supporting programme from its own funds, and did not disturb monetary equilibrium. The export price elasticity of tobacco is low compared to the farmer's price elasticity. The reason for this was that producers and exporters of tobacco are seperated, and thus it may be suggested that export prices do not affect tobacco production.[10]

Cotton

(1) The farmer's price elasticity without any time lag;

$$Y = 0.2897615 + \underset{(4.66141)}{0.7658430}\ X \qquad R^2 = 0.683 \qquad (14)$$

(2) The farmer's price elasticity with a one year lag;

$$Y = .21789 + 0.98523 \qquad R^2 = 708 \qquad (15)$$

(3) The export price elasticity of cotton without any time lag;

$$Y = 1.34924 + 0.36666\ X \qquad R^2 = 0.357 \qquad (16)$$

(4) The export price elasticity of cotton with a one year lag;

$$Y = 1.1316 + \underset{(3.076)}{0.47912}\ X \qquad R^2 = 0.403 \qquad (17)$$

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10. This situation is true for the other export goods. However, in tobacco this could be more clear. Because the producers of the other export goods have established a cooperative, the Agricultural Sales Cooperatives, dealing with each crop. Thus it may be suggested that information about export prices can be transmitted by these cooperatives. In tobacco, the producers have not established such an organisation.

As in the case of tobacco, when a one year time lag has been used, both price elasticities rise. But the price elasticities of cotton production, compared to tobacco, are rather high. Particularly, the farmer's price elasticity of cotton with a one year lag is almost unity. This may be attributed to both the high support prices and high demand for cotton exports. Regarding the productivity and export conditions of cotton, it may be suggested that the price support policy for cotton did not create any inflationary conditions in the economy.

Hazelnut

(1) The farm price elasticity without a time lag;

$$Y = 1.33336 + \underset{(1.2980)}{0.24432}\ X \qquad R^2 = 0.107 \qquad (18)$$

(2) The farm price elasticity with a one year lag;

$$Y = 1.4874 + 0.20255\ X \qquad R^2 = 0.097 \qquad (19)$$

(3) The export price elasticity without a time lag;

$$Y = 1.37586 + \underset{(1.1199)}{0.20762} \qquad (20)$$

(4) The export price elasticity with a one year lag;

$$Y = 1.3050 + \underset{(1.651)}{0.25540}\ X \qquad R^2 = 0.163 \qquad (21)$$

The results suggest that the price elasticities of hazelnut production are rather low. Despite this hazelnut area increased rapidly. The main reason for this is that due to the geographical structure of the region the area is not suitable for growing other crops, (the inclination of land, climate conditions). Thus the support price may

have increased the land allocated to hazelnut production.

The data suggests that price elasticities of the production of the major export goods, except cotton, are rather low. Despite the results of the regression analysis, it may be argued that producers are responsive to price changes. Because the land allocated to the production of these crops has increased. Thus it may be suggested that price changes affect production not directly, but indirec ly, through increases in land. In the agricultural sector the lack of the use of intensive agricultural methods is well -known. In this respect, support prices may have increased the land allocated to the crops.

5.2 INDUSTRY

Although agriculture was given priority in the 1950-60 period, industry also benefited from larger investments. Industrial output rose during the 1950-65 by 126% however, the share of the sector in real income remained almost constant at 17%[11]

The largest contribution to the industrial sector was the manufacturing sector. The main components of this sector are shown in Table 5.2. Manufacturing is most developed in the food, beverage, tobacco and clothing sectors. The share of this sector was 76.8% in 1950, in 1960 they accounted for 64.1%. In the 1950-60 period the

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11. Computed from the First Five Year Plan, p.18

Table 5.2 Percentage distribution of manufacturing output 1950-1960

	1950	1952	1954	1956	1958	1960
Food	32.9	28.6	27.3	27.8	28.0	32.3
Beverages	2.4	2.4	2.6	2.1	2.5	1.7
Tobacco	14.2	13.4	14.2	13.3	9.7	9.1
Textiles	26.1	27.3	27.8	27.4	27.7	21.0
Cloth	1.2	1.0	0.7	0.6	0.6	0.6
Chemicals	0.6	6.2	7.6	8.6	8.3	8.0
Machinery	0.5	0.6	0.8	1.0	1.3	1.4
Transport Vehicles	2.2	2.9	2.5	2.0	1.6	2.5
Metal Products	2.7	2.6	2.6	2.0	2.7	3.6
Coal	0.3	0.1	1.1	1.2	1.9	1.9
Rubber	1.4	1.5	1.2	1.3	1.8	1.2
Metal Molting	2.9	5.3	4.3	5.1	5.3	7.6
Non-Metal Products	2.2	2.0	2.5	2.5	3.2	3.2
Paper	1.6	1.7	1.5	1.4	1.1	1.7
Printing	0.9	0.7	1.0	1.1	1.2	1.3
Leather	0.8	0.6	0.6	0.7	1.0	0.8
Wood-Furniture	1.4	1.3	1.3	1.6	1.6	1.5
Others	0.2	1.8	0.3	0.3	0.5	0.5

Source: State Planning Organization, The Second Five Year Plan, 1967.

production of sugar, cement, coal and alcohol increased significantly. In cement production national self sufficiency was achieved; cement production was 396,000 tons in 1950, rose to 972,000 tons and 2040,000 tons in 1956 and 1960 respectively and in 1963 production was 2,723,000 tons.[12]

After 1954, the production of olive oil, wine, beer, paper and alcohol declined. This mainly resulted from the fall in agricultural production in the previous years, and balance of payments difficulties. The latter hampered the production of woolen textiles as the necessary amount of woolen fibre could not be imported. The decline in the production of processed tobacco can be attributed to the decline in the production of tobacco.

Table 5.3. The Production of some Selected Industrial Goods

	1955	1956	1957	1958
Wine	9.6	8.6	5.0	9.6
Beer	29.8	28.1	31.4	33.7
Olive Oil	41.0	90.0	43.2	90.0
Paper	46.7	45.3	54.3	57.7
Woolen Textiles	8.6	7.9	10.1	12.2

Source: Various reports of the Chambers of Commerce and Industry.

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12. Data was taken from N. SERIN, "Turkiye'nin Sanayilesmesi", (The Faculty of Political Science, Ankara, 1961)

It may be suggested that the decline in some sectors of manufacturing was caused by balance of payments difficulties rather than the lack of agricultural production, as after 1954 agricultural production increased. However, as it has been explained before, the decline in agricultural production in 1954 contributed to both the inflationary process and balance of payments difficulties. In this respect, an indirect negative effect of the agricultural sector on industry may be established.

Another relationship of agriculture, in the context of price increases, to industry could be the prices of agricultural inputs used by industry; due to the high prices of agricultural inputs in some sectors of manufacturing, production could have been curtailed. There is no available data for the prices of agricultural inputs. However, an assessment in general terms can be made. In Table. 5.4 the price index of agricultural goods and that of industrial goods are shown. Over the whole period studied, the price index of manufactured goods was above the price index of agricultural goods. In this case, it may be suggested that prices of industrial goods increased as agricultural input's prices rose, and this resulted in decreasing demand for industrial goods, leading to a reduction in production.

To summarize, over the 1950-65 period the agricultural sector had an important effect on macroeconomic equilibrium. The decline in output in 1954 led the economy into inflationary

Table 5.4 The Price Indices of Agricultural Commodities and Industrial Commodities 1950-1965
(1948 = 100)

	The Price Index Of Agricultural Goods	The Price Index Of Manufactured Goods
1950	98.2	107.6
1951	101.2	113.7
1952	105.8	125.2
1953	112.9	140.3
1954	115.2	163.7
1955	136.2	180.5
1956	149.2	216.2
1957	192.1	254.7
1958	219.1	318.5
1959	252.7	375.2
1960	258.8	391.0
1961	265.7	413.7
1962	287.0	424.7
1963	301.4	447.0
1964	302.6	455.7
1965	316.3	472.4

Source: The State Institute of Statistics, the Ministry of Commerce

situation, as the rate of monetary expansion was going on. In the long run, the production of the major export goods did not affect exports negatively, except in the case of cereal production, the bulk of which is consumed domestically anyhow. The area allocated to the major export goods was increased; in this respect the producers of the export goods can tentatively be said to be responsive to prices, particularly to the changes in the farmer's prices. But, except cotton, there is no sign of the use of intensive methods. Thus it may be suggested that production is affected by climate conditions, and this creates instability in the economy. This was the case in 1954.

CHAPTER 6

THE EFFECTS OF INFLATION ON EXPORTS

In this chapter the effects of inflation on Turkish exports will be examined. Inflation affects exports in two ways: firstly increased money income can absorb export goods causing a shift in total expenditure, and, secondly a prolonged inflation can cause wages and prices to rise and thus the prices of export goods are affected, disturbing the economy's international competitive position.

Turkish export goods consist primarily of agricultural commodities: tobacco, cotton, hazelnuts, raisin and minerals are the major export goods of Turkey. In Table 6.1 the percentage distribution of exports between these goods is shown.

Turkish exports, at the beginning of the 1950s experienced some structural changes. Before 1950, tobacco, raisins, figs and hazelnuts accounted for a large share of the exports. In 1948 the share of these goods in total exports was about 46%. In the 1950-53 period the share of these goods in total exports decreased, and in this period the exports of cereal crops increased and accounted for 24.5% of the total exports by 1952.[1] The main reason for this was that Turkey harvested a good cereal crop after

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1. Computed from Statistical Year Book 1950, (The State Institute of Statistics, Ankara).

Table 6.1 Percentage Distribution of Exports Between Various Export Goods, 1950-1965

	Cereal	Cotton	Tobacco	Hazelnut	Raisin	Legumes	Chromium	Minerals	Total Value of Exports (TL million)
1950	0.7	26.4	22.9	n.a	n.a	1.5	n.a	5.76	737.6
1951	6.4	24.4	21.9	5.92	3.39	1.9	n.a	10.03	879.4
1952	24.5	19.0	17.0	5.16	3.12	1.2	6.31	13.44	1016.2
1953	21.7	19.0	21.5	6.19	6.63	0.7	7.12	12.30	1109.0
1954	22.8	15.5	25.5	8.20	3.33	0.2	4.63	9.0	937.8
1955	7.4	14.5	28.2	14.30	4.60	0.2	6.36	12.42	877.4
1956	11.0	10.0	35.0	9.99	2.27	0.2	7.64	15.48	854.0
1957	6.9	13.57	40.17	12.70	5.43	-	6.2	11.95	966.6
1958	4.5	9.06	34.01	12.09	7.50	0.9	7.57	12.95	692.4
1959	11.8	14.97	25.85	12.33	5.11	2.5	2.82	6.63	990.6
1960	2.1	14.33	20.28	22.05	12.01	3.0	3.58	9.15	1721.2
1961	2.4	16.12	25.13	21.44	5.04	2.0	3.2	7.57	3120.7
1962	1.3	16.39	25.25	14.72	4.28	1.0	2.39	8.15	3430.8
1963	1.9	21.30	18.07	14.78	4.51	0.7	1.22	7.05	3312.8
1964	2.4	21.47	21.82	12.28	4.09	0.7	1.7	8.55	3696.8
1965	1.7	21.35	19.22	13.66	4.61	1.1	2.05	9.19	4173.6

Source: Statistical Yearbooks of The State Institute of Statistics.

1949 and became a major exporter of wheat. On the other hand the production and exports of cotton were induced by the Korean Boom. The share of cotton in total exports rose rapidly, and chromium was sold at a higher price in the international market due to the Korean Boom, inducing its exports.

In the 1950-54 period cereal exports were 30% of total exports. However, starting from 1955 they declined sharply, to 7.4%. Although they rose to 11% in 1956 and 11.8% in 1959, but in the rest of the period under study followed a declining trend.

Despite the increases in exports in the 1950-53 period, balance of payments difficulties were felt as early as 1952. Exports increased in the 1950-53 period, the volume of exports index rose from 113 in 1950 to 155 in 1953 (1948 = 100). However the export price index did not show the same development. It rose to 115 in 1951 and fell to 104 by 1953 (1948 = 100).[3] As long as the volume of exports increased, the export price index fell, thus in years of food crops there was quite often a danger of low prices. Another contributing factor to the decline in the export price index was that as soon as the Korean war was over, the United States and Canada drove their stocks onto the

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2. Z.Y. HERSHLAG, op. cit., p.204.

3. The price and the volume of index of exports were computed by N. SERIN, "Dis Ticaret Siyasetinin Iktisedi Kalkinnio Uzerindeki Etkisi" (The effects of Foreign Trade Policy on economic development) (Hacettepe and Bogazici Universities, 1973) p.42.

international market pulling down the export price of Turkish wheat. In order to dispose of the surplus wheat, Turkey had to offer it at a lower price than the international price. In 1954 a sharp decline in agricultural production took place. Exports fell to TL 937.8 million in 1954 from 1019 million in 1953. This decline in exports can not be attributed to inflation as in the 1950-53 period the domestic level of prices did not rise significantly. Exports declined continuously until 1959.

In the rest of this chapter the relation between inflation and exports will be examined.

In the context of the relationship between inflation and the balance of payments, it is argued that increased money income can absorb export goods. Particularly, if imports of the economy are forcibly curtailed, the money income spent on them can be spent instead on the export goods. In the case of Turkey, from 1950 onwards money income increased continuously. Disposable income was TL 10.229 million in 1951; it rose to TL 17,003 in 1955. Between 1955-60 it increased by 242.2%. With the imposition of restrictions on imports in 1952, the increased money income could affect exports. Turkey's major export goods are tobacco, cotton, minerals and dried fruits. Of these tobacco and cotton account for a large part of exports. In 1955 they constituted about 40% of the total exports. Livestocks and animal products and legumes are other important export goods, they had a 5% share in total exports in

1955. Due to the availability of data, the analysis will deal with these export goods.[4]

It is obvious that increased money income can not absorb cotton and tobacco as they are raw materials. In order to see whether inflation has affected the volume of exports of cotton and tobacco, the production of the industries using these goods as inputs should be examined. As for tobacco, the production of cigarettes and manipulated tobacco in the 1950-60 is shown in Table 6.2. As it can be seen from Table 6.2 the production of cigarettes and processed tobacco remained stable. Moreover, in the 1950-60 period, exports of tobacco, although they declined in 1954, remained almost the same in 1955, and 1956. In 1957 they reached the highest level - 86.7 thousand tons for the period. In the rest of the period studied, exports of tobacco fluctuated. Due to increases in production, stocks of tobacco increased (See Table 6.2). In this respect, it can be concluded that the increases in money income did not affect exports of tobacco.

Exports of cotton fluctuated year by year during the 1950-65 period. In 1956 and 1958 the volume of exports declined to 34.6 thousand tons and 34.5 thousand tons respectively. However, over the inflationary period, the production of domestic cotton fibre and cotton textiles did not increase, and the production of cotton textiles even fell in the 1957-59 period. Average production in the 1954-56 period was about 350 million metres, it fell

4. All data used in this chapter were taken from the Yearbook of Statistics (The State Institute of Statistics, Ankara).

Table 6.2 Production of Some Selected Commodities 1950-1960

	(1) Manufactured Tobacco (100 tons)	(2) Cigarettes (1000 tons)	(3) Cotton Fibre (1000 tons)	(4) Cotton Textile (million metre)	(5) Tobacco Stocks (in million TL)
1950	2.4	15.6	30.7	130.4	140.0
1954	3.2	23.7	40.9	305.0	168.0
1955	2.5	22.1	44.4	330.3	182.7
1956	3.3	23.6	46.0	354.1	219.9
1957	2.4	26.5	46.0	157.2	204.4
1958	2.8	30.7	46.1	156.3	213.0
1959	3.8	26.2	47.2	157.4	327.4
1960	3.4	26.3	92.8	527.1	589.2

Source: The columns (1), (2), (3) and (4) were taken from N. Serin, "Turkiyenin Sanayilesmeri" (Industrialisation of Turkey) (The Faculty of Political Science, Ankara) 1963. Column 5 was derived from data presented in chapter 4.

to about 150 million metres in the 1957-59 period. Thus it can be said that inflation did not incluence the exports of cotton.

The exports of livestock and animal products and legumes decreased in the inflationary period. Exports of legumes completely ceased in 1957, the share of livestock in total exports declined, (see Table 6.1). In the 1950-65 period the production of legumes, except in 1954, increased continuously. Thus it can not be suggested that there was a supply shortage that hindered the exports of legumes. However, the exports of legumes followed a declining trend and later on indicated an unstable trend. The decline in the exports of legumes may to some extent be attributed to rises in money income.

The exports of livestock and animal products followed a declining trend, as Lovasy has indicated:

"Exports of livestock from Turkey were reduced from an annual average of some 480,000 during 1948-51 to an average os some 110,000 in the next eight years, as herds maintained on farms greatly increased. Additional money incomes accrued in the first instance to the agricultural sector; they resulted primarily from high support prices for grain. The higher incomes induced farmers to increase their holdings of livestock, partly as a hedge against inflation. Also, as a result of diversion to the domestic market, there was a sharp decline in exports of eggs."[5]

In order to study the price effect of inflation, four major export goods will be examined; tobacco, cotton, raisin and chromium. The countries competing with Turkey for cotton

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5. G. LOVASY, "Recent Experiences in Stabilizing Policy", IMF Staff Papers, Vol. IX, 1962, p.37.

Table 6.3 An International Comparison of the Prices of Major Export Goods of Turkey

	COTTON								CHROMIUM					
	TURKEY		U.S.A.		BRASIL		EGYPT		TURKEY		RUSSIA		RHODESIA	
	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)
1953	106.6	738	642.4	805	139.5	729	346.5	1112.8	678.5	42	-	-	429.6	25
1954	60.2	870	944.0	826	309.5	721	287.7	1848.9	356.6	44	-	-	288.9	25
1955	52.5	870	564.1	832	175.7	748	277.4	1342.6	559.6	35	-	-	289.0	20
1956	34.6	759	1033.1	695	149.9	601	234.8	964.4	642.0	36	-	-	463.0	23
1957	60.6	684	1574.0	666	66.2	668	264.1	1128.1	571.1	37	-	-	635.0	26
1958	34.5	650	1043.7	628	40.2	616	281.5	1112.3	516.0	36	-	-	372.9	23
1959	97.5	542	834.0	533	77.6	458	317.8	1209.7	305.9	33	272.0	9.0	499.9	21
1960	80.0	576	1708.2	574	95.4	478	374.2	1329.0	386.2	30	427.0	12.9	490.5	20
1961	89.7	623	1449.8	603	205.7	533	295.3	1120.8	393.9	28	438.0	13.7	431.8	20
1962	104.8	596	872.9	605	215.9	520	250.5	995.4	349.6	26	472.0	14.8	391.6	19
1963	134.9	581	988.7	853	221.8	515	322.4	1034.1	212.7	21	567.0	13.3	279.6	16
1964	151.6	582	1188.7	573	217.0	499	291.1	1006.1	344.1	21	663.0	14.8	455.7	15
1965	175.3	565	806.8	603	195.7	489	329.7	769.9	457.5	21	748.0	17.2	635.1	17

Source: United Nations Trade Statistics.

Table 6.3 (contd)

	R A I S I N				T O B A C C O							
	TURKEY		GREECE		TURKEY		BULGARIA		YUGOSLAVIA		GREECE	
	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)	Export (ton)	Export Price ($)
1954	53	211	39	226								
1955	33	246	55	245	60	1481	31	1158	15	1165	55	1389
1956	48	300	33	299	61	1541	48	924	20	1036	48	1333
1957	59	318	58	588	87	1599	43	1068	16	1175	69	1357
1958	49	1177	37	361	54	1545	62	1032	23	1165	62	1348
1959	61	922	41	338	64	1416	71	1168	16	1081	55	1246
1960	82	280	36	269	56	1162	64	998	18	1068	61	1196
1961	64	274	99	247	88	986	53	958	16	1037	66	1258
1962	69	239	124	259	90	1060	84	1224	15	1376	47	1506
1963	66	250	136	330	43	1546	89	1173	17	1777	62	1906
1964	52	321	115	339	55	1625	82	1193	23	1694	70	1700
1965	65	328	126	350	65	1376	73	1263	23	1544	73	1548

are Brasil, the United States and Egypt; for tobacco: Yugoslavia and Bulgaria; for chromium: Russia and Rhodesia, and for raisins: Greece.

The prices and the exports of these goods are shown in Table 6.3. As it can be observed from Table 6.3, in the 1954-59 period inflationary process, the prices of major export goods had always been above the competing countries. However, after the inflationary this tendency continued.[7]

The causes of rises in the export prices can not be found easily, as the data on cost factors are not available. However, an assessment in general terms can be made: In the 1954-59 inflationary period the use of fertilizer, plant protection chemicals decreased, and the number of tractors fell. To some extent it may be said that there was no upward pressure from these inputs. The rises in export prices may be attributed to the policy followed by the government in the 1950-60 period. As explained before, a price support programme was applied in the agricultural sector, cotton and tobacco were being subsidized through the Agricultural Sales Cooperatives. The farmer's prices and the export prices of cotton and tobacco are shown in Table 6.4

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7. Table 6.3 was prepared on the basis of the figures obtained from the United Nations Trade Statistics. National currencies were converted into $ value on the basis of exchange rate shown in IMF Supplementary 1970.

In cotton, some years farmer's prices exceeded export prices. This seems clear in the 1954-58 period. This could explain high export prices for cotton. As for tobacco, there is no clear evidence that farmer's prices affected the tobacco export prices. High export prices may be attributed to rising storage and transport costs. In the tobacco exports there was an interesting development. In 1957 despite the high export price tobacco exports were at their highest level for the 1950-60 period. The main reason for this was the bilateral trade agreement with the European Socialist countries. Essentially the share of bilateral trade in terms of total trade increased during the inflationary years. In 1952 the share of the socialist countries was 6.4% in the total exports, rose to 22.2% in 1955 and fell to 10.7% in 1959. These types of agreements, to some extent reduced the role of the price mechanism in the foreign trade of Turkey.

In order to reveal the long run price effects on tobacco exports and cotton exports a regression analysis was conducted. The results are as follows:

The formula employed was

$$Y = f(P_t) \qquad (1)$$

where Y indicates the volume of export goods and P export prices. All values were in logarithmic terms.

Cotton,

$$Y = \underset{(3.4565226)}{1.7807247} + \underset{(.2205074)}{.0462850}\ X \qquad R^2 = .0037262 \qquad (2)$$

Tobacco,

$$Y = 1.7523060 + .0212509X \quad R^2 = .0033767 \qquad (3)$$
$$(6.4623928) \quad (.2177944)$$

The results show that there is no relationship between the exports of these two goods and their export prices. However, production and exports of these goods take time. In the second step of analysis a one year lag was used.

$$Y = f(P_{t-1})$$

Cotton,

$$Y = .1194586 + .7251588X \quad R^2 = .4084009 \qquad (4)$$
$$(.2051593) \quad (3.1088064)$$

Tobacco,

$$Y = 1.6377286 + .0660235X \quad R^2 = .0298134 \qquad (5)$$
$$(6.091295) \quad (.6789287)$$

When a one year lag was used, the regression analysis for cotton gave a better explanation. The t value is high there is a rise in the value of R^2. However, the price elasticity is still less than unity.

As for tobacco, the situation for tobacco did not change. Both the value of R^2 and t are low. This is true for tobacco that after 1960 when the world demand decreased. Firstly, the demand shifted to a virgino type of tobacco from the oriental type of tobacco which Turkey produced; secondly in 1963, due to Blue Rust the demand for Turkey's tobacco decreased. Thirdly, as explained in Chapter 5, the quality of tobacco fell.

Evidence suggests that the price effects of inflation on exports was not important. Because the price elasticity of the demand for these two goods is less than unity.

Regarding the behaviour of the volume of exports of these two goods a relationship between the price effects of inflation on the exports can not be established, namely, it may not be suggested that the international competitiveness of Turkey to a greater extent was disturbed by inflation. It seems that real factors rather than monetary factors affected the exports of Turkey in the late 1950's.

CHAPTER 7

THE EFFECT OF INFLATION ON IMPORTS

This chapter will examine the broad effects of inflation on import demand and will concentrate especially on the 1954-1959 period. Emphasis will be put on both the income substitution effects and rising domestic prices.

The year 1950 was a turning point for the Turkish import regime. For the first time, imports were considerably relaxed. On October 1950, the government declared a Free Import List raising the free import ratio by 60%. A further 15% increase in the ratio was envisaged for 1951.

From 1950 to 1952 the value of imports rose by 194.2% but fell in 1953, by 4%, and kept declining until 1959. The first balance of payments difficulties were felt in 1952. From this year onwards mounting restrictions were imposed on imports. In 1953 the liberalisation policy was completely abandoned. The difficulties felt in 1952 can not be attributed to inflation as in this year prices did not rise significantly. The reason should be sought in real factors rather than inflation.[1] As from 1950 investment expenditures rose rapidly. In Table 7.1 the percentage

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1. The concepts of real factor and monetary factors are rather vague in theory. Here real factors refer to the propensity to imports.

distribution between investment goods and consumer goods is shown. It can be seen from the table that the share of construction goods and machinery and equipment increased while the share of raw materials fell. Thus it can be concluded that new production units were being established.

In 1950-53 period the share of consumer goods in total imports accounted for 25% of total imports on average. This was a rather high percentage. The reason for this can be found in increases in real income. In 1950-53 period real income rose by 13% and showed its effects on the balance of payments. It should be pointed out that with the application of the liberalisation policy imports of consumer goods were quite easy.[2]

Imports on the 1950-53 period were largely financed through exchange reserves accumulated in the 1940s, as both export earnings and foreign resources were insufficient to meet imports. In 1952 exchange reserves fell to $6 million from $126 million in1950. Thus the economy reached a "balance of payments barrier" before inflation took place.[3]

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2. After the Second World War the policy pursued by the government gave rise to a political and economic interest in adjusting Turkey's economic regime to a 'western' style. This may have increased the demand for imported consumer goods, through the demonstration effect. See Z.Y. HERSHLAG, op. cit., p.182, and R. NURKSE Problems of Capital Formation in Underdeveloped Countries. (Basil Blackwell, Oxford, 1966), pp.57-81.

3. See for this point; I.G. PATEL, "Trade and Payments Policy for a Developing Economy", in International Trade Theory in a Developing World, edited by R. HARROD and D. HAGUE. (Macmillan, 1963), p.310.

Table 7.1 Percentage Distribution of Imports Between Investment and Consumer Goods, 1950-1965

	INVESTMENT GOODS			
	Construction	Machinery and Equipment	Raw Materials	Consumer Goods
1950	11.8	34.2	33.4	20.6
1951	10.6	32.4	32.2	24.8
1952	12.0	38.5	27.4	22.1
1953	16.0	36.0	26.1	19.8
1954	15.6	37.4	27.4	19.6
1955	18.1	36.2	31.1	14.6
1956	13.6	44.6	30.7	11.1
1957	12.0	31.5	44.2	12.3
1958	8.6	34.7	44.5	12.2
1959	7.7	37.9	44.2	10.2
1960	7.3	44.6	38.5	9.6
1961	5.7	39.1	45.3	9.9
1962	4.8	40.2	37.8	7.2
1963	6.1	39.7	48.8	5.4
1964	4.8	40.9	49.4	4.9
1965	4.9	36.9	53.8	4.4

Source_ The State Institute of Statistics.

One of the important consequences of this decrease in exchange reserves was that the economy lost its manoeuvrability in its balance of payments, and maintenance of the import capacity now depended on obtaining foreign credits.[4]

As was explained before, the economy fell into a substantial inflationary period from 1954 onwards. In this chapter the effects of inflation on imports will be examined in the 1954-59 period through the "income (expenditure) effect" and the "price effect". First "income (expenditure) effect" will be examined.

As can be seen in Table 7.1, the share of investment goods (including raw materials) never fell below 75% of total imports. This suggests that the effects of inflation on the balance of payments should be examined in the context of the saving-investment relationship. In this context, a deficit in the balance of payments is regarded as an addition to savings, thus to investments, on the condition that exchange reserves and/or foreign resources are available to finance the deficit.[5] From the point of view

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4. There are three resources for financing deficits: export earnings, foreign aid, and exchange reserves. In the case of Turkey, both export earnings and foreign aid lagged behind imports. Thus deficits were largely financed by the use of exchange reserves accumulated during the war. Foreign aid has widely been in the form of public foreign aid. Obviously the credits in this form are granted on some criterions. Economic stability is one of these criterions. When inflation proceeded in Turkey, the public foreign aid (including international institutions) decreased as the requested economic reforms were not enacted.

5. R. NURKSE, "The Relation Between Home Investment and External Balance in the Light of British Experience, 1945-1955", The Review of Economics and Statistics, May 1956, p.138.

of macroeconomic equilibrium, a deficit implies excess demand, namely, money expenditures exceed total domestic output. Assuming that full employment exists, excess money expenditure over real output results in a deficit in the balance of payments or aggravates the existing one. That is why inflation is important in analysing balance of payments difficulties.

In the case of Turkey, evidence suggests that investment effects aggravated the balance of payments difficulties increasing the demand for imports.[6] Particularly the public sector investments were largely financed through Central Bank credits. As was explained in Chapter 4, the State Economic Enterprises were one of the main reasons for the monetary expansion.

In the 1954-59 period the deficit in the balance of payment decreased. There were two reasons behind this: firstly, further restrictions on imports were imposed, because the borrowing capacity of the economy was impaired. Both public and private foreign credits decreased in 1954-58. Total foreign credits were $272 million in 1955, fell to $262 million and to $225 million in 1956 and 1957 respectively. Thus, the balance of payments became critical. As described by one expert:

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6. Over the whole period studied the share of investment goods in total imports was never less than 75%. In order to obtain the necessary exchange reserves imports of consumer goods were cut.

> "The government later found that, when the external supply of capital goods on credits also diminished, it could still proceed, albeit temporarily, with infrastructure development projects, . . . with the existing machinery. (It used military trucks and bulldozers when the civilian equipment wore out). Construction thus progressed: there were new roads, new dams, and new harbours, but no new vehicles on the roads. Industrial consumer goods, based on imported raw materials, also disappeared from the market . . ."[7]

All this resulted in imposing further restrictions on imports. Industrial production in some sectors declined as necessary spare parts and raw materials could not be obtained. Unused capacity emerged, it was 48% and 40% in 1957 and 1958 respectively.

Secondly, domestic production of some imported goods increased. Particularly this was the case for construction goods. Production of cement rose rapidly, decreasing the share of construction goods in total imports (see Table 7.1). However, balance of payments difficulties went on, because previously established new production units required imports by 1957, whilst it averaged 29.0% during the previous seven years. Moreover, domestic production could not replace special kinds of imports, particularly machinery and equipment.

By the second quarter of 1958, the government was unable to meet its foreseeable obligations for even a few weeks and thus a stabilization programme had to be undertaken.

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7. E. STURC, "Stabilization Policies: Experience of Some European Countries in the 1950s". IMF Staff Papers, July 1968.

In consultation with the International Monetary Fund, the 1958 Stabilization Programme was declared in August.[8]

The Stabilization Programme, although it involved a major change in the trade regime, was primarily directed at stopping the causes of inflation. An output increasing policy was applied, imports were relaxed as Turkey obtained $359m in credits, and thus imports rose by 49.2%. In the field of money and credit policy, some expenditure reducing measures were taken: the Central Bank credits were frozen within a certain limit. Particularly the Central Bank credits to the public sector could not exceed a certain limit. Commercial Bank credits were frozen at the level of July 1958 plus TL 200 million. In order that the internal resources of the State Economic Enterprises could cover their operating deficits, the prices of their products increased in 1958.

Despite the Stabilization Programme, the Government Budget for 1959 envisaged increases in expenditure. In fact, the Central Government expenditures rose by 35% in 1959 partially as the result of a salary increase for civil servants.[9] The deficit in the Consolidated Budget rose by 58.6% in the same year, and 36.7% of this deficit was met by Central Bank credits. The money supply rose

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8. Stabilization Program of Turkish Government, (International Monetary Fund, Washington), July 1958, Part II, p.6.

9. Computed from H. KIZILYALLI, "Türk Vergi Sisteminin Ekonomik Analizi" (The Economic Analysis of the Turkish Tax System). (The Faculty of Political Sciences, Ankara, 1963) Table 9.

by 15%. Despite this expenditure increasing tendency, however, rises in prices slowed down from the middle of 1959 onwards. The main reasons could be that increases in the prices of the State Economic Enterprises products absorbed the new excess liquidity in the economy and the import capacity was increased. In 1960 the Central Government expenditure fell by 9%. In 1960 and 1961 the Central Bank credits to the public sector were sharply declined. The deficit in the Consolidated Budget fell by 10%.[10]

Regarding the behaviour of prices, it can be suggested that the 1958 Stabilization Programme was successful in curing both inflation and balance of payments difficulties. However, it should be pointed out that the core of the Stabilization Programme was an expenditure reducing policy through cuts in the money supply. In this respect, it may be said that the proposition that at full employment, balance of payments difficulties can effectively be cured by reducing expenditures has been justified under the conditions of Turkish economy.

In this situation, the burden fell on investment expenditures rather than consumption expenditures, and this led to a stagnation in the economy. It seems that it was unavoidable firstly because the direct effects of consumption expenditures on imports had already been cut through

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10. The figures of the Consolidated Budget were obtained from the First Five Year Plan, p.18.

Import controls. In this case the possibility could be the multiplier effect: if consumption expenditures were cut, this would reduce income and the demand for imports. But this was a matter of time and the economy could not wait as the difficulties had come to an unbearable point. Thus it may be said that investment expenditures occupies a central place in managing the balance of payments.

Turning now to the price effects of inflation on the balance of payments, in an inflationary process, given fixed exchange rates, it can be expected that relative prices of imported goods will decline and the practical consequence will be a rise in imports, leading to balance of payments difficulties. In the case of Turkey, the price effect of inflation, in other words the overvaluation of the Turkish Lira, did not show a direct effect on balance of payments through increasing imports but rather an indirect effect, as strict quantiative controls were being imposed on imports in the 1954-1959 period.

Turkey set an exchange rate of $1 = TL 2.80 in 1946, and this rate was not changed until 1958. With the increases in prices the overvaluation of the Turkish Lira increased rapidly. As can be seen from Table 7.2, the value of the dollar on the basis of the Turkish wholesale price index and of the U.S.A. wholesale price index rose up to TL 16.40

Table 7.2 Three Factors Affecting Turkish Imports 1950-1965

	(1) Overvaluation of Turkish Lira	(2) Wholesale Price Index	(3) Import Price Index
1950	-	100	100
1951	2.68	106.5	111.4
1952	2.77	107.6	107.6
1953	2.88	109.8	96.2
1954	3.22	121.9	93.7
1955	3.41	130.7	124.3
1956	3.86	152.5	125.3
1957	4.39	181.3	122.8
1958	16.40	208.7	126.5
1959	19.60	249.4	116.4
1960	20.65	262.6	122.8
1961	21.29	270.3	259.5
1962	22.56	285.7	336.7
1963	23.46	297.8	411.4
1964	23.19	295.6	462.0
1965	24.49	321.9	488.0

Source: Column 1 - IMF Financial Statistics

Column 2 - The Ministry of Commerce

Column 3 - N. SERIN, "Dis Ticaret Siyasetinin Iktisadi Kalkinma Uzerine Etkisi (The Effects of Foreign Trade Policy on Economic Development) (Harettepe University, April 1973.)

by 1958.[11] According to the official sources, on the basis of the gold price, the price of the dollar was computed at TL 21.50 by July 1958. This situation made imports very profitable. In the period 1954-59 the import price index remained below the wholesale price index. The wholesale price index rose by 36% on average, while the import price index rose by only 6%. Therefore speculation against the Turkish Lira increased. Black market activities developed, adding further difficulties to the balance of payments situation.

In the early 1950s, Turkey obtained short-term import credits, the so-called arrears. These credits were largely used to import. In 1955 the amount of these credits rose to $127 million which was the highest for the whole period studied. However, during the inflationary period they fell and in 1959 were only $29 million. In the same

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11. The overvaluation of the Turkish Lira was computed on the basis of the following formula:

$$Y_{t+} = \frac{at}{bt+} \cdot \frac{ct}{dt+} \cdot Y_t$$

where t = base year:

X_t = Central Bank Selling Rate for $ in year t where balance of payments in equilibrium.

a_t = USA wholesale price index for year t.

b_{t+} = USA wholesale price index in year t+

c_t = Domestic price index in year t.

c_{t+} = Domestic price index in year t+ .

Y_{t+} = "The purchasing power parity".

The formula was obtained from A. GERAKIS, "Stabilization of the Greek Economy", IMF Staff Papers Vol. IV, 1954-1955.

Table 7.3 Exports of Turkey to Eight Major Trade Partners and Imports of the Eight Major Partners from Turkey 1954-1965 (in million dollars)

	GERMANY		FRANCE		ITALY		U.S.A.		BELGIUM		SWISS		SWEDEN		AUSTRIA	
	G	T	F	T	I	T	USA	T	B	T	Swiss	T	S	T	A	T
1954	71.6	59.77	20.12	10.0	23.82	20.75	58	58.20	4.09	2.99	5.71	8.48	5.15	4.01	6.21	5.82
1955	67.2	49.13	14.50	22.19	29.28	25.34	63	48.63	3.56	5.79	5.39	4.49	4.24	1.85	11.07	11.98
1956	67.1	50.74	24.53	16.18	34.28	30.65	73	59.9	6.62	3.33	4.46	6.82	5.85	6.30	7.49	7.50
1957	48.9	44.62	16.52	23.42	32.30	31.16	67	89.6	3.88	3.70	3.82	10.15	4.92	2.95	8.00	5.24
1958	53.2	45.16	22.73	18.8	14.41	14.46	65	48.12	4.86	4.32	4.48	3.97	3.67	1.32	5.19	5.60
1959	93.3	24.76	15.65		28.23	29.41	68	63.41	4.15	7.53	5.87	7.40	4.22	1.16	6.90	
1960	71.5	47.53	16.38	16.32	37.05	27.66	71	58.54	10.40	9.96	5.22	9.5	5.88	3.11	5.19	
1961	77.4	51.08	16.48	28.85	42.93	34.19	65	65.20	11.08	13.56	5.81	15.90	5.42	3.16	7.67	4.89
1962	90.6	64.41	18.28	14.04	56.51	51.51	71	74.89	12.35	13.94	8.45	18.70	8.17	4.35	7.29	3.41
1963	87.6	61.86	19.0	16.10	52.76	43.41	63	49.78	15.72	10.92	8.66	21.10	7.81	3.78	7.43	2.57
1964	90.8	62.08	18.87	24.93	39.61	28.74	60	72.98	14.22	14.74	9.27	23.50	9.42	3.91	8.24	3.96
1965	79.4	71.47	22.33	19.72	43.15	29.95	83	81.75	17.87	23.01	9.63	14.06	12.57	5.08	10.38	5.28

Source: United Nationa Trade Statistics

year in Paris a conference was held to settle these debts, and at this conference it was revealed that most of the imports on the basis of the arrears were financed from exchange earnings left outside Turkey. On the other hand the International Monetary Fund estimated that exports and imports had been underestimated by more than $100 million per annum in the middle 1950s. Bearing these points in mind, Table 7.3 was prepared. Here imports of the eight major trade partners of Turkey from Turkey on the basis of their records, and Turkey's exports to these countries on the basis of Turkish records are shown. The export figures reported by Turkey for Germany, U.S.A and Italy, which are three major trade partners of Turkey, are less than the figures reported by these countries between 1954 and 1959. After 1960 the figures reported by Italy and Turkey are very close in 1962. The U.S.A.-Turkey figures are almost equal in 1961 and 1962. The difference between the Germany figures and the Turkish figures is the smallest in 1965. However, the difference fell from $68.6 million in 1959 to $26 million. As far as Germany and Turkey were concerned, it may be suggested that, at least increases in the amount of exchange earnings left in Germany had stopped.[12]

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12. Turkey's exports to its trade partners in FOB terms, while the trade partners' imports from Turkey are in CIF terms. However, the difference between CIF and FOB prices is not important. According to the IMF, it is 12% for Turkey and is also relevant to trade partners as Turkey registers its imports in CIF terms.

In the light of the evidence presented in Table 7.3 it may be hypothesised that due to inflation a considerable amount of exchange earnings were not brought into Turkey. However, it should be pointed out that Table 7.3 is a general approximation and strict conclusions can not be drawn from it. If exchange earnings have been left outside Turkey at that time, there could be two main reasons for this.

Firstly, imports to Turkey were very profitable. Investments were going on and the demand for investment goods was rather high, thus imports of investment goods were very profitable. The government was aware of this fact so that it imposed a new duty, the Treasury Share, on imports in 1957. The goods on which the duty was levied were mostly investment goods. The rate of the Treasury Share was 40% of import values (Turkish Liras) of these goods. In this respect the imposition of the Treasury Share can be regarded as a partial devaluation. This duty was not successful in reducing imports as import prices remained well below the market prices, inducing imports.

Secondly, a devaluation may have been expected. The imposition of the Treasury share may have increased the devaluation expectations.

The Turkish Lira was devalued on August 1958 in accordance with the 1958 Stabilization Programme. Three categories of exports were established. Those in the first

category (opium, tobacco, copper, chromium) received TL 2.10 premium per dollar (in addition to TL 2.80); the second category of exports (raisins, figs, hazelnut) received TL 280 premium (in addition to TL 2.80). All other exports were given TL 6.20 premium. Thus, for exports, a multiple exchange system was applied. However, on August 1960 the premium system was abolished, all exports were paid $1 = 9 TL. On the import side, all imports, except for a few government transactions were also placed in the new rate. It was declared that henceforth, all imports were to be made in accordance with the Import Programme.

The effects of devaluation on the balance of payments can not be assessed easily. Exports increased by 49.2% in1959 but however, fell slightly in 1960, by 2%. As far as the long term effects of devaluation are concerned, in the 1961-65 period exports followed an unstable trend. Although they rose in 1961 and 1962 by 9% and 22% respectively, in the two subsequent years they fell again. In my view, the export problem of Turkey widely involves real factors rather than monetary ones. It is true that export prices of Turkey rose in the 1954-59 period. In this respect a devaluation decision was necessary. However, devaluation is not the only remedy for increasing exports. Other measures, such as standardization, improvements in entrepreneurship, should be taken, a topic which is outside the scope of this study.

Regarding the effects of devaluation on the balance of payments, it may be suggested that changes in relative prices were less important than expenditure reducing policies were. However, the former may be given a complementary role in the adjustment process.

CHAPTER 8

SUMMARY AND CONCLUSION

In this study an attempt has been made to show some relationships between inflation and the balance of payments in the 1950-65 period. In this context, it can be suggested that inflation aggravated balance of payments difficulties rather than caused them as balance of payments difficulties were felt before the emergence of inflation.

The evidence suggests that the effects of inflation on exports through the "income" and the "price effect" were not important: domestic consumption of the major export goods was not observed in the inflationary period. On the other hand, it was a fact that the export prices of the major export goods rose compared to the countries competing with Turkey. Yet, there was not any strong inverse relationship between the high export prices and the volume exported. Thus it seems that the "international competitiveness" of Turkey was widely determined by factors other than price considerations. In the 1954-59 inflationary process the share of bilateral trade aggrements -increased, reducing the working of the price system in trade and from 1952 onwards the demand for exports decreased due to real factors such as changes in tastes, as in the case of tobacco.

The effects of inflation on imports may be more clear than those on exports. The structure of imports indicates that investment expenditures were largely financed through monetary expansion, a strong relationship between inflation and the balance of payments can be established. As investment expenditures increased, the demand for imports rose, leading to further deficits in the balance of payments. Inflation, through expenditures, impaired the import capacity of the economy. It should be pointed out that Turkey to a large extent ran out of exchange reserves in the early 1950s, before inflation. In this case, inflation affected the borrowing capacity of the economy, both private foreign and public foreign credit decreased, as internal economic stability was requested by donor countries. On the other hand, at the present exchange rate, imports became more profitable. However, the "price effect" did not affect the balance of payments directly, but indirectly, as exchange earnings were left outside the economy with the hope of benefitting from a devaluation. Compared to exports, the price and the income (expenditure) effect of inflation on imports seemed more effective.

In order to stop inflation and balance of payments difficulties, a stabilization programme was declared in 1958. The main core of the programme was an expenditure reducing policy through cuts in monetary expansion. The

national currency was devalued, namely, an expenditure switching policy was applied. It may be suggested that the application of expenditure switching and expenditure reducing policies were consistent with each other. However, it should be pointed out that the expenditure reducing policy was the main policy variable.

After the application of the 1958 Stabilization Programme, the economy underwent a stagnation. In this respect it can be suggested that both internal and external stability was achieved at the expense of economic development.

It seems clear that the easy credit policies pursued by the government after 1954 contributed significantly to the inflationary process. The rapid increase in public sector activity, leading to an increase in the demand for imported machinery and raw materials put considerable pressure on the balance of payments. As the majority of Turkish exports are agricultural in origin, there was little immediate response on the export side to the rapid increase in imports. Hence the balance of payments constraint applied very quickly. This constraint worked back into the domestic economy through the 1958 Stabilization Programme, to bring about price stability; but stagnation.

Thus domestic inflation did affect the balance of payments situation in Turkey, largely through imports and ultimately measures to alleviate balance of payments

difficulties also had the effect of reducing the rate of change of prices in the early 1960s.

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