Economic Development and the Price level in Egypt 1950 - 1962

A Thesis submitted for The degree of

Doctor of Philosophy

By

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Preface

This thesis on growth and the price level in Egypt, is a case study of a country which is planning to enter the take-off period at a time when a social and political revolution is taking place. The period of study (1950-62) covers a critical stage in the history of Egypt, since it may be considered the transitional period in which the country had to complete the structural changes necessary for a dynamic economy. While in the earlier part of the period of study, the economy was mainly based on the principles of a free enterprise system, socialism emerged in the later years, with the economy being subjected to an overall plan. Thus, this study examines the functioning of the various economic variables and their relationships during such a stage of development and in view of such social and political changes.

Growth and the price level have been examined from both demand and supply viewpoints. In chapter III, a picture of the working of the external forces is given while chapter V is devoted to explaining the evolution of the public sector which has undergone many changes in conformity with the changes in the overall political and economic objectives of the country. Sectoral growth is examined in Chapter IV while Chapter VI is concerned with the system of price controls. Finally, Chapter VII summarises the

main conclusions reached as regards development and changes in the price level in Egypt during the period 1950-62.

An important contribution of this research is that it collates and presents in a useful form a considerable amount of statistical data on the Egyptian economy which previously had not been easily available.

In carrying out this work, I would like to express my gratitude to my supervisor Mr J.F. Brothwell whose advice and encouragement have been of great help to me. My debt is due to Professor Bent Hansen of the Institute of National Planning, Cairo, who in correspondence made some clarifications concerning the Egyptian National Income and Balance of payments Statistics. I also thank Mr. M.M. Amin for his kind help in the collection of data. I must also acknowledge the Ministry of Economy of the U.A.R. for sponsoring the research.

C O N T E N T S

CHAPTER I

The basic problems involved in studies of development and the price level

In studying the problems of economic growth in underdeveloped countries, many economists have emphasised the extent to which growth has been associated with inflation. It is true that in many countries; especially in Latin America, growth and inflation have occurred together. But growth without inflation is, of course, theoretically possible and there are several countries in which significant growth has occurred and yet the price level has remained reasonably stable. Although Egypt is listed among the most stable countries in the world, there is a possibility that this situation may in fact have been an inflationary one.[1] A main purpose of this thesis is to explain why prices kept relatively stable and how this state of price stability can explode into a state of price increase as the process of economic development goes on. It is not an attempt to contribute something new to the tools of economic analysis;

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1) In a study of inflation in primary producing countries, the World Economic Survey for 1957 (p 64) considered Egypt among the most stable countries taking the cost of living index number as an indicator. This comparison may give a preliminary idea about the movement of prices up to 1957, although it is subject to be revised according to the definition of inflation and how it is measured.

but it is rather an applied study of a particular case - in contrast to the Latin American countries - of a fairly stable economy. Most of the concepts which are used to interpret an inflationary economy will be used in this study, and the forces do not differ in essence from those which generate instability in the industrial advanced countries except that in all underdeveloped countries the stress must be laid upon the acceleration of economic growth[1].

Although certain similarities are found among the institutions in underdeveloped countries, (e.g. Exchange Control, economic planning and price control), it may be useful to study every country separately, since the interaction between the economic variables is affected by the existing institutions and may produce different results.[2] Individual studies are illuminating since they introduce the experience of the various countries in the field of economic development. In this respect the last conference which was held in Geneva in 1964 on problems of trade and development suggests,[3] "The competent international bodies, including, if appropriate, the continuing machinery recommended by

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1) Ibid P 64.
2) It is stated in the World Economic Survey mentioned above (pp 65-66) that "neither excess aggregate demand nor sectoral demand, however, wholly explains the magnitude of the price instability experienced by various primary producing countries. The primary inflationary impulses generated by excess demand have also initiated secondary cummulative advances in prices and costs. The magnitude of these advances has varied with the economic structure and institutions of the underdeveloped countries".
3) Document E/Conf. 46 / L 28 1964 page 85

this conference, examine the eonomic situations and policies and development plans of individual developing countries in order to determine the feasibility of rates of growth higher than those which have been experienced by most countries individually during the past decade, and even higher than that envisaged for the United Nations Development decade, and to indicate measures for developing and developed countries to take toachieve them. It was recognized that there is a need for co-ordination of these studies by competent machinery within the United Nations."

Characteristics of underdeveloped countries.

Seers has summed up the basic characteristics of underdeveloped countries as follows:-[1]

1. Exports of a few primary products form a significant proportion of the gross domestic product (over 5%)

2. There is little or no capactiy for producing various types of manufactures, especially engineering products, so that manufactures amount to a significant proportion of imports.

3. Land distribution is very unequal.

4. A large proportion of the labour force consists of unskilled and unemployed workers in country districts.

5. The Capital market is imperfectly competitive.

6. The supply of enterprise is inelastic.

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1. D. Seers: A theory of inflation and growth in underdeveloped economies based on the experience of Latin America, Oxford Economic papers 1962 pp. 175-176.

7. Manufacturing organization is highly monopolistic.

8. Wage-earners have some political and industrial power.

9. Public administration is of limited efficiency, especially in collection of direct taxes.

10. Income elasticities of demand differ greatly as between various commodities.

11. The population is growing.

12. The economic aspirations of the population are rising.

13. There is population migration towards the Cities.

14. Consumer credit facilities are spreading.

15. Tastes are changing under the influence of foreign example.

Without going into details, all these assumptions given by Seers in his Model apply to Egypt in addition to other features which we may add.[1]

First The Egyptian government is taking an important part in economic activity and the public sector is growing tremendously. Investments are controlled by the government and private investment is contracting.

Second Prices are controlled by the government and year to year changes in prices may be concealed[2]. However, this did not prevent prices from advancing in certain years due to

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1) For further explanation, see Chapter II on the Background to the period under study.
2) Professor A.J. Brown in his book, "The Great Inflation", 1956, p. 187, stated that "price control and restriction of supplies covered a considerable number of products in Egypt, and though the control was clearly not very effective, it may well have been sufficient to keep consumer expenditure lagging

forces which, in spite of the control, made the rise in prices unavoidable.

Third Import restrictions and exchange control are severely applied and the changes in the regulations have been very frequent and effective on the level of activity as a whole.[1]

Fourth The monetary system in the period under study was not tied to the balance of payments since Egypt's departure from the Sterling area and the promulgation in July 1948 of law No 119 of 1948.[2]

This enabled the government to issue notes against Egyptian government securities and treasury bills. The government can finance its budget deficit through the banking system with special reference to the Central Bank which is under the control of the government. This could prove to be important since the government can attempt to insulate the economy from the external forces.

Fifth A corollary of the previous point is the government policy of using the accumulated foreign reserves in financing the development programmes. In this context Professor Nevin says[3] " if a substantial element in the total National income

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well behind the increase in the means of payments which the great military disbursements of the allies created". That was during the period of the war. However, since the end of the war, price control has continued and still covers a wide variety of goods.

1) Year to year changes in the import and exchange restrictions are given by the I.M.F. Annual Reports on exchange restrictions.

2) Charles Issawi: Egypt in Revolution, 1963, pp 247-248.

3) Edward Nevin: Capital Funds in underdeveloped countries 1961, (p 4).

of presently underdeveloped countries to be handed over to the monetary authorities by the general public in return for notes and coins, it is obvious that the resources thus coming within the control of the monetary authorities can play an important part in a general development programme. The extent to which a currency reserve can be employed as an instrument of finance for development, however, will vary from country to country and from time to time. When currencies are fully convertible it is often necessary for the authorities to ensure that a substantial fraction of resources handed over to them in return for currency is held in the form of gold. When a currency is not convertible - like the Egyptian pound-the possibility of the employment of resources obtained from a currency issue in some form of relatively long term investment clearly does arise".

Egypt, as one of the countries which accumulated foreign reserves during World War II and during the Korean boom, was able to use these reserves in financing current and development expenditure.

Sixth Foreign aid plays an important role in the Egyptian Economy. Most of the foreign assistance delivered to Egypt is in the form of credit facilities extended by the donor country (soft loan)[1]. This factor, together with the foreign exchange reserves, were a major contribution to the development

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1) Foreign aid to the United Arab Republic by Said E.L Naggar, Institute of National Planning, Cairo.

process.

Seventh Egypt's foreign trade is conducted mainly with countries following a bilateral system of trade. Even the countries whose currencies are convertible and which are members of the International Monetary Fund signed bilateral trade and payments agreements with Egypt. This produced additional problems concerning the prices of exported and imported goods[1].

Finally Eygpt has concluded a stabilization programme with the International Monetary Fund the details of which will be discussed later on. It might seem odd to classify Egypt among the stable economies if a stabilization programme is required. This will be explained in Chapter III which is concerned with the role of the external forces in the economy.

These are the main specific characteristics of the Egyptian economy. These features could be added to Seer's characteristics to give a new model. However, his model is valid for many underdeveloped countries and Seers in his article did not forget to mention the importance of the particular policies pursued. Nevertheless, the Egyptian case may be different in the degree of government intervention and in the degree of socialization which makes the case worth

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1) See International Trade theory in a developing world, International Economic Association proceedings 1963. A paper presented by V.P. Sergeyev, The Economic Principles of the Foreign Trade of Socialist States, see also the discussion on this paper.

separate study.

The Meaning of Stability

The ideal development programme is described by Bruton as one which results in the maximum rate of growth in real output with price level stability and no drawdown of foreign exchange reserves.[1] This may be regarded as the equivalent to the Harrod case of the warranted and natural growth rates being equal to each other.

A large number of economists believe that it is necessary to sacrifice a high rate of growth by keeping the economy operating below maximum capacity if price stability and balance of payments equilibrium are desired; they argue that a high rate of growth is likely to be accompanied by inflation. However, we find a school of thought in the International Monetary Fund advocating price stability and stating that inflation is detrimental to growth. As an example of this school, G.S. Dorrance suggests[2] that," In the post war years the less highly developed countries have on the average enjoyed annual increases in per capita output of approximately 4% during those periods when they maintained monetary stability. During periods of mild inflation the increase in output in these countries was only half as great. During periods of strong inflation the increases in output tended to

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1) Henry J. Bruton: "Inflation in a growing economy", Series in monetary and international economics No 2 University of Bombay, (1961), pp 1-3.
2) Graeme S. Dorrance: The effect of inflation on economic development." I.M.F. Staff papers March 1963 pp. 2-3.

be even smaller." The main argument behind this is that inflation discourages saving and directs investment into unproductive channels. Following this line of thought, the International Monetary Fund has become very much concerned about price stabilization in underdeveloped countries, even in those countries which have not suffered yet from inflation such as Egypt. Against this school of thought, we find an economist like Seers suggests that "it is meaningless to set up a hypothesis that inflation helps or hinders growth. Growth and inflation are interrelated but not in any simple way. In Latin America there are examples of growth and inflation (Brazil), stagnation and inflation (Argentina), growth and stability (pre-1958 Venezuela), stagnation and stability (pre-1959 Cuba)"[1] Professor Brown suggests that "what is practically important to know is not simply what forces have operated to permit price inflation, perhaps to a very much greater extent than has actually been experienced, but what forces acting together or in part against each other, have caused price inflation to occur to the precise extent to which it has occured. We want to know, not merely what was the nature of the forces that made the balloon rise, but since it was in fact a captive balloon, how far the rope was paid out, and why neither more nor less".[2]

That is exactly what we require to know about the

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1) D. Seers op. cit. P 191
2) op. cit. p. 9 .

Egyptian economy; to what extent the various economic variables and the institutional framework contributed to the movements in the price level. To do this we shall have to analyse both the macro as well as the micro aspects of economic activity.

Indicators of Inflation

Indicators of inflation could be enumerated as follows:-

1. Indices of the price level of products.

2. Indices of the price level of factors of production, compared with the productivity of these factors.

Another indicator may also be added namely the exchange rate which reflects the foreign position of the country and may also show the economic situation as a whole.

As regards product prices, they can be expressed by one of the following indicators:-[1]

1. The wholesale price index which does not include goods sold directly to the consumers or to the government and which mainly include foodstuffs, raw materials and equipment.

2. Consumer price index or the cost of living index which includes not only items of food and clothing but also rent, medical care and other services.

3. The implicit income deflator which includes all final goods entering into the gross national product. It is considered an important measure in an underdeveloped economy

1) The new inflation, Willard Thorp and Richard E.Quadt 1959.

since it embodies the export prices which are not included in either of the first two indicators.

In much economic research the cost of living index is used to measure the degree of price stability since it is much more concerned with the welfare of the consumer. However it may not be a satisfactory indicator since it is based on particular commodities whereas the development process may result in changing tastes and aspirations. For this reason the cost of living index may not be an ideal indicator for a long period with different patterns of consumption. Furthermore it may be affected by an element of goverment control which renders it a misleading guide.

The wholesale price index may be a good index, but it is also based on particular commodities and it may not be wise to use it for longer periods of study. However, the general wholesale price level is always divided into individual items and, this can be very useful in economic analysis where an aggregate price indicator may not be adequate. Moreover, the element of control of that index is usually less than for other indices.

The implicit income deflator is a comprehensive indicator but it may also have an element of government control. However, as we have seen before, every indicator has its merits and demerits and it may be necessary to use them all and not just one them. It will be interesting to see the

relationship between the three indicators for differences between them may help to isolate the factors which influence the price level.

As regards the indices of the price level of factors of production, they are mainly the index number of wages and the index number of profits. The two indices must be analysed in view of the change in product prices and labour productivity. If productivity increases, the price level of goods is constant and/no increase in money wage rates, the net result will be an increase in the share of profits. It will be interesting to measure the relationship between such variables in an underdeveloped country like Egypt.

Finally, the external value of the currency could be used as an indicator of price inflation. Yet, this indicator is limited considerably by two factors:-

1) The ratio of foreign trade to national income.

2) The extent to which the exchange rate is flexible.

Concerning the significance of foreign trade in underdeveloped countries, it has been shown that foreign trade usually comprises a major part in the National income. Again inflexibility of the exchange rate may render it only useful in cases of hyperinflation where successive devaluations are taking place. Yet, it may be useful to consider this indicator, together with the others, to show the country's foreign position.

These are the main indicators of price inflation. It may be necessary to construct some other indices whenever there is a need for them.

Causes for instability in the price level

The causes of instability could be examined under the following headings:-

1. Demand pull and cost push inflation.
2. Export fluctuations.
3. Excessive industrilization.
4. Unbalanced growth.
5. Particular pricing policies.

Demand pull and cost push inflation

According to the classical argument, as expressed in the quantity theory, the changes in the price level are attributed to changes in the quantity of Money (M)[1]. The increase in the supply of money per unit of output would raise the price level since the demand for money was assumed to have a relatively constant relation with money income. According to Keynes's view the demand for money is not taken as related solely to income, but it is divided into three categories a) demand for transactions motive b) demand for precautionary motive and c) demand for speculative motive.

It is not necessary that the increase in the quantity of money (M) be used in buying goods but rather as a liquid

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1) The new inflation (Ibid) Chapter III

asset replacing other forms of liquid assets such as government securities. The increase in the quantity of money will influence the level of activity and the price level through the impact on the rate of interest, which determines the amount held according to the speculative motive and which decides the level of investment. For these reasons we cannot say that there is a direct relationship between the quantity of money and the price level. Furthermore, when the demand for money rises, the increase in demand may be met by an increase in the velocity of circulation rather than an increase in the quantity of money and this is actually what happened in the boom periods in some countries where the use of money was intensified.[1] Perhaps the most important factor which influences the price level is not the increase in money supply but what causes money flow (MV) to increase. In other words it is spending (whether private or public) rather than money supply which is important. This moves us to another point which is the importance of demand pull versus cost push inflation. Excess aggregate demand creates price inflation if full employment is achieved. This could be expressed by an excess demand for savings which consists of a) Gross private fixed investment b) change in private inventories c) budget deficit d) export balance.

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1) Committee on the working of the Monetary system report paragraph 391.

Any increase in the planned amount of one of these items will result in higher prices if it occurs in an economy with flexible prices operating near capacity.[1] Thus a rise in prices could be avoided either by increasing imports or raising the amount of taxes.

In underdeveloped countries, acceleration of economic growth requires a high ratio of investment to income. This usually results in an excess aggregate demand whether on the part of the government or the private sector. As was pointed out in the World economic survey of 1959, the rate of growth of fixed investment in many of the underdeveloped countries was either extremely high or generally very substantial.[2] Only in a few countries, such as Argentina, Brazil, or Chile were annual rates of increase as low as 2 and 3 per cent recorded, and instances of an actual contraction in the volume of gross investment were exceptional. The stimulating factors which encourage investment are either the government endeavour to raise the rate of growth with a consequent increase in the budget deficit, or the stimulating export sector, which affects the whole level of investment and not merely investment in the export sector. This will be explained in more detail under the heading of export fluctuations.

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1) The World economic survey 1957 p 67, see also Henry Bruton op. cit p 4.
2) pp 63-65.

As for the supply of savings, its pattern is largely dependent on the existing institutions in the country[1]. The supply of saving is divided into four items:-

1. The saving of the household sector which is dependent on the habits of the people, the distribution of income and the government policy.

2. The corporate saving which depends on the policy of the firms towards the distribution of profits versus the accumulation of reserves. Public corporations are affected by the level of bureaucratic expenditure which has a great impact on the level of public savings. This kind of corporation is very important in a country like Egypt where a large number of firms is run by the State.[2]

3. The government budget surplus which depends on the government policy whether on the revenue side or on the expenditure side. On the other hand the government policy is an important factor in determining both the household saving and the corporate saving.

4. The foreign saving is represented by the inflow of foreigh capital after the deduction of the outflows. According to the World Economic Survey of 1960, foreign saving is playing a vital role in most of the developing countries

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1) The World Economic survey 1960 p. 60
2) In chapter 5, a full account will be given of the operations of the Public sector in Egypt. This will involve a study of the contribution of public corporations to the amount of saving as well as the budgetary policy as a whole.

and on the average it amounts to 4% of the gross domestic product of these countries.

How far does the increase in aggregate demand for savings influence the price level?

An attempt has been made in the World Economic Survey of 1957,[1] in which a comparison between a number of primary producing countries is shown, to demonstrate the effect of the aggregate demand for saving on the price level. If we take the figures in that report and make some adjustments to get an average of six years, the result is as indicated in the following table.

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1) op. cit p 67.

Table I_1

Average demand for savings as a % of gross domestic product

1950 - 1955

Country	Private 1) investment	Budget deficit	Export surplus	Total	Percentage increase in the cost of living per annum
Argentina	16.3	2.6	-0.8	18.1	+ 19.0
Australia	24.8	3.7	-3.5	25.0	+ 9.1
Burma	10.8	4.0	4.0	18.8	- 2.2
Ceylon	6.4	1.5	0.3	8.2	+ 0.8
Columbia	13.5	3.9	-1.0	16.4	+ 4.5
Ecuador	11.3	1.8	-0.1	13.0	+ 2.0
Ghana	6.9	-2.8 2)	8.1	12.2	+ 3.6
Honduras	14.4	0.4	-1.1	13.7	+ 4.7
New Zealand	19.0	3.2	-0.9	21.3	+ 6.0
Peru	23.5	0.2	-2.8	20.9	+ 7.1
Phillipines	6.7	1.2	-1.7	6.2	- 0.7
Turkey	15.8	0.7	-2.7	13.8	+ 5.1
South Africa	19.1	7.1	-4.8	21.4	+ 2.7

Sources: - 1) World Economic Survey 1957

2) The U. N. Statistical Year Book.

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1) Including changes in stocks.
2) Budget surplus

From the previous table we can see that the most stable countries tend to be those with the lowest total level of demand for saving. We can probably say that Ceylon and the Phillipines achieved price stability due to the low level of demand. However, the aggregate demand for saving does not explain everything; for instance, Argentina with a lower level of demand than Burma experienced the highest rate of price increase while Burma achieved a declining price level. This may be attributed to many factors, one of which is that we are dealing with ex post figures rather than ex-ante ones. Also we do not know what happened to the supply of savings in every country. Nevertheless, these figures may be useful to the extent that they show the pressure on the available resources which is one of the main reasons for price increases; that is why some economists insist that growth must be accompanied by inflation[1].

An important force, which may drive prices upwards, is the increase in the prices of factors of production; in other words, price inflation may not be the result of the rise in demand for final products, but it may be due to the excess demand for factors of production. In this respect Professor Brown says,[2] "there is much evidence that prices are very widely fixed according to the cost of production - probably

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1) Growth is likely to be associated with increased demand.
2) op. cit. pp 10-12.

to the average total cost of production calculated on the assumption that plant is being utilized to some standard extent." He also suggests that "in a largely industrial community, the most direct and powerful price raising influence in a time of inflation may be either the rising price of raw materials and foodstuffs or the rising price of labour within the community".

In an underdeveloped economy, since the volume of imports is very significant, the change in the price of imports must be very influential on the internal price level. Also, since the wage level is often determined in these countries according to the price level of food, the change in the price of imported food will not only have an impact on the internal price level, but it will also affect the wage level.

Finally, the preceding argument is concentrated on a study of aggregates whether on the demand side or on the supply side. But the use of aggregates may not give a full picture of what is happening in an underdeveloped economy. As indicated by Seers[1], "one can conduct the analysis, in the fairly broad categories, and indeed write a book about the United States economy, without going into greater detail than, perhaps, splitting consumption into purchases of

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1) Dudly Seers: An approach to the short period analysis of primary producing countries. Oxford Economic papers, 1959 p.3.

durables, non durables and services, or distinguishing between primary, secondary and tertiary production. We need not concern ourselves with what happened to particular industries or particular racial or religious groups, still less particular states."

As a consequence of this; analysis in aggregate terms works in an economy like that of the U.S.A., while in an underdeveloped economy it will be difficult to depend solely on aggregates for two reasons:-

1) The economy is usually very dependent on particular industries, which have to be studied separately, especially the export industries, for most of the underdeveloped countries suffer from their prices and production fluctuations.

2) The propensity to import of these countries is usually very high, due to their dependence on importing most of the manufactured goods, particularly engineering products, in addition to the imports of foodstuffs and raw materials. For this reason more is required than just a study of the export surplus and its relation to the internal level of activity. For example, a study may have to be made of the movements of import prices and the exchange control system and how it responds to the fluctuations in the prices and quantities of particular exports and imports. In other words, it is often a matter of studying administrative controls, which change from time to time with no written

rules. This will be very clear in the case of the Egyptian economy where the exchange restrictions changed so frequently that one cannot postulate certain principles for the period as a whole.

Export Fluctuations

Price instability in a primary producing country may often be attributed to external forces over which the domestic government has no direct control. Underdeveloped economies are, in many cases, highly dependent on exports of a few products and fiscal revenue and money supply are highly correlated with the export receipts. During the phases of high export prices, resulting in an improvement in the terms of trade, real income increases more than real output. This may result in a higher investment ratio without sacrificing consumption. The capacity to import will rise and more capital and consumption goods could be imported. This expansionary phase may be accompanied by higher prices unless the demand for internal resources is offset either by more imports of consumption goods or by increase in the tax collection. Wages may go up and every section of the community may try to maximize its share in the National income. In spite of this; due to the increase in real income, all the sections may gain except those with fixed salaries such as the Civil servants.

During the downturn phase, the situation will be more serious. When prices of exports fall real income will decline, the capacity to import will fall and the pressure on the foreign reserves will be strong. During the expansionary phase the country may have engaged in an industrialization programme due to the availability of foreign capital goods and raw materials. When prices of exports fall and the capacity to import declines, the import of such goods will be subjected to import restrictions and consequantly they will be difficult to obtain. This may finally result in a devaluation of the currency which means a cost push inflation coming from outside the country. Furthermore, two internal forces may operate to push prices upwards. First, the government may incur a budget deficit, due to the fall in revenue, and due to its commitments to spend either on current or on capital account. The second internal factor is the social factor, which makes every section in the society strive for an increase in its share of income, especially the workers, who will try to preserve the gains they got during the expansionary period.[1] For these reasons it is said that,[2] " although rising export incomes sets up upward multiplier effects on incomes and prices

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1) Maynard: "Inflation and growth", Oxford Economic papers 1961; see also Maynard's book, "Economic development and price level", 1962.
2) Maynard, Oxford Economic papers, 1961; Ibid, p 188.

generally, a contraction in export incomes does not necessarily produce downwards multiplier effects."

Most of the development programmes of underdeveloped countries are disrupted by these short run fluctuations of export prices. Also, any drop in the production of the main exports produces difficulties to the country which cannot be underestimated. This may be illustrated by the case of the drop in cotton production in Egypt in 1961 and how this drop got the country into serious trouble.

Although the short run fluctuations in export prices produce serious difficulties to primary producing countries, still the long run aspect of the problem may be even more important since it is related to the whole structure of the economy. Economists of the "structural" school suggest that exports must grow faster than real output if equilibrium is to be achieved. Seers[1] for instance suggests that if 'G' is the purchases of manufactured consumer goods, and 'm' is the fraction of 'G' to be imported and is assumed to be constant, we must expect a rise in the overall import ratio for two reasons:-

1) The growth of 'G' will be faster than the growth of domestic product as we go along the development scale.

2) The increasing importance of the industrial sector in total domestic product will require more imported capital

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1) Oxford Economic Papers, 1962, op. cit.

equipment and raw materials. In an economy with a declining 'm' it is not necessary for exports to grow faster than real output. This will only be achieved when industrialization has been completed. In the earlier stages of industrialization the demand for capital goods and raw materials will exceed the decline in imported finished consumer goods, with the result of a rise in the marginal propensity to import. In this context Prebisch suggests that the growth of real income at a more rapid rate than the growth of exports releases inflationary forces that upset monetary stability [1]. He thinks that the solution to the problem is structural advocating a programme of import substitution, which means that the indigenous population depend more on domestic products than on imported ones. However, this policy will still involve more imports as mentioned above, in other words we still shall have what we may call the vicious circle of industrialization.

Excessive Industrialization

It has been accepted among underdeveloped countries that a policy of import substitution is an important part of the solution to their problems, since their economies need to be less vulnerable to external fluctuations. In spite of the overwhelming agreement, sometimes the policy of import substitution is misused and may become detrimental.

1) Raoul Prebisch: "Monetary stability or economic growth", Economic Bulletin for Latin America, March 1961.

However, it will only be detrimental if a rational policy is not followed. By rational we mean that the country must only establish those industries which have a comparative advantage and which are consistent with the degree of development. This may involve avoiding the production of luxury goods which were imported previously. In this respect Maynard says[1] "It would not be very desirable for a government to take massive steps to increase the output of Television sets when the mass of the population lived in a primitive housing conditions and still had too little to eat". High investment rates in these industries would mean that resources are bid away from those domestic industries catering to the low income population, leading to a general rise in the cost of living.[2] We must take into consideration that a policy of import substitution nevertheless draws upon the reserves of foreign exchange and, by importing the capital equipment and raw materials necessary for a certain industry, may involve the curtailment of imports in other sectors. For these reasons it is very important to have a prudent policy of substitution which only encourages the production of those items which can survive without lavish support from the government. That is why we find an economist

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1) Maynard "Economic Development and price level", p 51.
2) "Inflation and economic growth An interpretation of the Brazilian case", Werner Baer.
Economic Development and cultural change, 1962.

like Prebisch, who is one of the advocates of a substitution policy, warns against any misuse of such a policy. In this context he says[1] "when external disequilibrium arises, the reaction often is to restrict imports of finished consumer goods by measures which albeit unintentionally, involve the promotion of substitution production, regardless of the type of goods concerned. The laudable aim of this facilitating imports essential to economic activity at the expense of finished consumer goods has led to increasing rigidity in the composition of imports with serious consequences for some countries."

In conclusion we can say that increased industrialization, if it is not planned on a sound basis, may prove worse than a situation where the country is dependent on a few products, since a substitution policy may result in any fluctuation in exports creating a state of depression accompanied by a high degree of unemployment. Any substitution policy must take into consideration the need for a balanced growth where all the sectors must receive the same attention from the government with a view to building up the social overhead capital. For this purpose it may be useful to distinguish between two types of imported equipment:-

1) Capital equipment needed to produce consumer goods

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1) op cit pp 4-5.

divided between consumer durables and non-durables.

2) Capital equipment needed for the production of capital goods such as blast furnaces.

Unbalanced growth

Price instability may be attributed to the lag in the growth of certain sectors of the economy behind the other sectors. Agriculture is the major bottleneck which produces price instability, since at low levels of income the elasticity of demand for food is high while the scope for the non-food type of consumption is very limited[1]. As Maynard points out, the instability is the result of trying to force consumption into a less desired pattern; the community is forced to consume more industrial goods and less agricultural goods than its real income would normally lead it to do, at unchanged relative prices.

Agriculture is also a supplier of raw materials for industry and this requires a growth of the agricultural sector hand in hand with the growth of industry. Furthermore, Agriculture is often the main item in export earnings and consequently the import capacity is highly dependent on the state of agricultural production.

Other bottlenecks are likely to result in the following items:

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1) Maynard "Economic Development and price level" op, cit. pp 52-55 see also Nicholas Kaldor,"Essays on economic stability and growth", 1960, pp 238-239.

1) The import capacity [1]

2) Infrastucture projects such as communications and electricity projects.

As regards the import capacity, it is suggested that it is a major factor in determining the rate of growth. It has been found that capital formation is highly correlated with the import capacity and the imports of capital equipment[2]. The process of development, although it implies a change in the composition of domestic production accompanied by a change in the pattern and total amount of imports, still urgently needs foreign exchange to complete these changes. We can assume that these structural changes will take a longer period than is often anticipated and the need for foreign currency will remain so long as these processes of structural change are going on. Although many countries have developed cement and steel industries (social overhead capital), still they are in need of the foreign currency to import capital equipment and to build-up stocks of raw materials necessary for industry. Furthermore, any fall in the production of food can be compensated by more imports of food. However, as is mentioned above, it is essential to develop the agricultural sector to feed the growing population and to save foreign currency for the imports of capital

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1) "Two views on inflation in Latin America" by R. Campos, Latin American issues, A. Hirschman pp. 74-79.
2) The World economic Survey, 1959, pp 66-73.

equipment rather than to dissipate the foreign reserves in importing consumption goods.

As for the infrastructure projects, it has been agreed that any development process cannot even start without a certain minimum of transport, electricity and construction projects, as indicated by the Rostow thesis. The neglect of such projects may be an important factor in producing inflation. It will not be possible to develop the industrial or the agricultural sector if there are no means of transport to deliver the products to the various markets. The same applies to electricity and construction projects which are highly important for industrialization.

The idea of growth balance in a socialist economy was explained by Professor Oskar Lange [1]. He suggests that in a centrally planned economy, since the financial resources are subordinated to the real resources, the planning body sets physical targets for the production of every sector in the economy whether in the services sectors or in the material sectors. The balance between the sectors must be on the macro-level (national level) and on the micro-level. Thus there must be a balance between the production of consumption goods and the production of capital goods. The micro-economic proportions express the relationships between the individual industries within the sectors. Certain balance sheets are set up for the economy as a whole and for the individual industries. Moreover such balances are also set up for the factors

1) Essays on economic planning, 1963.

of production. Failure to achieve a balance between the various items will result in bottlenecks and a rise in prices. This failure may be due to some errors in estimation or the figures may be out of date.

If an attempt is made to draw up these balance sheets for underdeveloped countries, it will be difficult to find sufficient data. The use of these balances may be very dangerous if they are set up on false data. However, most of the undeveloped countries have started to plan their economies and it will be necessary to choose between two systems of programming 1) the system of balance sheets which is mentioned above or 2) the system of input-Output tables which is more advanced and which requires still more data.

Particular pricing policies

It has been argued that bottlenecks whether in the capacity to import or in other sectors may be the unforeseen result of the particular government policies pursued[1].

As regards the lag in import capacity, it may be the result of a government policy to overvalue the currency, which in turn discourages exports with a fall in the capacity to import. Sometimes the government, in order to encourage import substitution, resorts to a multiple exchange rate in

1) R. Campos op. cit.

favour of importing any kind of capital equipment with a résulting increase in the production of home produced goods including the luxury ones. If a favourable rate is given to essential consumer goods, this could cause an increase in the overall consumption ratio. These two results (production of luxury goods and increase consumption) are unfavourable to development and also to the balance of payments.

Pricing policies may also create production difficulties in some important sectors like agriculture. The government, in order to avoid social and political upheavals, may follow a policy of price control of essential goods such as food and electricity. In Argentina for instance, Maynard points out that internal terms of trade were always against agriculture (even when external terms of trade were moving towards agriculture) owing to the government policy[1]. This can be an important factor which may hamper the growth of the controlled sectors.

To sum up, we can say that government intervention is sometimes undesirable and it may in the end aggravate price instability, for the government will not be able to maintain price control indefinitely. Even with firm pricing policies, the pressure of the shortage in the supply of certain products may compel the government eventually to allow prices to rise;

1) Inflation and growth: Oxford economic papers op, cit. p 194

thus a fall in the capacity to import may end up with a devaluation of the currency. But it must also be realized that we cannot isolate the pricing policy from the institutions of production and the institutions in the country as a whole. For example, we cannot say that controlling prices of electricity and transport is detrimental to the production of these services if they are in the hands of the government. For this reason it is better not to generalize and to study each country separately.

Concluding remarks

In the present chapter, we have studied some basic theoretical problems which are concerned with growth and inflation. The study included the definition, the indicators and the causes of price instability.

In the next chapter, the background to the Egyptian economy in the period 1950 - 1962 will be discussed after which a detailed study will be made of the different economic factors operating in Egypt during this period, which will enable us to place the Egyptian case among the various case histories of growth.

CHAPTER II

The Background to the period under study

This chapter may be considered as a brief summary of the various economic policies adopted by the Egyptian government from 1950 to 1962, which will be discussed in detail in the rest of the thesis. Also an account of the economic situation just before the period under study will be given, since it may be useful to compare the working of the economy in two successive periods, especially if we have a preconceived idea that the two periods are different from the structural point of view. However, it is not considered a substantial contribution since the study of the background to our period has been the concern of many text books which are devoted to general studies on Egypt and not as specialized as this work.[1] Therefore, we shall tend to be more specific than other general surveys and we shall stress only the economic factors which are relevant to this study. This will help us to link the theoretical argument in the first chapter wi th the later chapters.

The chapter will be divided into two parts:-

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1) For this purpose, see Charles Issawi: "Egypt in Revolution,"1963 chapter on ARAB Socialism; Also:Harbison and Ibrahin, Human resources for Egyptian enterprise, 1958," the Chapter on The Setting ".

1) The situation at the beginning of the period.

2) A general survey of the policies pursued.

I - The Situation at the beginning of the period

Egypt is an overpopulated country with an increasing rate of population growth. While the rate of growth in the three decades ended 1937 was between 1.1-1.3% per annum, the rate of growth in the fifties varied between 2.5% and 2.7%. There is no indication that there will be a fall in that rate in the near future.

Despite the fast rate of population growth, statistics show that employment has not increased. Between 1947 and 1960, while the population increased from about 19 million to 26.1 million, employment fell from 8.3 million to 7.7 million; thus, the ratio of employment to population fell from 43.7% to 29.5%. Even if we rdate the number of employed to the number of adult population the picture does not change much. The following table shows the change in employment in varicus sectors of the economy between 1937, 1947, and 1960.

Table $II_{(1)}$

Employment in various Economic activities 1937-1960

in thousands

Designation	1937	1947	1960
Agriculture and Fishing	4283.4	4215.0	4379.0
Manufacturing industry	475.7	707.2	710.2
Construction	117.9	111.6	156.7
Transport	137.7	200.9	257.4
Commerce	458.4	617.5	636.9
Personal Services	255.0	391.0)	1361.5
Public Administration	317.1	508.0)	
Unspecified [1]	1329.4	1567.5	165.5
Total	7375.5	8318.7	7667.4

Source:- Annual pocket year book, statistical Department Cairo ARABIC.

Table II_1 shows that employment in Agriculture and fishing kept nearly constant due to the limited amount of cultivated land. As for manufacturing industries, while employment changed significantly between 1937 and 1947, it did not change in the period 1947 - 1960. This may be due to the intensive industrialization during the war period in addition to the change in techniques in favour of capital intensive methods.

As regards services (including Commerce and Transport), the number employed increased steadily throughout the two periods. The sharp fall in employment between 1947 and 1960 was in unspecified activities, but this can be attributed largely to improvements in the statistics. Also, there is a strong

1) including mining and electricity.

possibility that a large number of the population classified under this item represent disguised unemployment which was revealed in the population census of 1960. In this case we cannot say that the total number of employed between 1947 and 1960 declined; rather, we might say that it remained roughly constant. But even so, the main conclusion is that there was a sharp decline in the ratio of employment to total number of population.

This brings us to the next point concerning natural resources other than human resources. The cultivated land is not increasing and any development process must depend heavily on imports of food. Egypt is also poor in other natural resources and exploration for minerals has not yet proved successful. This, in conjunction with the low production in agriculture, renders the imports of raw materials a precondition for industrialization.

Cotton is the main source of income and any fluctuations in its prices influence the standard of living inside the country. Thus, the favourable prices of cotton during the forties contributed much to the development process in that period. A survey of the behaviour of the economy shows that gross domestic product at fixed 1954 market prices increased between 1945 and 1950 by 30%, which means that the compound rate of growth during that period was over 5% per annum. This is apart from a compound rate of increase of

real income equivalent to 3.5% per annum, which represents the gains from the terms of trade.[1]

Also the investment ratio increased steadily as shown in the following table:-

Table II [2]

Investment ratio in the period 1945-1952

Year	Investment in million pounds at current prices	Gross domestic product in million £) Pounds at current market prices	investment ratio
1945/46	30.9	551.5	5.4%
1946/47	46.1	544.8	8.5%
1947/48	61.9	598.5	10.3%
1948/49	83.3	724.9	11.5%
1949/50	97.7	860.8	11.3%
1950/51	117.1	1079.0	10.9%
1951/52	124.8	1027.0	12.2%

Sources: 1) National planning committee, unpublished figures of investment.

2) Bent Hansen, The growth of national income in the U.A.R. June 17, 1963, Institute of National Planning, Cairo.

Allocation of investment experienced a strong tendency towards industrialization. This suggests that there might have been a mutual relationship between growth and industrialization. The high rate of growth which was achieved partly as a result of the favourable terms of trade contributed to the process of industrialization; on the other hand the process

1) National Planning Committee estimates - The Growth of the National income in the U.A.R. - Bent Hansen, June 17, 1963.
2) Figures of domestic product are calculated for the period 1945-50 for calendar years and interpolated into fiscal year figures to make them comparable with the figures of 1950/1 and 1951/2.

of industrialization contributed to the rate of development. Investment in dwellings also rose considerably, which shows that the increase in incomes was associated with a high degree of speculative investments such as those in dwellings. As a whole it is clear that the period before 1952 was an expansionary period with all the characteristics of an economy on the upward phase of the cycle.

Table II_3

Distribution of investment among major sectors (1942/3-1951/2)

value in million pounds

Year	Irrigation and Agriculture		Electricity and Industry		Transport		Dwellings		Total
	Value	Ratio %	Value	Ratio %	Value	Ratio %	Value	Ratio %	Value Ratio %
1942/3	4.65	24.2	4.70	24.5	3.35	17.4	4.57	23.8	19.20 100
1943/4	5.17	32.3	1.79	11.2	3.85	24.0	2.83	17.7	16.00 100
1944/5	6.07	27.3	3.28	14.8	4.36	19.6	5.38	24.2	22.10 100
1945/6	8.16	26.4	6.61	21.4	6.56	21.2	5.80	18.8	30.91 100
1946/7	5.91	12.8	14.81	32.1	8.47	18.4	12.15	26.3	46.13 100
1947/8	5.88	9.5	20.00	32.3	10.90	17.6	19.72	31.8	61.92 100
1948/9	6.99	8.4	30.67	36.8	16.36	19.6	21.70	26.0	83.34 100
1949/50	8.89	9.1	33.28	34.0	17.76	18.2	27.69	28.3	97.75 100
1950/1	9.80	8.4	35.69	30.5	20.70	16.8	39.08	33.4	117.73 100
1951/2	9.29	7.4	39.32	31.5	22.85	18.3	41.66	32.6	124.81 100

Sources: - calculated from:
unpublished figures, National Planning Committee

As regards the composition of domestic production, Agriculture was the main source of output, It used to produce more than thirty per cent of G.D.P. and employ more than half of the waking population. Agriculture in Egypt

is well advanced compared with other countries in the same area or at the same scale of development. A united nations document suggests that [1] "In Egypt, development policies are conditioned by the fact that, unlike other middle East Countries; it has carried out an agricultural revolution, based on elaborate and costly irrigation projects, lavish use of fertilizers, careful selection and breading of cotton strains and intensive application of labour to land. This had raised the country's yield per acre far above the regional level, and enabled it to support a much greater density of population. The income of this population, which during the past thirty years has been growing more rapidly than the acreage of cultivated land, has become mainly dependent on the value of cotton in the industrial markets; and the standards of living has tended to fluctuate with the price of cotton while the population increase has exerted a down-ward pressure.....Progress in agriculture is impeded by the fact that all the land which can readily be cultivated is already under the plough, and that further extension is dependent on large expenditure for irrigation; moreover, agricultural methods have improved so much that there is no longer scope for a spectacular increase in yields but only for a continuation of the steady advance of the past few

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1) Review of economic conditions in the Middle East 1951-52. Supplement to the World Economic Report, document. E/2353/add, ST/ECA/19/Add, p5.

decades, interrupted by the war".

The previous quotation explains very clearly the position of agriculture, which was the main sector in the economy and which is an essential prerequisite for the process of economic development.It will be interesting to see how far the government policy can be successful in improving productivity in agriculture in such a developed situation.

As for industry, Egypt had been successful in establishing many light industries after the imposition of the new tariff system in 1930. These industries flourished during World War II when imports of foreign goods stopped and a policy of import substitution was followed.[1] The pattern of Egyptian industries included, food and beverages, textiles, cotton ginning and pressing, chemical products, metal products, tobacco products, water, electricity and gas, mineral products, paper and printing, petroleum products, clothing and shoes, leather and rubber products, mining and quarrying, machinery and transport equipment, wood and cork products and miscellaneous.[2] The most important groups of industries which score in employment or in output were textiles and food and beverages. A considerable amount of raw materials for most of the industries had to be imported from abroad which meant a pressure on the balance of payments. Nevertheless, due to

1) The growth of the Egyptian economy 1952-1963, The National Bank of Egypt Bulletin 1964 No 1.
2) Review of Economic Conditions in the Middle East 1951/2 op. cit.

the favourable economic situation in the forties, it was possible to import the necessary capital equipment and raw materials and this can be confirmed by the change in the composition of investments in favour of industry. These investments were mainly performed by private entrepreneurs but under the protection of the government against foreign competition.

This was the situation in industry. However small the industrial sector was, it may be considered as a good start for an underdeveloped country. For this reason it is said that Egypt is an advanced underdeveloped country, Although the real per capita income is small compared with, say, Iraq, Egypt is more advanced culturally and industrially.[1]

Egypt, like many other underdeveloped countries, is highly exposed to external fluctuations. It has been mentioned before that, due to the poor natural resources, a considerable amount of raw materials had to be imported, which made the internal level of activity greatly sensitive to the prices of imports. Moreover, since cotton was the main source of income, any change in the price of cotton in internal and external markets used to reflect on whole sectors of the economy and not merely on the export sector. A deficit in the balance of payments was characteristic of Egypt's external transactions after World War II, but the existence of hugh sterling balances was an important backing

1) Human resources for Egyptian enterprise op. cit.

for the economy. The trade balance always showed an import surplus while other items on current account experienced anexport surplus but not to the extent to offset the deficit on the trade balance. The deficit on current account used to be offset by movements on capital account, which mainly involved running down accumulated foreign reserves. The average balance of payments deficit on current account between 1946 and 1950 was 11.7 million pounds accompanied by an average rate of growth of domestic product of more than 5% and, if the effect of changes in the terms of trade is considered, the rate of growth of real income was higher. It will be interesting to measure this relationship (between the deficit in the balance of payments and the rate of growth of output) for the period 1950 - 1962 to see how far the structural changes have improved the economic situation compared with the forties, or how far the structural changes depend on foreign financing. However, it is important to note that the high rate of growth in this period was partly attributable to the favourable terms of trade, which contributed between 1945 and 1950 an average of 3.5% per annum to the growth of real income. Although this contribution is not included in the 5% mentioned above, it must have had an indirect effect on the level of production inside the country since it increased the resources available.

Finally, external transactions were mainly conducted

with Western countries either in the sterling area or outside the Sterling area. This situation altered in the fifties as will be explained in due course.

As regards the public sector operations before 1952, the Exchequer budget used to be the main instrument of the government through which the government provided services for the public[1]. The Railways Organization was the only publicly owned concern and it used to be a part of the Ministry of Transport. Half of the government revenue used to come from customs duties which meant that the government receipts were highly dependent on the fluctuations of foreign trade. The policy of the government resulted in budgetary surpluses during the war and also after the end of the war. In 1948/49, the government incurred a deficit of £15 million due to an increase in outlay including an increase in capital expenditure. However, in 1949/50 and in 1950/51, expenditures were reduced and the deficit fell to 5 million. The ratios of capital expenditure to total expenditure in 1948/49, 1949/50, and 1950/51, were as follows: 15%, 2 0%, and 17%, respectively. It will be interesting to estimate this ratio for the period 1952-1962 and to compare it with the above mentioned figures. It will also be useful to see the evolution of the public institutions

1) Review of economic conditions in the Middle East, op. cit.

and how the ramifications of the public sector could be consolidated into a single system of accounts.

The last point to be discussed in this section, is the impact of all the preceding factors on the price level.

According to the United Nations study[1], the two factors responsible for the price increase during the boom of 1950/51 were:

1) The increase in the price of cotton.

2) The increase in the prices of imports.

The boom of 1950/1 was accompanied by a fall in the budget deficit partly due to a reduction in government spending, but the reduction in government expenditure was not sufficient to offset the inflationary forces coming from outside.

A study of the price level in Egypt at the beginning of the fifties was made by the National Bank of Egypt[2]. According to this study the main causes of inflation were:-

1) The devaluation of the currency in 1949.

2) The Korean War.

Apart from the general level of prices, the Bank reclassified the wholesale price index into three sub-indices:-

1) Index of locally produced goods (foodstuffs and some manufactures)

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1) Ibid
2) Bulletin of the National Bank of Egypt 1952.

2) Index of imported goods.

3) Index of mixed goods including cotton.

The most important increase was in the case of mixed goods followed by the imported goods.

Another factor which influenced the price level was the government control of prices and price subsidies. Controlled articles hardly experienced price rise while non-controlled prices increased considerably. Non-controlled, locally produced, articles experienced higher prices than non-controlled imported ones, but only because of the inclusion of the export articles. If export articles (cotton) were excluded, the result would totally differ and imported articles would exceed the locally produced ones appreciably. In the later chapters we shall see how the structural changes in the economy have altered the situation and what factors have become the main determinants of the price level.

II - A survey of the economic policies in the period 1950-1962

The period under consideration is not a homogeneous period either politically or economically. The base year 1950/51 was the year of the outbreak of the Korean War and as we have seen above, prices went up due to the increase in the prices of exports and imports.

By 1952 prices started to decline and the country experienced a dump characterized by:- [1]

1) The Bulletin of the National Bank of Egypt, 1964, op. cit.

1) A larger balance of payments deficit than had ever been experienced before.

2) An increase in the budget deficit from 5.5 million, in 1949/1950 and 1950/51, to 38.8 million in 1951/52.

It is clear that the boom year of 1950/51 and the drop in incomes and prices in 1952 were the result of the external forces; even with a cut down of public expenditure or with an increasing budget deficit it was difficult to stop the inflationary or the deflationary tide caused by the exogenous factors.

In July 1952, and after political and economic upheavals, a military coup took place which meant a new era with new aspirations.

However, the new regime, although having in the background the improvement in living standards, adopted an ideology which was entirely "classical", favouring the role of the private sector, whether foreign or national, a balanced budget and a balanced external position. The policy pursued in 1952/3 and in 1953/4 was to reduce government expenditure, and this resulted in a fall in the public outlay in the exchequer budget (ordinary budget) from 232.9 million in 1951/52 to 208.4 million in 1952/3 and to 199.7 million in 1953/4. However, a development budget was introduced on the 5th March 1953 amounting to 21.7 million, which was raised on the 22nd July by an amount of

35.5 million.[1]

Most of the projects in that budget were infrastructure projects, including irrigation, which had usually been carried out by the government. Few industrial projects were mentioned in that budget, since the government at that time did not want to perform the role of the industrial entrepreneur.

The financing of the first development budget was as follows:-

1) The profits gained from the appreciation of gold[2].

2) The issue of a loan.

3) Profits from sales of selected seeds to farmers.

4) Funds accrued from the Agrarian Reform System

Apart from the first source of revenue, which may be considered an inflationary method of raising finance, we cannot say that the development programme as a whole was financed by inflationary methods since the other sources of revenue are not inflationary. This, in addition to the drop in the expenditure of the exchequer budget, suggest that the policy of the government at the beginning of the revolution was prudent in spite of the existence of the development budget.

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1) See ... volume I "Laws issued in Revolution 1952-1957," and the Annual Budget estimates.
2) The government had to revalue the gold in the Central Bank which was valued at the pre-September 1949 exchange rate.

However, it is essential to keep a balance between internal monetary and financial movements on the one hand and the external payments position on the other. Statistics must be available to show the interconnection between the various sectors of the economy. This is a crucial problem for any underdeveloped economy and it is a main concern of this research. Even with increased saving and with a higher level of tax yield, we may not be able to balance the external transactions; in other words a Keynesian solution to the problem of the balance of payments (increasing taxation) may not be the decisive solution. In this respect the Egyptian government, in order to correct the balance of payments deficit, intensified import and exchange restrictions, aiming at cutting down the imports of luxury consumer goods. It was a major objective at that time to maintain a high value of the Egyptian pound in the foreign markets.

This was the approach of the new regime, classical and prudent. This approach changed later on and a form of socialism emerged as the new ideology. However, even with the existence of socialist measures, the government was still clinging to the values of a free economy as will appear in due course.

The reasons behind the change in economic ideology were the changes in the international atmosphere as well

as the increase in the demands of the indigenous population. The decade of the fifties is considered the United Nations economic development decade and most of the underdeveloped countries began to seek a new approach to economic development and this necessitated more government intervention. Moreover, in the case of Egypt, the change in the political regime with its consequences of more aspirations on the part of the masses, in addition to the high rate of reproduction, accentuated the need for government action. The introduction of a development budget may be considered as a new era of a balanced economy instead of the era of the balanced budget. A balanced economy requires the natural rate of growth to be equal to the warranted rate. But, in the case of Egypt, a balanced economy may also have some political implications such as having a strong army, which is a major target, apart from the objective of economic development, in other words, apart from the overall economic target the development procees must follow a certain pattern in line with the political objectives of the country.

The change of the target from a balanced budget to a balanced economy created many new problems. The expansion of the development budget resulted in large deficits in the overall public sector and, consequantly, a rise in prices in 1955 and 1956 especially when it is pointed out that a large amount of the deficit was covered by the Central Bank through an increase in treasury bills which, instead

of financing the cotton crop, were used to faince (finance) other kinds of public expenditure[1]. In this respect we can, perhaps say that, instead of the foreign sector being the most important sector determining the price level, the government sector emerged as another important factor. However, the rise in prices in 1955, 1956 and 1957 is not completely attributable to the public sector. Certainly, the external factors, originating from the Suez Crisis, also contributed a great deal to the instability of the price level. This will be discussed in detail in the later chapters. But in any case we can surely say that the approach of the government became more positive and the role of the state became more significant. This was explained in an official document as follows:[2]

"One of the most important aims of nations is the realization of a maximum standard of living which ensures to all individuals a decent life. This is a basic requirement for a system characterized by social equality, offering equal opportunities to everyone, to improve his meterial and moral levels.

States no longer confine themselves to their former traditional functions. They now tend the interests of all classes and groups. They participate in economic and social

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1) Economic Developments in the Middle East, 1956/57, U.N. Annual Report.
2) The Budget Report, 1958/59, Cairo (English Version.)

activites, not only for organizing these fields, but also, to undertake direct services. This is especially so when such services require funds that are beyond the capacity of the individual enterprise, or whenever the outcome or the risks of such undertakings do not attract private capital, in spite of their importance to society or the need for them for its progress and development. In adopting such a policy the state directs itself to exploit all the natural resources of the country, in order to increase production and provide chances for employment and good living to all nationals."

The previous quotation explains the new approach of the government to break the vicious circles and to raise the per capita real income. However, the country was still only partly committed to an expansion of the public sector since government activity was confined to those fields which private entrepreneurs cannot explore.

This brings us to the third stage, which started in 1958, with the embarkation upon a five year industrial plan, which accelerated the role of the state as an entrepreneur in industry. Investment in the public sector increased but, up to 1958/59, investment in the private secotr was more than 50% of total investment. This meant that the private sector was growing side by side with the public sector but at a slower pace. By the end of 1959, many regulations

had been imposed to restrict the freedom of the private sector, such as using the Arabic Language in the Companies, the intervention of the Ministry of industry in the production system, the labour laws and, finally, the maximum limit set on the distribution of profits in 1959. This limitation on distributed profits had a serious effect on the private sector and it was considered as a warning.[1]

The last stage started in 1960 with the nationalization of the National Bank of Egypt and Misr Bank. Mass nationalization schemes followed in July, 1961, accompanied by other Socialist measures:-

1) A law reducing the maximum hours of work to seven hours per day.

2) A progressive income tax system reaching 90% on the top incomes.

3) 25% of the profits to be allocated to the wage earners.

These measures produced two main results:-

1) An emergence of a large public business sector, which necessitated the establishment of a separate business budget for those projects performing trading activities, with a complicated structure of public accounts [2].

2) Private investment declined considerably and instead of being over 50% of total investment, the ratio dwindled to about 10% .

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1) See Charles Issawi, op. cit.
2) The Budget Report of 1962/3, Ministry of Treasury.

Also, as of 1960, the whole economy was subjected to an overall plan, the target of which was to double the national income in 10 years and to increase the national income by 1965 by 40%. In order to set up a plan certain co-efficients have to be calculated such as the propensity to import, the propensity to consume and the investment ratio. The aim of this research is not to make an appraisal of the plan but rather to provide a sound foundation upon which to construct a plan. Any plan must be related to past experience since we cannot expect a drastic change in economic trends, merely as a result of administrative action, especially if such action is based on unrealistic assumptions. The potentialities of any development programme certainly stem from the past trends. It is not only the amount of internal finance or foreign finance which determines the rate of growth, but also what is called the absorptive capacity.[1]

In this thesis we may be able to establish certain economic relationships, e.g. between finance and economic growth, foreign finance and structural changes, structural changes and price level, and finally between foreign finance and internal finance. When we have established such relationships we may be able to construct a plan.

The last point to be discussed is how far these changes in the policies of the government could be related to a change

1) The Capital Development Needs of the less Developed countries, United Nations, 1962.

in the economic ideology.

In spite of the great increase of government intervention in the economy and the socialist laws of 1961 and afterwards, we can assure that the government is still committed to the private enterprise ideology for many reasons:-

1) Many key institutions functioning in the United Arab Republic at the present time are the same as those which were operating before the nationalization schemes, such as the stock exchange and The Federation of Industries, which officially defends the interests of the private establishments. In 1961, after the formulation of the nationalization laws, the government was advised by the group of economists in the Alexandria Bank (Barclays Bank) to alter these institutions but since that date the same institutions have been functioning.

2) The United Arab Republic is highly dependent on the assistance of the International Monetary Fund. A stabilization programme was agreed upon in 1962 according to which the conditions of the Fund were accepted by the Egyptian government. In the same year Egypt joined the G.A.T.T. Organization, although many of the policies adopted by the Egyptian government contradict the G.A.T.T. articles of Agreement, such as trade and payments agreements, and subsidies paid to exporters.

However, the government is still hoping to remove some

of the restrictions as mentioned in the report by the working party:-[1]

"1) With regard to bilateral agreements, the representative of the United Arab republic referred to their agreement with the International Monetary Fund gradually to abolish those bilateral trade and payments agreements which had been entered into with members of the Fund, which meant nearly all the contracting parties. Lists of products annexed to bilateral agreements were merely indicative and did not involve undertakings to purchase. He repeated that purchase took place on a strictly non discriminatory basis and in accordance with commercial considerations. The existence of credit balances would not affect their policy in this field. Moreover the United Arab Republic was carrying on an increasing volume of trade in convertible currencies or in a currency of account. In the latter case balances had to be settled in convertible currencies. It was further to be noted that especially since the unification of exchange premia (I.M.F. Stabilization programme) there was no longer discrimination in purchasing as between supplying countries whether the United Arab Republic had a credit balance with them or not.[2].

2) The representative of the United Arab Republic said that

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1) General Agreement on Tariff and Trade Document L/1876 (Restricted)25th October 1962, limited distribution, pp.2-3
2) For further explanation see Chapter III.

in the Collection of internal taxes and excise duties there was no discrimination between imported and domestically produced goods."

The significance of this discussion on ideology is that, since the government is still attached to the principles of private enterprise, we must expect similar economic relationships to operate to those which operate in a free enterprise, market economy. There might be some difference between ideology and practice, but still the economic famework is very important in determining the economic relationships which exist.

Concluding Remarks

This chapter began with an examination of the economic situation in Egypt before 1952. Some economic relationships have been discussed, especially those related to price stability, but these relationships occured within the environment of what was basically a free economy highly dependent on the external forces.

The adoption of a development policy accentuated the role of the state as a stimulant for economic development. The public sector has increased both in size and complexity and a system of consolidation is required. Thus, for the period after 1952, one has to study the various economic relationships bearing in mind the changes which have taken place in the economy. Some may argue that certain economic relationships, which occur in a private enterprise market economy, may not exist in a highly controlled economy like that of Egypt during the period under study (1950 - 1962); but, as mentioned before, the ideology is still attached to the free enterprise economy and consequently such economic relationships can exist even though they may be modified by the presence of governmental regulations.[1]

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1) In a paper presented by Professor Wiodzimiers Brus of Poland, to a conference in Oxford in September 1963, on problems of decentralization in a socialist economy, he described a decentralized model of economic planning as a model of the functioning of a planned economy with a built-in market mechanism p(3). In another place (p5) he stated that"obviously, the market mechanism plays an important role in the decentralized model/of economic planning/. Monetary relations are active instruments in the operations of the

The economic problems which have to be studied could be summed up as follows:-

1) The vulnerability of the economy to the external fluctuations and how the changes in the balance of payments position, with the consequent changes in the import capacity, influence the internal level of activity.

2) The structural changes in the economy and their impact on the internal price level. This will necessitate a study of the agrarian problem as a balancing factor to the process of industrialization.

3) The budgetary policy as a stabilizing factor and as a development measure.

4) Government control of prices.

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economy, presenting real alternatives of choice and hence influencing the decisions of the enterprises. This explains the use of the term "model of functioning of a planned economy with built-in market mechanism" as more precise compared with the rather vague term decentralization." If this happens in a purely socialized economy, it is not unreasonable to expect certain economic relationships which take place in a free economy to occur to a degree in an economy like that of Egypt even after the socialist measures which have been applied since 1961.

CHAPTER III

The impact of the external forces on the Egyptian Economy

A study of the Egyptian case is a study of the economic structure of a country to which the old version of the comparative advantage theory applied, in that Egypt specialized in the production of cotton and paid for its imports from the recipts of exports of this single primary product.

This raises the question whether such specilization is as useful in the long run as in the short run, since this specialization may hamper the long run economic development of the country. In this respect Professor Maurice Bye says,[1]

"From the view point of effective factor and demand creation we can argue as follows. Thanks to short term comparative advantage, a country maximizes its products at t_o. This product will, according to the marginal prospensity to save, give rise to additional capital, which in turn will raise the productive capacity, modify itsfactor proportions and satisfy additional demand. In the new conditions of t_1, the principle of comparative advantage will again come into play, new factors of production and new demand will be generated and so on. In every separate period short term comparative advantage prevails."

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1) Maurice Bye,"Internal Structural Changes required by growth and changes in international trade" p 146. International Trade theory in a developing world International Economic Association, 1963.

However, Bye believes that if specialization on agriculture generates no saving, but specialization on industry does, it is not certain that long run comparative advantage will always prevail.

Nurkse suggests that primary producing countries will not be able to make full use of their resources without developing their domestic markets.[1] A theory of international specialization while was applicable in the 19th Century is not workable now. There are several factors which make the growth of output in primary producing countries lag behind the growth of output in industrial advanced countries:-

1) The change in the industrial structure in favour of heavy industries with a low content of raw materials imported.

2) The rise in the share of services in the total output of advanced countries.

3) The low income elasticity of demand for agricultural products.

4) The policies pursued to protect the domestic agricultural production.

5) The economy in the use of raw materials.

6) The introduction of synthetic materials.

Nurkse put forward the theory of balanced growth as a solution to the problem of the size of market.

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1) A.K. Cairncross: "pattern of trade and development". Factors in economic Development, 1962, pp. 190-191.

Other economists argue that there must be structural changes in the economies of underdeveloped countries since it is the only solution to make them less vulnerable to external fluctuations, which disrupt their development programmes and hamper their growth.

In spite of this, many economists still defend the principles of international specialization. In this respect Professor Cairncross emphasises two factors which have affected the position of primary producing countries.[1]

1) Underdeveloped countries have not made sufficient efforts to have a larger share in the world trade in primary produce since 1937.

2) Maizel's calculations suggest that primary producing countries are getting higher prices for their exports than those obtained by the advanced ones. That difference in the unit value of exports made the advanced countries develop their own production of raw materials and intensify the use of substitutes, with the consequence of a fall in the share of exports of primary producing countries. The low elasticity of supply of raw materials in these countries created this situation, and it was aggravated by the domestic industrialization programmes with the result of agriculture being less responsive to external demand.

The second point may be valid to a certain extent in the case of Egypt, for the drop in the cotton crop in 1961 was

1) Ibid p 201

associated with a sharper decline in the exports of raw cotton in 1961 and 1962, due to the existence of an expanding cotton textile industry. This will be explained in detail in due course.

However, the main criticism which can be made of the theory of comparative advantage is that foreign trade must be studied in view of the growth of the economy. This will involve studying the structural changes which are taking place. The relationship between foreign trade and growth is a mutual relationship; in other words, economic growth affects foreign trade and foreign trade also influences economic growth. As regards the impact of growth on foreign trade, Professor Kindleberger suggests a law of declining trade which states that after an initial expansion, foreign trade tends to decline relative to total economic activity.[1] He mentions four stages of economic development;-

1) In the early stages of development, most of the imports consist of food products and some manufactures. In this stage the growth of food imports is likely to grow faster than the growth of domestic product.

2) The second stage occurs where a country wants to build up the social overhead capital, which consists mainly of the output of the construction goods industries which do not rely heavily on imports of capital equipment.

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1) C.P. Kindleberger: Foreign trade and the National Economy, 1962.

3) The third stage involves the development of services, which are subject to a high income elasticity of demand, but, on the other hand, a number of services are subject to the law of declining foreign trade, such as transport services.

4) The stage of import substitution, which requires a change in the whole structure of imports, with more capital equipment and raw materials imported at the beginning of the stage and a declining import ratio at the lat er part of the stage.

In an attempt to construct a dynamic model of international trade, Professor Bye emphasised the importance of the structural changes in the economy.[1] He gave an example of Chenery's relationships between the level of income and industrialization and the level of income and the type of industry. Applying this to international trade theory, one must expect a change in the composition of demand whether for consumer goods or for production goods along with the growth process. We should not expect the same indifference curves to apply all the time but there must be a change in the marginal rates of substitution. Also, there will be a change in the pattern of production according to the profitability of investments, which is determined by the terms of trade between the sectors, and consequently, the

1) op. cit.

structure of domestic product may differ in the period t_1 from the period to.

On the whole we can say that both Kindleberger and Bye were concerned with the impact of growth on the pattern of trade. This will imply a detailed study of the behaviour of the pattern of exports and imports, corresponding to the change in the behaviour of the pattern of domestic production and investment.

As regards the impact of trade on growth, three possible models are suggested:-[1]

1) Trade may be a leading sector, where exports grow at a greater rate than the growth of domestic product. In this case exports provide the stimulant to other sectors of the economy.

2) Trade may be a balancing sector where exports increase at the same rate of growth as domestic product.

3) Trade may be a lagged sector where domestic product, as a result of the internal forces, grows at a faster rate than the growth of exports. This is a Nurksian model where the internal markets are gaining strength.

This third model is the most controversial one, since a lagged export sector may produce price instability, even with the existence of expanding internal markets. However, we have to study each country separately, since actual

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1) Kindleberger, op. cit; see also A. Maizels, International Trade and Industrial growth, 1963, W.W. Rostow, The take off into self sustained growth, International Economic Association, 1963.

experience in each case depends upon the particular economic policies (such as the substitution, the financial and the exchange policies) pursued .

The previous argument has been concentrated on the long run aspect of foreign trade, it is concerned mainly with the structural changes which only take place over the long period. This chapter, although concerned with the developmental or the dynamic aspect of foreign trade, is also concerned with short run or year to year changes. The period under study is only twelve years (1950-1962) which means that short run fluctuations will loom large in the analysis. This does not mean that structural changes are not important in such a short period, but it only suggests that both studies must go together. Both probelms are interrelated, since the instability of export and import prices and changes in the volume of exports cause serious troubles to primary producing countries which may be detrimental to their long run economic plans.

In an advanced country, instability is mainly created by internal forces, while foreign trade may help to correct that instability through operations of the balance of payments. In an underdeveloped country the reverse is true, instability usually comes from abroad, while internal forces tend to correct economic fluctuations. Wallich has ventured the generalization that the ratios of exports, investment and

government expenditure to National income are characteristically different in underdeveloped and developed countries.[1] In an underdeveloped economy, the export ratio is higher than the investment ratio or the public expenditure ratio to national income. This makes the problem very difficult since exports are entirely beyond the control of the state. Furthermore, the supply of money and the state of the government budget are highly correlated with exports, which makes the independant action by the monetary or fiscal authorities less effective than in an industrial advanced country. For this reason, the solution to the problem of instability in primary producing countries is found in the structural theory of growth, which involves a morediversified pattern of exports corresponding to a more diversified pattern of production.

Finally, it is not only thevalue of visible trade which counts, but it is rather the whole situation of the balance of payments, especially in a country like Egypt, where invisibls comprise a significant ratio of its external transactions. According to Delivanis,[2] most underdeveloped countries have got balance of payments difficulties for two reasons:-

1) The difference in the rates of growth between these countries and the advanced ones.

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1) Monetary problems in an export economy, 1950.
2) D.J. Delivanis: Existing International payments and exchange systems in relation to problems of growth. International Trade theory in a Developing world. International economic association, 1963.

2) The attempt to increase the rate of growth and its consequences of internal monetary instability and depletion of foreign exhange reserves. He suggests four basic requirements for the proper development of an economy:-

1) An adequate amount of foreign currency.

2) The chance of having more capital from abroad if it is not available at home.

3) Flaxibility of exchange rate.

4) If the exchange rate is not permitted to fluctuate, there must be another solution to cope with any disequilibrium that may arise and which will be aggravated along with the growth process.

These requirements are basic for any development programme. This means that a study must be made of the importance of the various items which constitute the balance of payments both on current and capital accounts. It will be interesting to see how far the development process in Egypt is associated with disequilibrium in the foreign position of the country. An investigation will be made of the following points:-

1) The vulnerability of the economy to cyclical fluctuations abroad to indicate the short run effects.

2) The long run structural changes of exports and imports corresponding to structural changes in gross domestic product.

3) Changes in the overall import capacity, including foreign reserves and foreign aid. Exchange rate changes will be studied in the light of the changes in the import capacity.

Vulnerability to External Forces.

It has been explained above how fluctuations of foreign trade in primary producing countries play an important role. It is misleading to say that trade is more important to advanced countries than to underdeveloped ones on the basis of absolute figures; trade figures should be related to national income figures. In this respect Professor Singer[1] pointed out that fluctuations of trade in primary producing countries tend to be proportionately more violent, where the export sector is the main source of capital formation. The problem of trade fluctuations has been the concern of a large number of conferences the last of which was the important one held in Geneva in 1964 (conference on Trade and Development.

In order to measure the reactions of trade fluctuations on the Egyptian economy three methods will be used:-

1) Real income in Egypt will be correlated with real output in the Western countries.

2) Real income in Egypt will be correleted with real export proceeds.

3) In Chapter: VI the impact of export and import prices on the internal price level will be discussed in detail; only the effect of exports and imports on real income will be studied here.

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1) H.W. Singer: International Development, growth and change; 1964. p 161.

As regards the first measurement, the first point to emphasise is that the United States of America is the greatest economic power in the world. Any recession or boom which takes place in the United States must have its repercussions on other parts of the world through the international trade multiplier. The second area which may have autonomous booms or recessions is Western Europe. The non-industrial countries are assumed to have no cyclical autonomy and therefore act passively.[1] The impact of each area on other areas (excluding the non-industrial area) depends on other forces in the economy such as government expenditure, private investment including changes in stocks, and private consumption.

Comparing Europe with the United States, we find that during the fifties the European economy was not fluctuating as severely as the American. There has not been a single year between 1950 and 1960 during which the O.E.E.C. figures have shown a decline. The worst years were 1952 and 1958, but in both cases the recession only resulted in a slower rate of growth. This can be attributed to the working of the internal forces in the European Economy.

To what extentwas the Egyptian economy influenced by the income levels in U.S.A. and Western Europe?

The table below shows, for the period 1951 to 1961, the

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1) Lamfalussy: International Trade and Trade Cycles: International trade theory in a developing world 1963.

level of activity in Egypt and the aggregate level of activity in the Western Countries (O.E.C.D.). These results are illustrated in the accompanying scatter diagram.

Table III_1

Volume indices of G.D.P.
in the O.E.C.D. Countries compared
with the level of real income in Egypt.
1953 = 100

Year	O.E.C.D. countries	Western Europe	United States	Egypt (real income)
1951	92.5	92.7	92.6	107.2
1952	95.8	95.2	96.0	104.0
1953	100.0	100.0	100.0	100.0
1954	100.6	105.4	98.4	101.3
1955	108.0	111.8	106.3	105.2
1956	111.4	116.9	108.3	108.8
1957	114.5	121.9	110.5	113.2
1958	114.4	124.7	108.8	119.8
1959	120.8	130.1	116.0	127.7
1960	125.6	138.5	119.0	135.9
1961	129.4	145.5	121.2	141.4

Sources: 1) Statistics of National Accounts 1950 - 1961 Organization for Economic Co-operation and Development (O.E.C.D.)

2) The National income of the U.A.R. 1939-1962, Bent Hansen Donald Mead, Institute of National Planning, Cairo[1]

The previous table shows, that from 1951 to 1953, the aggregate domestic product of the O.E.C.D. countries was rising while the indices of real income in Egypt showed an

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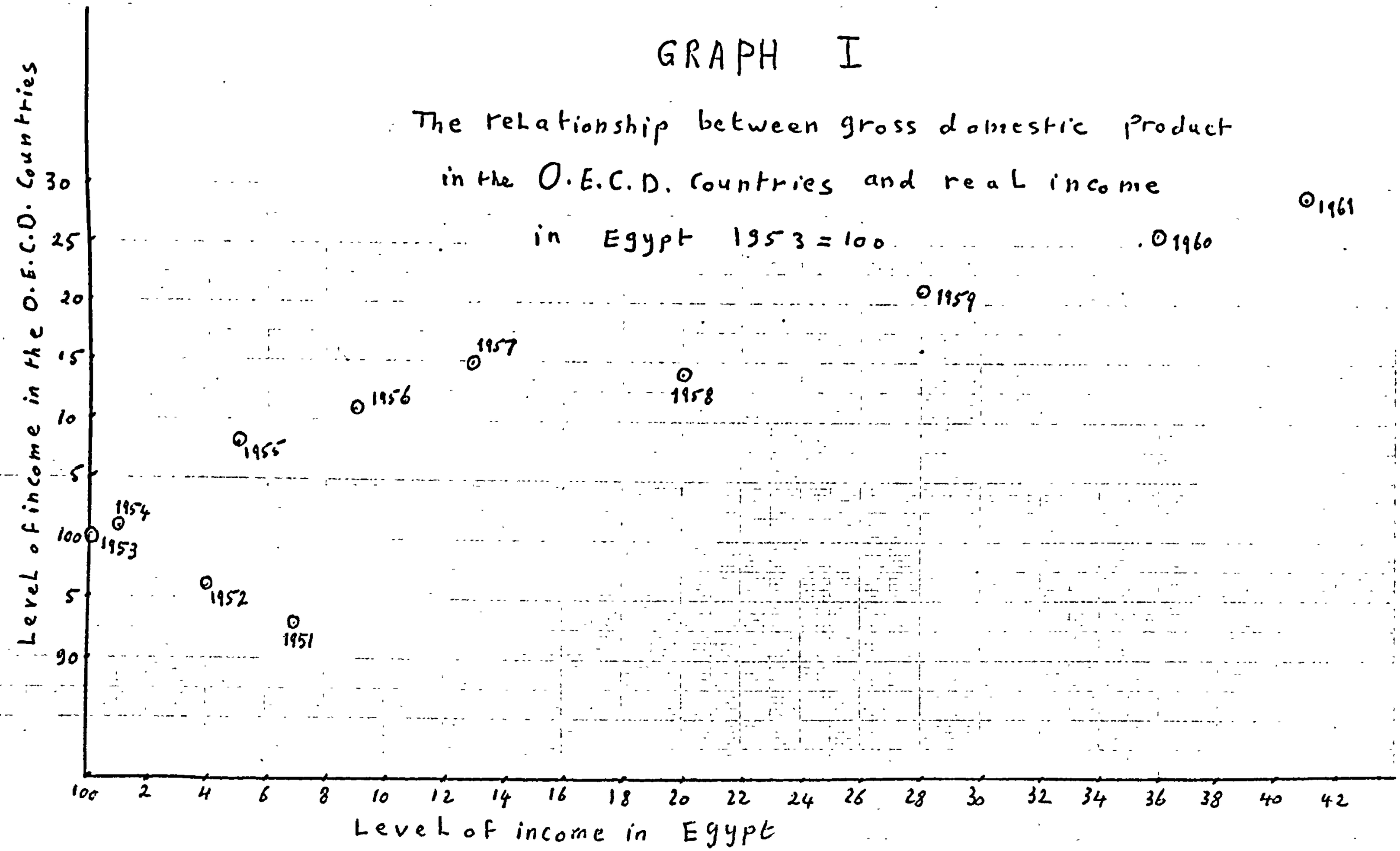
1) The figures calculated by Hansen and Mead are fiscal year figures for the period 1952/3 - 1961/2. These figures have been extended to 1950/1 and calendar year figures were deduced by simple interpolation. Indices of real income have been set up and made comparable with the figures of the O.E.C.D. countries. The difference between the two sets of figures is that in the case of Egypt the figures are of real income, not real domestic product.

GRAPH I

The relationship between gross domestic product in the O.E.C.D. countries and real income in Egypt 1953 = 100



absolute decline. This could be explained by the fact that the collapse of commodity prices from 1951 to 1952 had a depressive impact on the level of activity in Egypt because of both the adverse change in the terms of trade and the secondary effects, which meant a spreading of the depression throughout the economy. In spite of the rise in the absolute level of domestic product in the O.E.C.D. group, the slow down of the rate of growth caused a drop in the value of Western Europe imports from the non-industrial countries. The textile industry, which is the major consumer of the Egyptian Cotton, experienced the highest degree of recession.

In 1953, although the situation in both Europe and U.S.A. improved, the position in the non-industrial countries was still depressed. In 1954, the combined rate of growth in the O.E.C.D. group slowed down, although the rate of growth in Europe was improving. During this year the level of income in Egypt improved slightly (1.3%).

In the period 1954 - 1957, the level of activity in Egypt was growing in line with the level of activity in the Western countries. During this period, government intervention was taking place on a larger scale which means that the improvement in the level of activity was partly due to the working of the internal forces. In 1958, while both Western Europe and the United States experienced a depression, the Egyptian economy achieved the highest rate of growth since 1950. This could be attributed to one or both the following reasons:-

1) The industrialization programme started and the pattern of imports changed in such a way as to allow the import of the necessary raw materials and capital equipment. This may be considered the most important action made by the government to insulate the economy from external fluctuations.
2) The existence of foreign exchange reserves and the use of these reserves in filling the gap between imports and exports when the country suffers from a fall in volume or prices of exports.

As from 1959, although the level of activity in Egypt was highly correlated with the level of activity abroad, the rate of economic growth accelerated in such a way that we cannot attribute the high rate of growth solely to the external forces; it was more likely the start of a new era of development programming, as shown by the great difference between the growth rates in the period 1951-57 and 1958-61.

A direct measurement of the impact of short run external fluctuations on the internal level of activity is the relationship between exports, terms of trade and the level of real income. For this reason, the following table has been set up.

Table III_2
Indices of trade fluctuations
and the level of real income.

1953 = 100

Year	unit value of exports	volume of exports	Terms of trade[1]	Real export proceeds	real income
1951	179	82	206	169	107.2
1952	136	77	132	102	104.0
1953	100	100	100	100	100.0
1954	113	89	118	105	101.3
1955	111	91	112	102	105.2
1956	121	86	121	104	108.8
1957	134	93	126	117	113.2
1958	116	104	117	122	119.8
1959	105	108	119	128	127.7

Sources:- calculated from:-
1) Year Book of International Trade Statistics (U.N.)
2) Hansen and Mead National Income of the U.A.R. op. cit.
3) Bulletin of the National Bank of Egypt.

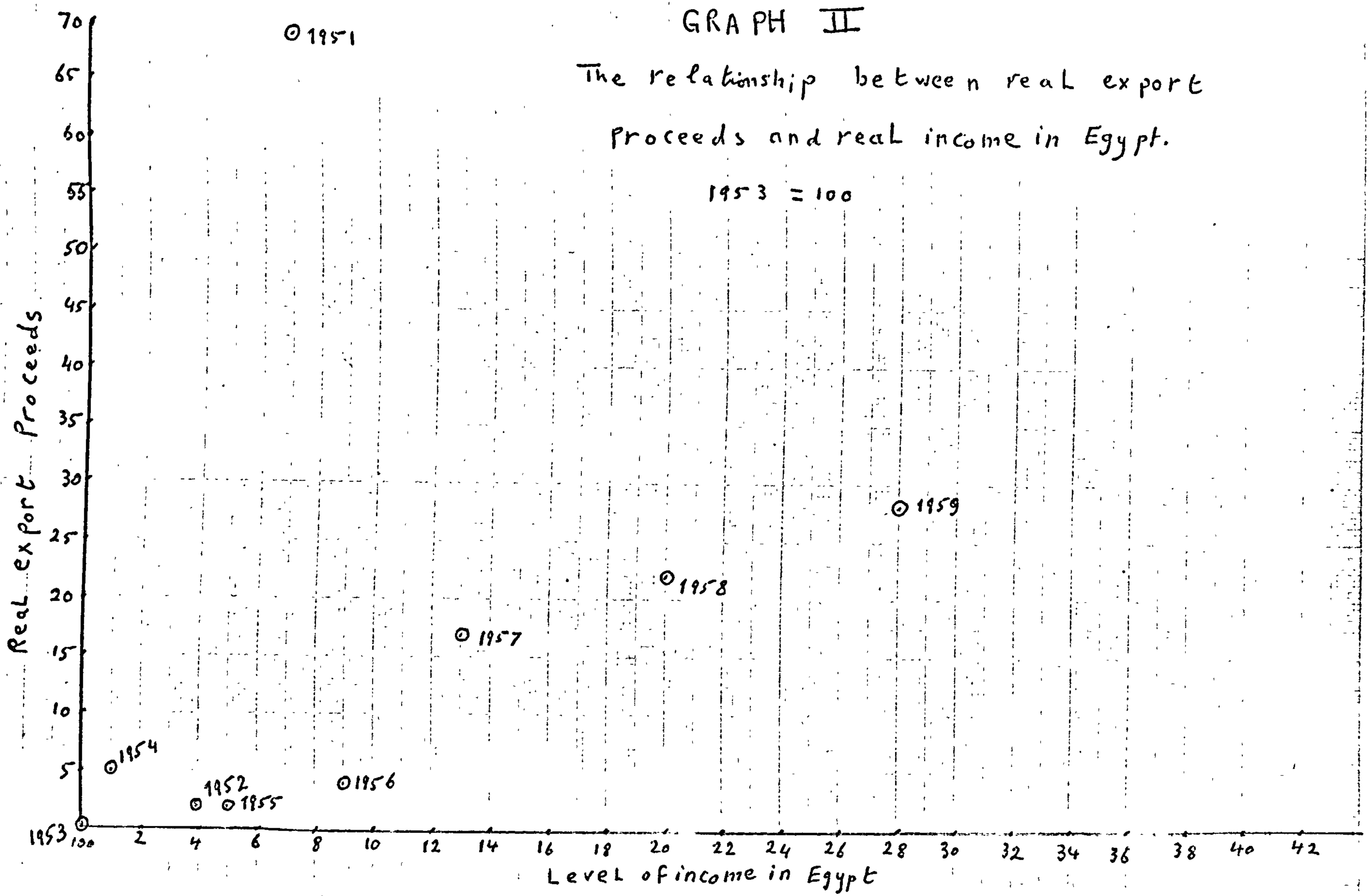
The preceding table shows that fluctuations in export prices are more violent than fluctuations in volume. The average year to year change in prices was about 23 against a year to year change in volume equivalent to 11. As regards the relationship between fluctuations of export prices and fluctuations of real income, the direct link between the two variables is the gains from the terms of trade. Gains from the terms of trade may be the result of higher export prices or lower import prices. As indicated in Table III_2, there is a strong connection between the change in export prices and the change in the terms of trade, in other words

1) Unit price of export ÷ unit price of imports.

GRAPH II

The relationship between real export proceeds and real income in Egypt.

1953 = 100



fluctuations in the terms of trade are more attributable to the change in export prices than to the change in import prices. In the period 1950 - 59 it was found that the average change in the unit price of exports was 23 against 6 for the change in the unit price of imports. However, in order to estimate the gains from the terms of trade, we must take into consideration the volume of exports as well as the prices of exports and imports. Any measurement to indicate the impact of external fluctuations on real income must include gains from terms of trade and not merely price changes. A corresponding relationship is the connection between real export proceeds[1] and the level of income. This relationship will involve the volume and prices of exports as well as the prices of imports. The table shown above and the accompanying scatter diagram show that the drastic fall in real export proceeds between 1951 and 1952 was accompanied by a drop in the absolute level of income which extended to 1953. In 1955, the decline in real export proceeds was compensated by the government action, with the result of an approximate rate ofgrowth of income of 4%. After 1958, the internal forces weighted more than the external factor. This resulted in a higher rate of growth than the previous years.

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1) Money export proceeds ÷ unit price of import (volume of exports x terms of trade).

The importance of short run fluctuations of exports is also in its possible impact on investment, money supply and government revenue. The following table gives statistics of exports, investment, and money supply, while the relationship between external fluctuations and government revenue will be discussed in Chapter V.

Table III_3

Value of Exports, Investment and Money Supply (in million pounds)

Year	Exports	Investment[1]	Money Supply[2]
1951	203.1	121.5	430.3
1952	145.1	121.5	403.2
1953	137.3	125.0	411.3
1954	138.3	139.0	443.0
1955	138.4	159.1	446.5
1956	142.3	161.5	473.6
1957	171.6	158.2	508.5
1958	163.8	173.4	521.8
1959	154.3	176.4	532.1
1960	191.6	198.1	587.3
1961	168.9	238.5	644.4
1962	158.3	277.5	641.1

Sources:- calculated from.
1) Bulletin of the National Bank of Egypt
2) Planning Committee, Cairo, unpublished figures of investment.
3) For the latest years, figures of investment are compiled from Bent Hansen, National Outlay in the U.A.R. Institute of National Planning, Cairo
4) International financial statistics.

Neither investment nor money supply are closely correlated with the amount of export proceeds. However, this is not an

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1) Investment figures are interpolated from fiscal year figures
2) Annual averages based on quarterly data. It includes time deposits, saving bank deposits and government deposits.

unexpected result since both money supply and the amount of investment are subject to government controls. However, if investment and other items of expenditure had been highly correlated with the fluctuations in export proceeds, the impact of these fluctuations on national income would have been much stronger. For this reason we may be able to classify primary producing countries into two categories:-

1) Countries which are extremely exposed to external fluctuations and which cannot combat the cycles by fiscal and monetary weapons, such as some Latin American Countries.

2) Countries which are exposed to external fluctuations but in which, on the other hand, there is room for fiscal and monetary weapons to operate and offset such cycles. Among these countries we can include Egypt. This brings us to the next section concerning the structure of exports.

Structure of Exports.

This section will be concerned with trends rather than year to year variations. First the long run relationship between exports and gross domestic product must be examined to see how far the growth of the productive capacity allows for more exports. Second, there is the change in the pattern of exports to consider, to see whether the structure of exports changed to correspond with the structural changes in the economy as a whole.

As has been mentioned before, exports may be a leading sector, a balanced sector or a lagged sector. It may be interesting to find out under what category the Egyptian

economy falls.

During the period under study the Egyptian government was exerting various efforts to develop exports. The main features of the government policy may be summarized as follows.[1] -

1) All exports-with some exceptions to be mentioned later - are freely exported through the customs administration and the value is paid in the currency of the importing country, without any restrictions concerning quantity, method of payment or kind of currency.

2) Certain items are not allowed to be exported if they are essential for the local consumption requirements and are in short supply; most of these items are foodstuffs. The level of restrictions on the export of these goods varies according to the available supply (For example, the production of rice in Egypt fluctuates. In the years when there is a shortage in its production, the government prohibits its export). In some cases there is outright prohibition, in others a global quota for exports is established taking into account domestic needs.

3) Cotton yarn and cotton textiles enjoy a subsidy equivalent to the difference between the price of cotton component in these two items and the price of other kinds of cotton

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1) The Accession of the U.A.R. to the G.A.tt. document No L/1816 (Restricted) p. 24.

used in their production in other exporting countries. The problem arises from the fact that high grade cotton is used in producing low quality yarn and textiles.

Exports to countries with convertible currencies are encouraged taking into consideration the need for diversifying the markets.

These are the main characteristics of the export policy in Egypt. While it may seem satisfactory for increasing exports, still there are some strings which may hamper the development of exports, such as the the prohibition of certain items to provide for the domestic market, or the diversification of export markets. However, this is the dilemma of any underdeveloped country, while the country is seeking to promote its exports, we may find that the policy pursued is a collection of contradictory regulations.

In order to assess the results of the export policy, the following table has been set up to compare the growth of exports with the growth of domestic product.

Table III_4

Export proceeds in relation to gross domestic product at current market prices

Year	Exports in[1] million pounds	gross domestic product[2] in million pounds	export coefficient Exports/gross domestic product.
1951	203.1	1053	19.3%
1952	145.1	966	15.0%
1953	137.3	934	14.7%
1954	138.3	988	14.0%
1955	138.4	1043	13.3%
1956	142.3	1098	12.9%
1957	171.6	1161	14.8%
1958	163.8	1230	13.3%
1959	154.3	1318	11.7%
1960	191.6	1409	13.6%
1961	168.9	1551	10.9%
1962	158.3	1614	9.8%

Sources:- calculated from
1) Bulletin of the National Bank of Egypt.
2) Bent Hansen and Donald Mead op. cit.
3) Bent Hansen, National outlay in the U.A.R. op. cit.
4) The revolution in (The Statistical Department)[2] ten years

Table III_4 shows that the ratio of exports to National income has been declining steadily. The growth of domestic product at current prices was faster than the growth of money exports. In some years there was a sharp decline in the value of exports in spite of the growth of national income. However this relationship may be criticized on the basis that both variables are given in money terms without taking into consideration the relative changes in the deflators. In this

1) Including re-exports.
2) Figures transformed into calendar years instead of fiscal years. They are also re-adjusted to current market prices by including import duties.

case the real measure will be the change in the ratio between the volume of exports and the volume of domestic product.

Table III_5

Indices of Export Volume and Volume of domestic production

Year	Export volume	domestic production	export volume / domestic production
1951	82	99.9	82.1%
1952	77	100.6	76.5%
1953	100	100.0	100.0%
1954	89	102.3	87.0%
1955	91	104.6	87.0%
1956	86	107.8	79.8%
1957	93	110.0	84.5%
1958	104	118.8	87.5%
1959	108	126.0	85.7%

Sources:- calculated from
1) Year Book of International Trade Statistics
2) Hansen and Mead op. cit.

The elimination of the price element changes the picture slightly; while the use of current values produced a lagged model, the use of volumes instead of values produced an approximately balanced model. However, a deterioration in the terms of trade requires a greater volume of exports in order to get the same amount of imports, which means that, in an economy with a constant propensity to import, the growth of export volume must exceed the growth of domestic production if there is a deterioration in the terms of trade.

Turning to the pattern of exports certain points have

to be examined:-

1) To what extentwas the government successful in its policy of export diversification? This requires a disaggregation of the Egyptian exports into raw materials, semi-manufactured, and manufactured goods.

2) How far does the Egyptian case agree with Nurkse's thesis about the sluggishness of the external demand and the necessity for a balanced growth system?

3) How far was industrialization in Egypt responsible for the shortage of supply of raw materials for export as Professor Cairncross suggests?

4) How far was the government policy effective with regard to the prohibition of food exports?

Table III_6

Pattern of Exports in million pounds

Year	Total Exports	Food[1] Exports	Semi Manu-fact-ured	Finished Manufac-tured	Cotton raw	Cotton yarn	Cotton fabrics
1952	145.1	4.9	7.8	4.0	126.4	3.4	0.9
1953	13713	6.6	7.8	3.9	116.3	2.0	0.9
1954	138.3	7.4	11.8	4.8	113.1	4.4	1.8
1955	138.4	13.2	14.7	5.1	107.4	4.4	2.2
1956	142.3	17.9	17.3	13.7	98.9	4.5	3.6
1957	171.6	18.9	21.0	13.8	124.2	5.8	3.6
1958	163.8	23.8	25.6	12.3	109.8	7.1	4.3
1959	154.3	11.6	12.8	12.9	110.1	5.9	4.7
1960	191.6	21.3		30.4	134.7	9.1	6.7
1961	168.9	19.5		30.8	104.6	7.7	6.1
1962	158.3	22.8		31.3	83.9	11.2	7.5

1) Including manufactured food products which are also included in the item finished manufactured exports.

Sources: calculated from:
1) Year Book of International Trade Statistics
2) Bulletin of the National Bank of Egypt.
3) Bulletin of the Central Bank of Egypt.
4) Monthly economic Bulletin, Ministry of Economy, February 1964.

Table III$_7$

Main categories of exports as a proportion of total exports

Year	Food	Semi Manufactured	Finished	Cotton Raw	Yarn	Fabrics
1952	3.4%	5.4%	2.7%	87.1%	2.3%	0.6%
1953	4.8%	5.7%	2.8%	84.7%	1.4%	0.6%
1954	5.3%	8.5%	3.5%	81.8%	3.2%	1.3%
1955	9.5%	10.5%	3.7%	77.6%	3.2%	1.6%
1956	12.6%	12.1%	9.6%	69.5%	3.2%	2.5%
1957	11.0%	12.2%	8.0%	72.4%	3.4%	2.1%
1958	14.5%	15.6%	7.5%	67.0%	4.3%	2.6%
1959	7.5%	8.3%	8.4%	71.8%	3.8%	3.0%
1960	11.1%	15.8%		70.3%	4.7%	3.5%
1961	11.5%	18.2%		61.9%	4.5%	3.6%
1962	14.4%	19.8%		53.0%	7.1%	4.1%

From the previous two tables we can observe that the pattern of exports has changed, with an increase in the ratios of food, manufactured and semi-manufactured goods, while the importance of raw cotton has declined, and its export whether in absolute amounts or as a ratio of total exports has fallen. However, the increase in the exports of manufactured goods may be attributed to the subsidy offered to the exporters of certain products such as the subsidy paid by the Cotton Textile Consolidation Fund to the exporters of cotton textile products.

This is the case which Professor Cairncross argued; where the encouragement of domestic industry is at the expense of the exports of raw materials. The Egyptian

government in order to develop textile exports has used types of subsidies which is certainly detrimental to raw materials export . Nevertheless, there is a possibility of a genuine increase in the export of manufactured goods and it may be necessary at the beginning to subsidize industrial exports till foreign markets have been established. It is essential for underdeveloped countries not only to expand their internal markets, but also to develop new export markets for their industrial products. In this respect we may quote Dr. I.G. Patel who says:-[1]

"Needless to say, the drive for import saving cannot be carried to the poiht at which it defeats its purpose by cutting too deeply into efforts to promote exports. From the view point of balance of payments strength, export promotion is just as important as saving on imports. Even the familiar argument that there is a greater degree of uncertainty in any assessment of chances for larger exports then in an estimate of potential import saving, has at best, a limited validity, when we speak of a comparatively long period of time where mistakes are as likely to be made in estimating domestic demand as in gauging foreign demand and supply, where at least the law of averages would apply with somewhat greater force. Similarly the superiority of import

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1) Trade and payments policy for a developing economy. International Trade Theory in a developing world, International economic Association, 1963. pp 315-6.

substitution over export promotion cannot be established merely by reference to the fact that at any given time existing exports face a somewhat unresponsive international market. In the content of long term growth, the resources that go to import substitution can equally be diverted to the creation of new export opportunities where domestic supply conditions are more favourable than in the case of existing exports. Whatever judgement, therefore, one arrives at about the balance to be struck between import substitution and export promotion in the light of long run possibilities and potential would still be a relative judgement, and it certainly would not be divorced from considerations of comparative cost."

This argument does not contradict Nurkse's thesis, because even with a changing pattern of exports in favour of manufactured goods, still we have to rely on domestic markets. All that can be said is that both export promotion and import substitution must go together. One cannot deny that there has been a change in the structure of the Egyptian exports and the degree of diversification has improved. How far can this improvement be evaluated? This will be considered after an analysis of the degree of diversification of the economy as a whole has been given, and this will be the concern of Chapter IV.

Finally, the impact of the change in the pattern of exports on the internal price level could be examined by a study

of the tendencies of food exports whichrepresent a pressure on the available supply of food. It has been mentioned before that the Egyptian government, in the period under study, prohibited the export of consumer goods which were essential for the domestic markets. However, it seems that the government policy was not strictly applied since the foregoing figures show a rise in the ratio of food exports. Yet, anr judgement will be incomplete unless we study the trend of food exports in relation to the local production and imports of food, and this will also be discussed in the next chapter.

Imports and the level of Income

Import volume is the external factor which is always growing with the growth of national product and which is the reason for seeking an expanding export sector. A country embarking upon a development policy is faced with the following problems:-[1]

1) A rise in the demand for imports of consumer goods with special reference to the increase in the demand for food.

2) A growing demand for equipment and raw materials as a result of industrialization and to improve productivity.

3) Limited foreign exchange reserves due to the low export capacity.

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1) Dr. Patel, Ibid, pp 314-315.

For these reasons a policy of importrestrictions is advocated by most of the underdeveloped countries and such a policy has been approved by international ecohomic organiations. The G.A.T.T. articles of agreement state that countries may resort to import controls either to protect their infant industries or to correct a balance of payments disequilibrium. However, the method of import control is still controversial, some economists advocate the tariff as a measure of protection while others sponsor a policy of administrative control.

The import policy which was followed in Egypt during the period under study could be summed up as follows:-[1]

1) Essential consumer goods such as Kerosene, medicine and wheat were imported, at the same time these goods were subsidized by the government in order to be sold to the consumer at reasonable prices. Figures of the subsidy will be analysed in the chapter on price controls.

2) Imports of luxury goods and goods produced domestically were prohibited. In this respect it may be useful to see how far the prohibition of luxury goods imports helped to promote domestic savings and how far it was associated with more production of substitutes.

3) In January 1957 a foreign exchange budget was set up, the main features of which were:-

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1) Dr. Kaisouni: Minister of Economy in a press conference, July 1962; see also the accession of the U.A.R. to the G.A.T.T. document L /1816.

a) Available foreign exchange was estimated according to the proceeds of exports, visible and invisible, with special reference to the dues of the Suez canal and the credit facilities which were contracted with other countries and organizations.

b) This available foreign exchange was classified into convertible and non-convertible currencies.

c) Allocation of the available foreign exchange was carried out among the different sectors of the economy and among different projects according to an order of priority.

d) High priority was given to the importation of capital goods, machinery, raw materials, spare parts, insecticides and some food supplies. Such priorities had to be set up in line with the general economic objective, which was a balanced growth among the various sectors of the economy and between production and consumption.

Following these guiding principles, imports became subject to licences, issued by the administration of imports of the Ministry ofEconomy, in addition to the regulations set by the Exchange Control Department.

To what extent was this policy successful?

To answer this, it will be useful to examine the behaviour of the import co-efficient and the saving ratio over the period, and also the relation between the change in the import structure and the rate of growth of domestic product.

Table III$_8$

Imports, Savings, and Money Income
in million pounds

Year	Imports (IMP)	Savings[1] (S)	Money Income (Y)	Import Co-efficient (IMP/Y) %	Saving Ratio (S/Y) %
1952	223.5	6I.I	966	23.1	6.3
1953	177.8	II7.8	934	19.0	I2.6
1954	161.4	I23.0	988	16.3	I2.5
1955	183.2	II3.I	1043	17.6	I0.8
1956	186.0	I04.7	1098	16.9	9.5
1957	182.6	II9.I	1160	15.7	I0.3
1958	238.2	I38.5	1230	19.4	II.3
1959	214.4	I20.6	1318	16.3	9.2
1960	225.0	I5I.4	1409	16.0	I0.I
1961	243.8	I52.5	1551	15.7	9.8
1962	302.9	II4.5	1614	18.8	7.I

Sources: Calculated from:
1) Bulletin of the National Bank of Egypt.
2) Bent Hansen and Donald Mead. op. cit.
3) The Revolution in ten years, statistical Atlas, Statistical Department, Cairo.
4) International financial statistics.
5) Foreign aid to the U.A.R. Said E.L. Naggar, Institute of National Planning Cairo.

The preceding table shows that the government was to a certain extent successful in lowering the import co-efficient, although the fall was less than the decline in the export ratio (exports divided by money income). As regards the relationship between imports and savings, it may be argued that the imposition of import restrictions is for the benefit of domestic saving, as the prohibition of importing the luxury consumer goods will damp down the consumption of the upper calsses with the result of an increase in the overall

1) Saving is defined as Investment - (foreign aid + fall in foreign reserves; Capital outflow).

saving ratio. However, the foregoing figures do not show a close inverse correlation between the two items. This is not surprising since the saving ratio may be determined by factors other than the import co-efficient, an important one of which is the production of substitutes within the country. It has often been argued that underdeveloped countries tend to produce the goods which they previously imported, including the luxury ones. This renders a policy of import control ineffective in so far as the level of saving is concerned.

Pattern of Imports

It has been explained before that fluctuations of exports and the lag of their growth behind the growth of domestic product is a main reason for economic instability. In the Egyptian case it was shown that the export co-efficient was declining at a faster rate than the import co-efficient. The solution to such a balance of payments problem may be both structural and financial. It requires a substitution policy, which implies a change in the whole structure of the economy, with a corresponding change in the pattern of imports. However, it must be emphasised that a change in the economic structure will not save on imports in the immediate future; we must expect that such structural changes will only produce a cut down in imports after a considerable period of time, and after the process of change has been completed. In this respect Raoul Prebisch distinguishes between three categories of

imports[1]

1) "The raw materials and intermediate goods that are essential for maintaining economic activity at the maximum level of employment whether it consists of the production of consumer goods and services or of capital goods.

2) The end consumer goods needed to satisfy the regular demand of the wage or salary earning active population with fixed incomes.

3) The consumer or capital goods required to satisfy the demand of the variable income groups, chiefly entrepreneurs."

He suggests two co-efficients of import, the first one includes items 1 and 2. It does not change with fluctuations in exports since such imports are essential to keep the economy going. The second co-efficient includes the third item and is highly sensitive to export fluctuations. Both consumption and investment of entrepreneurs are a function of export incomes. However, the import co-efficient must not only be related to export fluctuations but also to the whole institutional framework. It is the structure of the economy which determines the weight of the two co-efficients in the overall import co-efficient. We have seen in this chapter how the Egyptian government succeeded in insulating the level of investment and money supply from export fluctuations. The Egyptian classification of imports is similar to that described by Prebisch, but due to the existence of the government as an

1) op cit. p 10.

entrepreneur and as a regulator of the economy, the third category is not as distinct from the other categories of imports as in the case of purely private enterprise economy. The import co-efficient in Egypt may be divided into two categories:-

1) The import co-efficient of consumer goods which is subdivided into two main items:-

a) Supply goods (wage goods), whose prices are controlled by the government, such as Wheat, meat, Kerosene and pharmaceutical products.

b) Other consumer goods, which are subject to severe import licences and exchange regulations.

2) The import co-efficient of productive goods which consists of:-

a) Intermediary goods namely raw materials and semi-manufactures necessary for production.

b) capital equipment.

c) Transport equipment which may be considered as part of the investment in equipment.

Comparing this classification with that of Prebisch, we may say that No 1 a) corresponds to the second category of Prebisch, while 1 b) corresponds to goods consumed by entrepreneurs (non-essentials). However, in the Egyptian case, all items are controlled by the government and we cannot say which will fluctuate with incomes and which will not, since the import of all items must be in line with the development

policy of the government. This suggests that the determination of imports in a regulated economy, like that of Egypt is closely related to the long run pattern of growth of the economy, rather than to short run fluctuations in exports. Therefore, if we try to measure the marginal propensity to import as Δ IMP /ΔY, we may have a different ratio every year, with some years even having a negative marginal propensity to import. In this case it is better to see the long run trend of the ratio between imports and income, as is shown on Page 89.

Table III$_9$

Composition of Egyptian Imports in million pounds

Designation	1952	1955	1956	1957
Capital goods	30.9	40.7	42.0	37.5
Intermediary goods	72.6	79.7	89.2	81.3
Supply goods	65.1	27.7	32.1	46.3
Others	54.9	35.1	22.7	17.5
Total	223.5	183.2	186.0	182.6

Percentages of various categories %

Designation	1952	1955	1956	1957
Capital goods	13.8	22.2	22.6	20.5
Intermediary goods	32.5	43.5	47.9	44.5
Supply goods	29.1	15.1	17.2	25.3
Others	24.6	19.2	12.3	9.7
Total	100.0	100.0	100.0	100.0

1958	1959	1960	1961	1962	Designation
49.4	50.0	53.0	63.9	67.6	Capital goods
105.5	83.5	95.7	91.4	97.2	Intermediary goods
55.2	52.1	46.7	52.6	81.8	Supply goods
28.1	28.0	29.6	30.6	56.3	Others
238.2	214.4	225.0	238.5	302.9	Total

1958	1959	1960	1961	1962	Designation
20.7	23.7	23.5	26.8	22.3	Capital goods
44.3	38.9	42.5	38.3	32.1	Intermediary goods
23.2	24.3	20.7	22.0	27.0	Supply goods
11.8	13.1	13.3	12.9	18.6	Others
100.0	100.0	100.0	100.0	100.0	Total

Sources: Calculated from 1. The Annual Budget Reports
2. The Central Bank of Egypt No 1 1963
3. Ministry of Economy, Planning Dept.

The transformation of the structure of the Egyptian economy has necessitated a change in the composition of imports. Both the value of capital equipment and the ratio of capital equipment to total imports tended to increase. The importation of intermediary goods has risen in value, but the highest ratios to total imports were achieved in the period 1955-1960. An investigation of the import content in total investments and also an investigation of the ratio of imported intermediary goods to total imputs of raw materials in the manufacturing sector is obviously desirable. This has been done in the next Chapter.

As regards supply goods imports, they were increasing between 1955 and 1962 whether as absolute figures or as a ratio to total imports. Nevertheless, the highest ratio was in 1952 when the imports of cereals were exceedingly high.

The preceding figures are given at current prices, and it may be better to build our analysis on volumes rather than on values. For this reason, an estimation of import prices of various categories has been made. It is a weighted arithmetic average based on particular commodities in each category[1]

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1) B. Ramperessad: Some aspects of the external trade and payments of Trinidad and Togo 1951 - 1959. Social and Economic Studies June 1963.

Table III_{10}

Indices of prices of various Categories of imports

1952 = 100

Designation	1952	1955	1956	1957
Capital goods	100	90.9	98.3	97.7
Intermediary goods	100	84.6	93.0	99.0
Supply goods	100	100.0	78.0	72.3
Food products	100	106.0	77.7	73.0

Indices of real imports of various categories compared with real gross domestic product

1952 = 100

Designation	1952	1955	1956	1957
Capital goods	100	145.0	138.2	124.3
Intermediary goods	100	129.7	132.1	113.1
Supply goods	100	42.5	63.7	98.3
Gross domestic product	100	103.9	107.1	109.3

Sources: same sources as table III_9

From table III_{10}, it could be observed that prices of food and supply goods experienced a decline while those of capital goods were rising. In the case of intermediary goods they were rising between 1955 and 1959 after which they started to fall. In the next chapter it will be interesting to see the impact of the change in prices of various categories of imports on the internal price level.

As regards the relationship between the growth of real domestic product and the real imports of various categories

1) The drop in prices of supply goods and food products is attributable to the decline in the price of wheat, which comprises most of the imports in these categories. Prices did not fall in 1955 because Egypt did not import wheat in this year.

1958	1959	1960	1961	1962	Designation
99.7	106.6	107.0	106.4	115.5	Capital goods
102.0	103.8	91.1	80.0	88.0	Intermediary goods
64.4	62.7	60.7	57.6	68.4	Supply goods
62.0	58.0	58.0	61.0	62.0	Food products

1958	1959	1960	1961	1962	Designation
160.2	154.0	160.2	194.2	189.3	Capital goods
142.4	110.7	144.6	157.3	152.1	Intermediary goods
131.6	127.6	118.1	140.2	183.7	Supply goods
118.0	125.2	132.9	137.9	N.A.	Gross domestic product

there is a fairly good correlation between the growth of domestic product and the imports of intermediary goods; in 1958, for example, the high rate of growth which was achieved was accompanied by the highest increase in the imports of raw

materials. This suggests that Egypt could perhaps make up for a failure of export proceeds to grow by changing the pattern of imports in favour of the intermediary goods. This would allow domestic product to grow beyond the limits otherwise set by total exports. However, it is dangerous to allow the composition of imports to become so rigid that any shock coming from outside will cause highly depressive effects. In such a case a country has to forgo an acceptable rate of growth unless it has got access either to foreign assistance or to accumulated foreign reserves.

If there are no reserves, the country may be subject to successive devaluations, with a consequence of internal price instability, if it attempts tomaintain its growth rate.

Finally, the volume of imports of supply goods has increased considerably. Comparing the imports of supply goods with the growth of domestic product, we can see that, as from 1955, the growth of such inports in real terms was faster than the growth of domestic product. This may be due to the government policy to stabilize the prices of such items. However, this must also be studied in relation to the domestic production of these products.

The Balance of Payments and the level of income.

In this section the whole foreign position of the country will be discussed in relation to the changes in the level of activity. In a country like Egypt, where services comprise a significant ratio of the foreign exchange receipts, it will not be possible to study the currency situation in terms of the balance of trade only. It is the net balance of payments on current account (including both visible and invisible items) which represents the contribution of the foreign sector to the national economy.

The connection between the balance of payments and the flow of income is expressed by the following identity.

$Y = C + I + G + F$ where

Y = National income or national outlay at current market prices.

C = Private consumption.

I = Private investment

G = Government expenditure

F = Foreign balance on current account.

This identity shows the importance of each item of income generating expenditure and by simple ratios between every item and the national income we can deduce the contribution of this item to the national income. Items on capital account may be ignored entirely as mere contra entries of the balance of payments on current account, for, according to the principles of social accounting, international

capital transactions merely change the form of assets and liabilities of the domestic residents i.e. capital export is an exchange of local assets with foreign assets. Such transactions do not create income. In addition to this, since the foreign transactions must always balance, the balance on capital account must always be equal and opposite in sign to the balance on current account.[1]

A more comprehensive study of the effects of the balance of payments upon domestic income is to find out the causal relationship between F and other items of expenditure (the multiplier effect). Exports may be considered as part of the multiplicand which is not determined by the level of income. Not all items on current account change with the change in income, we have to choose the items which set the first movement of change, in other words the autonomous items. In a country with no import restrictions exports could act as the multiplicand, but, if import restrictions exist, it is the balance of trade which has to be taken, because both exports and imports are autonomous. In the case of Egypt we have seen before that there is no clear cut relationship between exports, investment, and the level of income due to the government intervention in planning both foreign trade and investment. However, in many underdeveloped countries, the correlation between exports and investment

1) T. Tsiang; Balance of payments and flow of income, I.M.F. Staff Papers 1950/1.

is high since the export sector is a leading secotr in the economy. As regards the relationship between exports and consumption, we do nct have accurate figures for private consumption and consequently we are not able to test any possible causal relationship.

The table below shows how income and the current balance behaved during the period studied.

Table III_{11}

Balance of payments and gross national product at current market prices

values in million pounds

Year	Current receipts	Current payments	Net balance on current account	Gross national Product	balance of payments / gross national product
1951	292.2	307.4	-15.2	1053	-1.4%
1952	218.7	272.1	-53.4	966	-5.5%
1953	215.1	223.0	-7.9	934	-0.8%
1954	222.2	218.6	+3.6	988	+0.4%
1955	227.3	261.3	-34.0	1043	-3.3%
1956	218.8	251.8	-33.0	1098	-3.0%
1957	237.2	268.4	-31.2	1160	-2.7%
1958	250.2	270.3	-20.1	1230	-1.6%
1959	264.9	300.9	-36.0	1318	-2.7%
1960	301.7	325.3	-23.6	1409	-1.7%
1961	256.1	295.9	-39.8	1551	-2.6%
1962	246.9	364.5	-117.6	1614	-7.3%

Sources: 1. Bulletin of the National Bank of Egypt
2. Hansen and Mead op.cit.
3. Bent Hansen, National outlay in the U.A.R. op.cit.

Table III_{11} shows a persistent balance of payments deficit during the whole period under study if 1954 is excluded. This deficit ranged between 0.8% and 7.3% of the money income.

The relation between the balances of payments and money income may be either way, which suggests that in order to understand such relationship we have to study it in view of other economic variables. For example, the big deficit in 1952 and the drop in the absolute level of money income were created by the sharp drop in the terms of trade as explained before and as shown by the appreciable decline in current receipts. Another significant change in the net balance was between 1954 and 1955 when the surplus on current account turned into a deficit. In the same year income showed an appreciable increase partly due to the working of the internal forces which was accompanied by an increase in external payments. Finally, two reasons can explain the huge deficit in 1962:-

1) The implementation of the development plan which resulted in a rise in money income associated with a significant increase in current payments. In this case we can say that the growth of money income was greatly responsible for the balance of payments instability.

2) The drop in the cotton production in 1961 which resulted in a significant fall in export earnings in 1961 and 1962. However, it could be seen from the previous table that the first factor was more important than the export factor.

The importance of the balance of payments situation is not merely in its direct or indirect effect on national

expenditure, but it also may have an impact on the exchange rate, which in turn affects the internal price level. The existence of a persistent balance of payments deficit, as in the case of the Egyptian economy, can be a threat to the stability of the whole economy. However, in studying the foreign currency position, it is not only the balance of payments on current account that has to be considered, but the overall state of the balance of payments, including the effect of capital transfers.

The Exchange rate is determined by the relationship between the import capcity and the actual imports of goods and services.[1] Import capcity could be estimated by one of the following methods:-

1) Only receipts and receivables from current export trade in goods and services. When capacity is defined in this way it does not take into account that not all these receipts are available to the economy for spending on imports or alternatively it does not include factor income from abroad, or

2) Plus factor income from abroad, or

3) Plus capital transfers, or

4) Plus past accumulated reserves.

In our study of the Egyptian economy, we shall be concerned with two major indicators of import capacity:-

1) Receipts on current account, or

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1) Frank B. Ramperessad op. cit.

2) Plus foreign assistance[1]

Past accumulated reserves cannot be considered as an item which can be used up in any one year; such reserves are available to fill the gap between import capacity either defined by 1 or 2 and the actual value of imports. For this reason we shallonly be concerned with the change in foreign reserves rather than the total of reserves.

Receipts on current account can be listed as follows:-

1) Proceeds of visible exports.

2) Shipping dues

3) Suez canal dues.

4) Interest, dividends and other Revenue (net after transfer of dividends and interests abroad)

5) British army expenditure up to 1955.

6) Other items.

As for the second indicator of import capacity, it includes both the foregoing items and the foreign assistance (capital inflow)[2]. However, a deduction must be made for the outflow of capital since only the net capital inflow is available to cover the deficit on current account. This measure of import capacity is similar to the items included in the foreign exchange budget with the difference that the former

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1) Most of the foreign aid delivered to the U.A.R. is not recorded in the balance of payments on capital account. For this reason such figures will be compiled and added to total import capacity.

2) Capital inflow other than foreign assistance such as private investment in Egyptian companies has been negligble even at the early years.

is based on ex-post figures while the foreign exchange budget is based on anticipated receipts. (see page 87)

Payments on current account can be divided into the following items:-

1) Payments for imports of goods.

2) Shipping dues.

3) Travel and maintenance

4) Egyptian government expenditure

5) Other disbursements.

From the figures of import capacity and the actual figures of imports, we can deduce the import surplus.[1] This import surplus will determine the amount of reserves to be used and consequently the impact on the value of the currency as will be shown in due course.

Table III$_{12}$

Measurement of Import Surplus

in million pounds

Year	Payments on current account	Import capcity Measure I	Import surplus[2] Measure I	Import[3] Capacity Measure II	Import surplus Measure II
1950	282.3	268.3	+ 10.4	-	-
1951	307.4	292.2	+ 15.2	-	-
1952	272.1	218.7	+ 53.4	-	-
1953	223.0	215.1	+ 7.9	215.3	7.7
1954	218.6	222.2	- 3.6	222.2	- 3.6
1955	261.3	227.3	+ 34.0	236.6	24.7
1956	251.8	218.8	+ 33.0	233.7	18.1
1957	268.4	237.2	+ 31.2	241.6	26.8
1958	270.3	250.2	+ 20.1	274.0	- 3.7
1959	300.9	264.9	+ 36.0	300.3	0.6
1960	325.3	301.7	+ 23.5	328.8	- 3.5
1961	295.9	256.1	+ 39.8	320.5	-24.6
1962	364.5	246.9	+117.6	358.8	5.7

1) Import surplus = Imports of goods and services - import capacity.

see next page for 2,3.

Sources; calculated from:-
1) The Bulletin of the National Bank of Egypt
2) Said EL Nagger op. cit.

The previous table indicates that during the whole period under study there was a rising trend in the import surplus if import capacity is simply estimated by the receipts on current account. However, in a country like Egypt, one must add the inflows of foreign capital, since Egypt is one of the countries which receive an appreciable amount of aid. The inclusion of capital inflows (as indicated by measure II) changes the picture completely and in some years the import surplus becomes an import deficit due to the huge amount of foreign assistance.

Import surplus as explained by measure II must be equal to the fall in foreign reserves, if the capital account has to balance the current account. However, the available statistics for Egypt exhibit many discrepancies, as shown by the following figures:-

Year	Import surplus	fall in foreign	value in million pounds Balancing item
1953	+7.7	+ 7.0	0.7
1954	-3.1	+16.0	+19.1
1955	+24.7	+36.7	+12.0
1956	+18.1	+41.9	+23.8
1957	+26.8	+34.7	+ 7.8
1958	-.3.7	+21.2	+24.9
1959	+ 0.6	+20.4	+19.8
1960	- 3.5	+19.6	+23.1
1961	-24.6	+21.6	+46.2
1962	+ 5.7	+51.1	+45.4

2) Balance of payments on current account.
3) After the exclusion of capital outflows
4) Aid in this context includes foreign loans.

As indicated above the balancing item is significant especially in the last two years. The reasons for this may be partly attributed to the fact that the above figures are compiled from different sources. However, there are other important reasons which should be mentioned here.[1]

1) The figures of the balance of payments on current accouht represent actual payments, while the falls in foreign reserves are estimated by the compilers of the international financial statistics on the basis of commodity flows rather than actual payments. We could have used the actual figures, but in the case of Egypt it may be useful to work with real imports rather than payments for imports; therefore it is better to use the International Financial Statistics estimates of changes in foreign reserves than the figures shown by the aggregate balance sheet of the banking system, which only take into account the actual payments. Also, in the last few years, short term credit facilities have played an important role. Imports according to these facilities are not recorded in the balance of payments which means that the bigger these facilities are, the less the balance of payments becomes comprehensive (leads and lags)

2) The high dam imports were not recorded in the balance of payments in the period 1959-1961. It is estimated that the value of the High Dam imports amounts to 10 million

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1) A letter to the author from Prof. Bent Hansen, Institute of National Planning Cairo 24th October 1964.

pounds a year. However, since 1962, the High Dam figures have been included in the balance of payments.

A final question is how far did the change in foreign reserves and the inflow of foreign assistance contribute to the growth and stability of the economy?

Table III$_{13}$

Foreign position and Exchange rate quoted in the Market of Zurich

Year	Foreign assistance[1] Million pounds	Fall in reserves Million pounds	Total	Index of currency value 1953=100
1952	-	60.4	60.4	-
1953	0.2	7.0	7.2	100
1954	-	16.0	16.0	95.9
1955	9.3	36.7	46.0	100.4
1956	14.9	41.9	56.8	89.3
1957	4.4	34.7	39.1	80.3
1958	13.8	21.1	34.9	84.1
1959	35.4	20.4	55.8	85.1
1960	27.1	19.6	46.7	98.7
1961	64.4	21.6	86.0	89.3
1962	111.9	51.1	163.0	80.0

The average contribution of both items (reserves and assistance) in the period under study was about 55.6 million pounds per annum, out of which 30 million pounds was contributed by the fall in reserves and the rest (25.5) by foreign assistance. However, it may be misleading to take the period as a whole and it may be better to divide the period into two stages:-

1) The period 1952-1957 and

2) The period 1958-1962.

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1) After allowance for capital outflow

As for the first period, the average contribution of both items was 37.6 million pounds per year while the contribution in the second period was 77.3 million pounds. At the same time the importance of each item changed from one period to the other. While foreign aid in the first period averaged 4.8 million pound per annum, and the fall in reserves was 32.7 million, in the second period foreign assistance averaged 50.5 million pound associated with a fall in reserves equl to 26.8 a year.

Comparing these figures with the rate of growth of real income,[1] we can see that the growth of real income was associated with (and probably largely depended upon) huge amounts of foreign finance[2]. Given the high correlation between the rate of growth of real income, and the imports of raw materials as suggested before, it is necessary to have an access to different sources of foreign finance together with the change in the import structure.

Finally, the impact of the foreign position on the value of the currency is illustrated by Table III_{13}. Exchange rate fluctuations in the free markets are likely to be related to changes in the foreign reserves. The figures above show that as reserves have dropped so has the value of the Egyptian pound. On the other hand as the £E has weakened so the internal price level has risen as

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1) See p. 74
2) fall in reserves plus foreign assistance

shown in the table below[1]

Table III_{14}

Value of the Currency and the Internal Price level 1953=100

Year	Value of the Currency	Wholesale price index.
1953	100.0	100.0
1954	95.9	97.4
1955	100.4	99.1
1956	89.3	109.4
1957	80.3	118.8
1958	84.1	117.1
1959	85.1	117.1
1960	98.7	118.0
1961	89.3	119.6
1962	80.0	118.8

Sources: calculated from:
1) Bulletin of the National Bank of Egypt.
2) Annual averages of price index numbers, statistical dept. Cairo (ARABIC)

However, in a country like Egypt where most external transactions and many internal prices are controlled, although the value of the pound abroad may give an indication of the value of the currency inside the country, it may be misleading to use such figures in isolation from the government policy inside the country. For this reason, it is necessary to consider the changes that have taken place in the exchange regulations when examining the relationship between the value of the currency abroad and the internal price level. The main restrictions on external transactions during our

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1) The link between the value of the pound and the internal price level is the import prices. Other factors may also be responsible for the change in the internal price level; this will be studied in due course.

period were as follows:-[1]

1) At the beginning of the period under study the government introduced two kinds of accounts:-

A) The export accounts.

These accounts can be credited with:-

1) Payments for specified goods imported into Egypt under permits. stipulating settlements in Egyptian pounds through an export account.

2) Transfers from other export accounts.

3) Amounts specifically approved by the Central Exchange Cohtrol.

Balances on these accounts may be utilized for:-

1) Payments to residents of Egypt in settlement of the value of goods exported from Egypt to soft currencies countries that have not concluded payments agreements with Egypt.

2) Payments to residents of Egypt in settlement of up to 75% of the value of goods exported to the dollar area or sterling area.

3) Payments to residents of Egypt for some limited services.

4) Transfers to other export accounts.

These export accounts were dealt with in the free markets of the various countries.

B) The Entitlement Account

Exporters who sell to an authorized bank export proceeds

1) Annual Reports of Exchange restrictions, I.M.F.

in soft currencies are entitled to use some of their earnings to import goods or to sell them to other importers at a certain premium fixed by the banks. Most of the goods were imported through the entitlement accounts although a list of machinery and industrial equipment were imported at the official exchange rate. This means that the government was following a system of multiple exchange rates favouring industrialization.

The premium incurred was quoted as follows:-

1953 For the pound Sterling 5 3/16 and for the Deutsch Mark II 5/8

1954 For the pound Sterling 7 1/8 and for the Deutsch Mark 8 3/16

1955 For the pound Sterling 10 1/32 and for the Deutisch Mark 12 1/32

Source: Bulletin of the National Bank of Egypt.

2) Some payments agreements were signed with Switzerland, Belgium and Holland according to which an account called the B account was established and the Egyptian pound was fluctuating in the free markets of these countries.[1]

3) In 1955, it was decided that import licences for goods involving payment through the export account would no longer be issued. The import entitlement account procedure was also abolished later and a restrictive import policy for imports paid for in soft currencies was re-established. At the same

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1) The value of the currency mentioned before is that of the B account in Zurich.

time payments for exports to Belgium, Holland and Switzerland through Egyptian pound B account were suspended although they were permitted again.

4) In 1956 a 7% import tax had to be paid entirely at the time of issue of an import permit. This was paid apart from the premium and the custom duties.

5) An examination fee of 10% for individual imports and 20% for government imports was levied on each application. This was announced in 1957, consequently the currency depreciation was 17% for the individuals (examination fee + import tax 7%) and 27% for the government.

6) In 1958, the system of export accounts was re-introduced in another way. The export account premium was fixed at 25% buying and 27% selling. This was reduced in the same year to 17.5% buying and selling.

7) The surcharge payable on most imports was increased from 7 to 9%.

8) The export account system was abolished in 1959 and was replaced by a new exchange system in which premium on Egyptian pounds were applied to receipts and payments in convertible currencies. Proceeds in convertible currencies from exports of raw cotton and a few other export proceeds in convertible currencies received a variable premium while most other export proceeds received a 17.5% premium. Payments in convertible currencies were charged 27.5% premium.

9) The premium applicable to payments in convertible currencies for all imports was reduced from 27.5% to 20% in 1960, the premium for exports was also reduced. In the same year the premium was reduced again to 10%

10) In 1961, the application of the premium of 10% to imports was extended to cover imports payable through bilateral agreement accounts and in inconvertible currencies. (All payments agreements with the communist Block). Previously only imports paid for in convertible currencies were subject to the premium, but now it was extended to all imports. This was a step towards an official devaluation.

The preceding exposition of the changes in currency restrictions shows that, during the whole period under study, Egypt experienced a "de facto" devaluation in the form of a premium paid or an import tax. These changes must have had an impact on the value of the currency abroad as is shown in the next table.

Year	Currency Index in Zurich	Government exchange control regulations
1953	100.0	5 3/16) premium on sterling in the
1954	95.9	7 1/8) import entitlement
1955	100.4	10 1/32) account
1956	89.3	7% import tax and premium
1957	80.3	10% paid by individual and 20% by government
1958	84.1	Premium 27% reduced to 17.5 + 9% import tax
1959	85.1	27.5% premium paid on imports
1960	98.7	Premium reduced from 27.5% to 20% then to 10%
1961	89.3	The application of the premium to all imports including bilateral agreements in Egyptian pounds.

From the previous table we can see that there is an approximate negative correlation between the size of premium and the value of the currency abroad.

Since both the government exchange control regulations and the value of the currency abroad are determined according to the state of the balance of payments and the state of foreign reserves, it is not incorrect to use the currency index abroad as an indicator of the exchange rate situation.

Stabilization programme[1]

In 1962 a stabilization programme was agreed upon with the International Monetary Fund, the main items of which were the following:-

1. A unified exchange rate for the Egyptian pound was set up at 2.3 dollars[2]. The government was to give up the multiple exchange rate practice and control on current payments and receipts.

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1. The items mentioned under this heading are taken from the Stabilization programme with the I.M.F. (confidential).
2. The exchange rate used to be One E £ = 2.871 dollars.

2) Since the application of the new exchange rate on all exports might result in the short run, in excessive profits in certain items of exports such as cotton, oniohs, rice and petroleum products, the government might temporarily impose export taxes on those items to be reduced if necessary to encourage production and exports of these items.

3) As for import policy, open import permits were to be granted to an important part of the items which were permitted. A principle of the policy was to set up a foreign exchange budget by which available foreign exchange was allocated among different items of imports according to an order of priority in line with the development plan. No discrimination was to be practised among exporting countries and competitive prices were to be the guide of importing from different markets.

4) Bilateral trade and payments agreements with the members of the International Monetary Fund were to be gradually cancelled. This step was described as an important one towards the liberalization of foreign trade since it, together with the principle of competitive prices and the unification of exchange rate, would enable the country to buy and sell in the best markets.

5) The governmant would continue its policy of non-inflationary methods[1] of financing development, a credit ceiling heing set up. It was argued that this would certainly have a favourable effect on the course of foreign trade.

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1) This will be discussed in Chapter 5.

6) The stabilization programme prompted some highly developed countries to extend long term credit facilities to Egypt, to help finance the development programme, and short term credit facilities to help finance current imports. It was said that this would certainly increase the volume of trade between Egypt and other countries. Also, the International Monetary Fund would offer Egypt a loan equivalent to 40 million dollars to offset the destruction of the main crop in 1961. How far does this agreement satisfy the requirements of the development policy of Egypt?

As regards the use of a multiple exchange rate, although this is not very welcome to most economists, it may be a necessity if a diversified pattern of exports is the objective. (provided that such a multiple rate is not as cumbersome as in some Latin American countries). For this reason it was stated in the stabilization programme that due to the excessive profits in certain items of exports (the conventional ones such as cotton and onions) the government may temporarily impose export taxes on these items. This is another way of applying a discriminatory system of export. What matters here is whichis easier to administer, a multiple exchange rate or an export tax?

On the import side, the application of a unified exchange rate will raise the prices of essential goods whether consumer items or capital equipment. This will require more subsidy

to be paid by the government whether in the form of production or consumer subsidies. This may result in a budget deficit at a time when a credit ceiling is being set up, and create a contradiction which may reflect on the internal level of activity. If the government cuts down the consumers subsidies prices will go up, while the cut down of production subsidies may produce unemployment. However, an advantage of the unified exchange rate is that it does not discriminate in favour of the domestic production of luxury goods.

Table III_{15}
Balance of Payments Estimates according to Regions 1961/1962 Value in Million Pounds

Area	Merchandise credit	Merchandise debit	Balance on trade account	Other transactions Credit	Other transactions Debit	Other transactions Balance	Net Position
American							
1961	11.2	48.7	-37.5	12.5	5.8	+6.7	-30.8
1962	11.1	87.6	-76.5	20.0	9.2	+10.8	-65.7
Sterling							
1961	15.1	29.6	-14.5	28.7	6.3	+22.4	+7.9
1962	17.2	32.4	-15.2	34.4	7.6	+26.8	+11.6
Western Europe							
1961	25.5	55.2	-29.7	26.4	16.9	+ 9.5	-20.2
1962	29.1	63.6	-34.5	23.9	19.5	+ 4.4	-30.1
Eastern Europe							
1961	67.9	78.8	-10.9	11.6	19.4	- 7.8	-18.7
1962	54.6	83.6	-29.0	10.3	17.7	- 7.4	-36.4
Middle East							
1961	26.1	11.7	+14.4	10.6	19.8	- 9.2	+ 5.2
1962	17.2	8.8	+ 8.4	12.7	14.5	- 1.8	+ 6.6
Other Countries							
1961	15.5	13.9	+ 1.6	5.0	3.4	+ 1.6	+ 3.2
1962	13.6	14.0	- 0.4	2.8	6.0	- 3.2	- 3.6

Source: Central Bank of Egypt No 2 1963.

Table III_{16}
Distribution of Foreign Aid according to groups of countries up to 1962

Group	Million Dollars	% of Total
1) Private enterprise economies	1085.4	61.4%
2) Centrally planned.	609.1	34.4%
3) International Agencies	74.5	4.2
	1769.0	100.0%

Source: foreign aid to the U.A.R. op. cit.

A major criticism of the programme, is the devaluation of the currency. It may be argued that the elasticity of demand for Egyptian exports is low and therefore any devaluation will not help to increase the value of exports. However, the important point which may be introduced in this context is that Egypt is conducting a large portion of its external transactions with countries following a bilateral trade system. Exports are arranged through long run trade agreements and therefore a devaluation will not help the increase of exports. The previous two tables show that trade with the Eastern European block comprises a significant ratio of total exports and imports. Moreover 34.4% of the total aid has been obtained from centrally planned economies and consequantly any devaluation of the currency will increase the

burden of debt due to these countries (as well as the extra burden due to other countries which require payment in their own currencies). As a result of this, it may be suggested that the existing structure of the Egyptian foreign markets makes it more profitable to maintain an overvalued exchange rate. However, this argument could be disputed for many reasons:-

1) Prices of exports and imports are fixed according to the world prices, therefore, countries with a bilateral trade system will take into consideration the depreciation of the Egyptian pound in the foreign markets. Thus, it will be difficult to maintain an overvalued exchange rate with such countries.

2) A confirmation to the previous statement, is the application of the premium to bilateral trade countries in 1961 and even before the official devaluation. This meant that a de facto devaluation was already applied to both convertible and non-convertible currencies.

3) The exhaustion of foreign reserves and the urgent need for foreign assistance must produce sooner or later a devaluation in the exchange rate. It would be difficult to maintain an overvalued exchange rate indefinitely.

However, we still believe that underdeveloped countires may be unduly attracted by the principles of the I.M.F., which

are mainly concerned with the liberalization of foreign trade. This was clear in the article which stipulated that all payments agreements with the Members of the I.M.F. must be cancelled. This article may be difficult to apply unless it is associated with immense credit facilities as was mentioned in the programme. All payments agreements guarantee a credit ceiling, and for many years Egypt has been using these facilities to finance its current imports. In this case the abolition of payments agreements with the members of the fund will not change the picture much, since new agreements in the form of credit facilities will replace the old payments agreements. In our opinion the liberalization of foreign trade will not be possible unless the productive capacity of the economy allowed such a removal of restrictions; in other words, until the structural changes have been completed.

Another financial solution suggested by the I.M.F. is the restriction of money supply as a safeguard against inflation. This action may not help to prevent an inflation if the real resources are not enough to meet the requirements of the country. Existing money supply may be used more intensively if the demand for available resources increases either on the part of the individuals or the government. Also, the devaluation of the currency may produce a cost push inflation irrespective of the money supply. However, it may

be argued that the inflationary process must be supported in the long run by an expansion in the money supply. But here again we can say that the solution to the problem is both financial and structural and it will be necessary to analyse the changes in the domestic sectors in order to see how far a stabilization programme can be workable.

Concluding Remarks

1) The impact of external fluctuations on the level of activity was not symmetrical during the whole period under study. Between 1950 and 1953, fluctuations in real export proceeds had a significant effect on real income, while in the latest years real income was not tied to export earnings. This was attributed to the following two reasons:-

a) The internal forces were operating to insulate the economy from external fluctuations and to promote economic development. However, this must be accompanied by more imports and consequently a fall in reserves is likely to happen. The use of foreign reserves and foreign assistance was a great help to the economy.

b) The readjustment of imports in such a way as to allow the imports of raw materials and capital equipment at the expense of luxury goods.

It is argued that primary producing countries are vulnerable more to fluctuations in the price level than fluctuations in the level of activity. This will be shown

in the chapter on prices.

2) The long run growth of exports has lagged behind the growth of domestic product; however, a slight improvement has taken place in the pattern of exports. This can be better studied in relation to the structural changes in the economy as a whole.

3) The import structure has become so rigid that only essential consumer and production goods were imported. Thus growth has become closely related to import capacity.

4) Growth of domestic product is highly dependant upon imports of certain essential raw materials and intermediate products. But, given the limited import capacity of the country, it is not enough to readjust the pattern of imports in favour of such items if a high rate of development is desired. Foreign assistance to finance the necessary imports is essential if growth is not to be retarded.

5) The depletion of foreign reserves resulted in a stabilization programme with a devaluation of the currency which in turn may create internal price increases.

Chapter IV

Growth and Structural changes in the Egyptian Economy

The present chapter is concerned with the development of the internal economy during the period under study. It has been argued in the previous chapter that it is not possible to study the impact of the external position on the internal level of activity unless it is analysed as an integral part of the growth and structure of the economy. Crucial problems such as investment, agriculture, import substitution and wage policy must be discussed in detail.

The chpater incorporates two main parts:-

1. Growth of total output:-
   i) National outlay estimates.
   ii)Estimation of gross national product.
2. Structural changes:-
   i) The need for a balanced growth.
   ii) Agriculture
   iii) Industrilization

Section I - Growth of total output.

i) Estimation of national outlay

National income can be estimated either by the expenditure approach, by industrial origin or from the income data. The approach of estimating national outlay is backward in under-developed countries and tremendous efforts must be made in this field. As for the Egyptian national accounts, official

figures are very scanty and cannot be relied upon. Professor Bent Hansen,[1] pointed out that the margin of error in the figures of outlay is substantial, the limited coverage of stock statistics is perhaps one of the most important short-comings. In particular, it should be observed that private consumption is everywhere obtained as a residual which makes all errors in the other series of figures cumulate in the series of private consumption. This makes the private consumption figures rather uncertain and they should not be used for year to year comparison without great caution, only long term trends and significant changes should be considered.

In this research we shall be mainly concerned with investment, the balance of payments and government expenditure. In the previous chapter an account was given of the balance of payments situation and in the next chapter, there will be a detailed discussion about the structure of public accounts.

Capital and investment structure

Statistics on capital in Egypt are not available. However, since we are more concerned with the growth of capital than the existing stock, it is the figures of investment that matter as they represent the change or thegrowth of capital.

The importance of this sub-section is that it explains how far the depletion of foreign reserves was associated with a build-up of physical capital to improve the productive

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1) National outlay in the U.A.R.

capacity. It has been argued that underdeveloped countries may run down their foreign exchange reserves, so long as the draw on such reserves is offset by an increase in the physical capital stock. However, this does not always happen. Underdeveloped countries may exhaust their foreign reserves in importing foodstuffs and other consumer goods; this in addition to the foreign assistance they receive. Foreign assistance may be in the form of capital goods or consumer goods as in the case of the American foreign aid to Egypt according to the law 480 (Foods Surplus).

A simple comparison can be made between, the amount of new investments and the fall in foreign reserves plus foreign assistance in the form of capital goods. However, this comparison needs qualifying since a part of investment is in construction and the other part is in capital equipment. Investment in construction is mainly financed by local currency and therefore it does not affect the stock of foreign exchange rsserves. For this reason it may be better to compare such sources of foreign finance (reserves and assistance in the form of capital goods) only with the part of investment in capital equipment. However, investment in construction may produce a strain on the balance of payments through the rise in imports of foodstuffs and consumer goods. Therefore, there is still some point in taking both kinds of investment into consideration.

The Egyptian economy may be taken as an example of an

underdeveloped country which is trying to build-up a physical capital stock at the expense, particularly, of its foreign financial resources. The change in the structure of capital can be expressed by the following table:-

Table IV[1]

Foreign reserves, foreign aid and the change in domestic capital stock (in million pounds)

Year	Change in foreign reserves	Foreign assist-ance in the form of capital	Total for-eign assis-tance	Capital assist-ance & fall in reserves	Total assi-stance & fall in reserves	imports of equipment	Total invest-ment
1952	-60.4	-	-	60.4	60.4	30.9	121.7
1955	-36.7	-	11.9	36.7	48.6	40.7	159.1
1956	-41.9	-	18.1	41.9	60.0	42.0	161.5
1957	-36.7	-	6.9	36.7	43.6	37.5	158.2
1958	-21.2	9.7	15.7	30.9	36.9	49.4	173.4
1959	-20.4	26.8	43.5	47.2	63.7	50.8	176.4
1960	-19.6	38.7	62.4	58.3	82.0	53.0	198.1
1961	-21.6	46.9	75.7	68.5	97.3	63.9	238.5
1962	-51.1	76.4	123.3	127.5	174.4	67.6	277.5

Sources: calculated from
1. International Financial statistics (I. f.s)
2. Annual Budget Report
3. Figures of Investment are given by the National planning committee, Cairo and Bent Hansen, National outlay in the U.A.R.
4. Said El Naggar op, cit.

From the previous table[1] it can be observed that the sum total of the change in foreign reserves and capital foreign assistance is more than the imports of capital equipment in the years 1952, 1960, 1961 and 1962. Moreover, the period as a whole showed a total amount of imported capital goods less than the depletion of foreign reserves plus the capital foreign assistance.

However, in order to have a true picutre of the situation, we must include all foreign aid and not merely capital foreign aid since consumption aid relieves the balance of payments and without it more reserves would have been used in importing consumer goods.

It may be concluded that in certain years a part of the reserves was used to import essential consumer goods apart from the capital equipment needed, this means that, although severe restrictions were applied, foreign assets were essential either for the purpose of importing essential

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1) An attempt to estimate foreign aid in the form of capital goods was made from the original figures of aid which are divided into five items (see foreign aid to the U.A.R. Said El Naggar)-
1. Consumption aid (32% of total aid committed)
2. Technical assistance (6.1%)
3. Financial aid to Agriculture (13.6 %)
4. Financial aid to industry (38.0%)
5. Transport and other services (10.3%)
If we exclude 1 and 2 the rest will be 62% which nearly represent aid in the form of capital goods. However between 1952 and 1958 we cannot apply this ratio because all foreign assistance used to be offered by the United States either in the form of food or technical assistance. Consequantly we can ignore the capital assistance delivered before 1958 assuming that all aid was in the form of consumption goods. In this case the comparison will be only between imports of capital equipment and the fall in reserves.

consumer goods or as a means of accumulating physical capital. Another measurement to indicate the importance of foreign finance is the import content in total investments. As indicated above, investment is divided between construction and capital equipment. Since Egypt produces very little capital equipment, we can say that imported machinery represents total investment in equipment.

Table IV$_2$

Import content in total investment at current market prices value in million pounds.

Year	Imported capital equipment [1] (Col. 1)	Total investment (Col. 2.)	Import content Col. I /Col.2 (Col. 3) %
1952	30.9	121.7	25.4
1955	40.7	159.1	25.6
1956	42.0	161.5	26.0
1957	27.5	158.2	17.4
1958	49.4	173.4	28.5
1959	50.8	176.4	28.8
1960	53.0	198.1	26.7
1961	63.9	238.5	26.8
1962	72.8	277.5	26.2

Sources: calculated from -
1. National planning committee, Cairo (unpublished figures of investment.
2. Bent Hansen, National outlay in the U.A.R. op.cit
3. Figures of imported capital equipment are compiled from the Annual Budget Reports, Ministry of Economy, Cairo.

The table above shows a high ratio of import content in total investment with the highest ratio reached in 1958 and 1959 when industrialization was intensified. The sharp drop in

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1) Does not include customs duties.

1957 was immediately after the Suez Crisis when the imports of capital equipment were cut down in order to save the foreign exchange for more essential items such as supply goods (wage goods) and raw materials necessary to run the existing factories. However, after 1959, the import co-efficient declined again. This could be due to -

1. Greater emphasis upon construction projects such as the High Dam.
2. The slow down of the import substitution process or the production of certain equipment domestically which is not likely to happen in such a short period of time.

This can only be explained after a breakdown of total investments into various sectors and after the pattern of industrial production have been investigated.

Table IV 3

Allocation of investment amongvarious sectors of the economy Percentages at current prices.

Year	Agriculture	High Dam	Industry	Transport	Housing	Suez Canal	Service
1952/3	11.5	-	29.8	16.1	31.8	-	10.8
1953/4	11.0	-	29.1	14.5	34.7	-	10.5
1954/5	10.5	-	28.0	16.1	34.2	-	11.2
1955/6	10.4	0.3	34.1	14.2	30.2	-	10.7
1956/7	13.0	0.3	26.7	10.3	33.1	2.6	14.0
1957/8	12.8	0.3	26.2	14.2	29.0	3.0	14.4
1958/9	13.7	0.7	30.0	14.9	22.0	3.3	15.4
1959/60	14.8	2.4	32.4	17.5	18.0	3.4	11.4
1960/1	14.6	3.8	32.2	29.9	8.1	2.6	8.7
1961/2	15.2	2.9	31.8	20.0	11.9	3.1	14.9
1962/3	16.2	3.1	35.3	14.9	11.6	2.0	16.9

Source - National Planning Committee

In order to integrate the previous table with the table before to see how far the allocation of investment resulted in more construction or more capital equipment imported, it is necessary to investigate the import content in every sector of investment. This has been made for three major sectors agriculture and irrigation, industry and electricity and the transport.

Table IV$_4$
Import content of investment in Agriculture Industry and Transport

Year	Agriculture and Irrigation		%	Industry and Electricity		%	Transport		%
	1	2	3	1	2	3	1	2	3
1952	2.0	11.5	17.4	20.8	32.3	64.4	8.0	20.9	38.3
1955	1.8	16.6	10.8	29.2	41.4	70.5	9.7	24.0	40.4
1956	2.3	18.2	12.6	29.4	40.1	73.3	10.3	19.5	52.8
1957	1.3	20.8	6.2	17.8	33.3	53.4	8.4	25.2	33.3
1958	2.3	23.8	9.7	30.7	41.7	73.6	16.5	23.7	69.6
1959	2.2	27.2	7.9	37.7	48.5	77.7	11.1	28.5	38.9
1960	4.3	35.4	12.1	37.4	58.1	64.3	11.3	48.6	23.2
1961	7.6	43.2	17.6	25.1	75.7	33.2	29.7	58.2	51.0
1962	9.6	52.2	18.4	30.6	93.4	32.8	32.6	47.7	68.3
Average			12.1%			60.2%			46.2%

1 =Imports of capital equipment for every sector in million pounds.
2 =Total investments in the sector in million pounds[1]
3 =Ratio of 1 to 2.

Sources: 1. Annual Budget Reports.
2. Central Bank of Egypt No 1 1963
3. The year book of the Federation of Industries 1962.
4. Bent Hansen, National outlay in the U.A.R.
5. National Planning committee
6. Economic Bulletin, Ministry of Economy February 1964.

The table above shows that Industry and Electricity have the highest import content, followed by Transport and then Agriculture

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1. Figures of 1961 and 1962 are re-adjusted to actual figures instead of proposed figures.

There is a strong correlation between import content in industry and the overall import content fortwo reasons:-

1. The import content in industry is higher than in other sectors.

2. The share of industry in total investments is the highest among all sectors.

The import content in transport is also positively correlated with the overall import content but not to the extent of industry. We can certainly say that the decline in the overall import content in the last three years is attributed to the sharp decline in the import content of industry. This may be because the process of industrialization (which speeded up in 1958) always starts with a great deal of construction due to factory building..

Finally investment components have been estimated at constant prices of 1952. The equipment deflator was calculated in the previous chapter (Index of capital goods imported) while the construction deflator was taken as a simple average of the prices of building materials and wages. The results are shown in the following table.

Table IV 5

Investment components at constant prices of 1952

in million pounds

Year	Equipment deflator	Construc- deflator	Investment deflator	volume of con- struct- ion	volume of equip- ment	total invest ment	import content Col.5/ Col. 6
	Col.1	Col.2	Col.3	Col.4	Col.5	Col.6	Col.7 %
1952	100.0	100.0	100.0	90.8	30.9	121.7	25.4
1955	90.9	99.2	96.9	113.9	44.8	164.1	27.3
1956	98.3	106.0	103.9	112.7	42.7	155.4	27.5
1957	97.7	111.0	107.5	108.7	38.4	147.1	26.1
1958	99.7	110.6	107.3	112.1	49.5	161.6	30.6
1959	106.6	109.1	108.4	115.1	47.6	162.7	29.2
1960	107.0	110.5	109.6	131.3	49.5	180.8	27.4
1961	106.4	112.3	110.7	155.5	60.0	215.5	27.8
1962	115.5	110.9	112.0	189.3	58.5	247.8	23.6

Sources: Calculated from -

1. Budget Reports
2. National Bank of Egypt Bulletin.
3. Bent Hansen, National outlay in the U.A.R. op. cit.
4. National planning committee, Cairo.
5. Annual averages of price index numbers (statistical dept.)

It can be observed that if constant prices are used the result is not changed except that the import content in this case is higher due to the rise in the construction deflator being faster than the deflator of capital equipment. This may suggest that construction materials may be an important bottle-neck which has to be considered in any development programme.

ii Estimation of gross national product.

Several estimates of gross national product are available but they are not strictly comparable either due to differences in definitions or in the way of estimation. The estimates for the period under study (1950 - 1962) are given either by the Statistical Department at current factor cost and at constant

prices or by the National Planning Committee (The mobilization Department) at current market prices and excluding custom duties. The definitions and classifications of the Statistical Department differ from year to year and this makes the figures hardly comparable especially if sectors are considered separately. The other series of the Mobilization Department is made for the period 1952/53 - 1962/3 and they are comparable from year to year although they are calculated at current prices only. Professor Hansen and Donald Mead [1] have made their own estimates for the period 1952/3 - 1961/2. The estimates are given at constant prices of 1953/4 and they are reasonably consistent with the figures of the Mobilization Dept. Comparable figures have been estimated back to 1950/1. On the other hand the figures given by the Mobilization Dept have been re-adjusted in such a way as to include Customs duties to get the figures at current market prices[2]. Some of the figures of the Statistical Dept have been used to complete the series on the the assumption that the definitions and the method of estimation are the same as used by Hansen and Mead.

The way Hansen and Mead followed to calculate various sectors of national product can be summarized as follows:-

1. Agriculture - A calculation of the net value added at 1954 prices is made by the Dept of Statistics for the years 1950 - 1960

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1. Bent Hansen and Donald Mead, National income of the U.A.R. op.cit
2. A letter to the author from Prof. Bent Hansen, 3 Feb. 1964, Institute of Planning Cairo.

This series is used by the department itself in its national income estimates. There seems to be little objection to this method of calculation. Hansen and Mead converted the series into 1953/4 prices and made interpolations to the series to obtain budget year figures instead of calendar year figures. By the same token we have deduced the figures for 1950/2. On the other hand we have used the figures of the statistical Department at current prices for the years 1950/1 and 1951/2.

2. Industry - Hansen and Mead calculated the net value added in industry from two sources:- a) from 1952 to 1959, they deduced the net value added from the industrial production index calculated by the National Bank of Egypt. b) from 1959 onwards they used the value added for enterprises engaging 10 persons and more in industry as shown by the production census, adjusted by the wholesale price sub-index for industrial products. Although a bias may result due to the exclusion of new industries from the index number or the industries employing less than 10 persons Hansen and Mead find that this does not seem to disturb the results.

By a simple relation between the index number of industrial production and the value added, we have estimated the value added for 1951/2. As for 1950/1 we have used a figure published by the planning committee in a series covering the period 1945-54 and which does not differ much from the Hansen-Mead figures.

3. Construction - Figures given by the Mobilization Dept at

current market prices have been deflated by a simple average of the official wholesale price index for building materials and an index of average weekly wages for all workers. For the years 1950/1 and 1951/2, we have taken the figures of the Statistical Dept, which do not differ much from the Mobilization Dept figures and deflated them by the same deflator used in other years.

4. Transport and Communications - The sectoral income of the Mobilization Dept is deflated by a crude index comprising of Suez Canal tollrates and Railway fares. For the years 1950/1 and 1951/2 we have estimated an arbitrary figure based on the Statistical Dept data, which is, however, consistent with Hanson's figures.

5. Commerce and Finance - The real contribution is assumed to be proportional to the commodity flow. On this assumption, the change in real income from Commerce and Finance is set equal to the rate of increase of real income from agriculture and industry plus real imports with addition of custom duties in proportion to those of 1953/4, the base year. On the same basis figures for 1950/1 and 1951/2 have been calculated.

Commerce and finance output at current prices was estimated by multiplying the value at constant prices by a simple average of wholesale and retail price index numbers.

6. Housing - The level of rent is taken to have been unchanged during the whole period. Actually rents have been kept unchanged by the rent controls, but since an increasing part of

the existing stock of houses consists mainly of new houses, built at a higher level of costs than the prewar houses, and since the income from housing is estimated on the basis of rental value of the house (as assessed in connection with the building taxation) an upward bias is introduced in the real estimates.

For the period 1950 - 1952 we have used the figures of the Statistical Dept since they are estimated by the same method.

7. Other Services - This sector includes government administration, domestic services and others. For the period 1950 - 1952, we have estimated the sector at 23% of total domestic product since it remains about the same proportion every year.

8. Factor income from abroad - Professor Bent Hansen[1] pointed out that in the period 1950-1954, the contribution of this item to the growth of national product probably amounted to only - 0.1%, while for the period 1954 - 1959 it became much more important, due to the nationalization schemes and the fall in the dividends transferred abroad, and the contribution to growth reached 0.4%. However, we shall ignore this item and work only with domestic product and changes in the terms of trade.

9. Gains from terms of trade - Gains from terms of trade means that with the same volume of exports the country can get

1) The Growth of National income in the U.A.R. 17th June 1963, Institute of National Planning. Bent Hansen.

an increased volume of imports. They are set equal to:-
Volume of exports x change in terms of trade compared with the base year.

The inclusion of gains from terms of trade in the gross national product will result in the real gross national income which is subject to fluctuations in export and import prices. The extent to which real gross national income is influenced by the fluctuations in the terms of trade has already been discussed in the previous chapter.

To sum up, we have two concepts of income as shown in the following tables:-

1. Gross domestic product at current market prices which is merely the value added of the various sectors.
2. Real gross national income which includes the gains from terms of trade.

Table IV 6

Gross domsstic product at current market prices (Million pounds)

Designation	1950/1	1951/2	1952/3	1953/4	1954/5	1955/6
Agriculture	360	312	275	295	315	339
Industry and Electricity	148	145	127	140	155	170
Construction	25	25	25	27	26	27
Transport	49	51	54	55	58	62
Housing	51	57	59	56	62	65
Commerce	206	195	148	158	163	172
Services	240	242	217	232	235	237
Total Gross Domestic Product	1079	1027	905	963	1014	1072
Index number 1953/4 = 100	112.0	106.6	94.0	100.0	105.3	111.3

Sources: calculated from 1. Hansen and Mead op. cit
2. Bent Hansen, The national outlay in the U.A.R.
3. National income Statistics, Statistical Department
4. The revolution in ten years - Statistical Atlas - Statistical Dept.
5. National Bank ofEgypt.

x Figures of 1961/2 are re-adjusted to actual figures instead of proposed figures, the total estimate is given by Bent Hansen, National outlay in the U.A.R.

Table IV_6

Gross domestic product at current market prices (Million pounds)

1956/7	1957/8	1958/9	1959/60	1960/1	1961/2	Designation
365	370	381	407	403	413	Agriculture
192	218	240	269	297	322	Industry and Electricity
32	38	43	47	44	93	Construction
58	65	72	92	102	107	Transport
67	68	70	73	74	73	Housing
168	189	198	218	230	238	Commerce
243	247	252	272	297	304	Services
1125	1195	1256	1372	1447	1550	Total Gross Domestic Product
116.8	124.1	130.4	142.5	150.2	160.9	Index number 1953/4 = 100

Sources: as on adjacent page.

x Figures of 1961/2 are re-adjusted to actual figures instead of preposed figures, the total estimate is given by Bent Hansen, National outlay in the U.A.R.

Table IV 7

Real Gross National income and Gross domestic Product at 1953/4 constant prices
(million pounds)

Designation	1950/1	1951/2	1952/3	1953/4	1954/5	1955/6
Agriculture	284	299	305	295	298	308
Industry and Electricity	129	133	137	140	149	160
Construction	28	27	25	27	26	25
Transport	53	54	54	55	58	62
Housing	50	57	59	56	62	65
Commerce and Finance	187	181	167	158	161	171
Other Services	218	224	217	232	235	237
Total Gross domestic product	948	975	964	963	989	1028
Index (1953/4 = 100)	98.4	101.2	100.1	100.0	102.7	106.7
Per capita Index	105.8	106.5	102.1	100.0	99.7	101.6
Gains from terms of trade	86	65	8	0	8	10
Total real gross National income	1034	1040	972	963	997	1038
Index(1953/4=100)	107.4	108.0	100.9	100.0	103.5	107.8

Sources: calculated from
1. Bent Hansen and Mead op. cit
2. National income statistics, Statistical Dept.
3. National Bank of Egypt.
4. Annual averages of price index numbers (Statistical Dept).
5. Year Book of International Trade Statistics (United Nations)

Table IV_7

Real Gross National income and gross domestic Product at 1953/4 constant prices (million pounds)

1956/7	1957/8	1958/9	1959/60	1960/1	1961/2	Designation
318	333	352	367	365	338	Agriculture
170	186	198	209	234	257	Industry and Electricity
28	33	38	42	39	55	Construction
58	62	69	88	97	111	Transport
67	68	70	73	74	76	Housing
172	189	205	213	223	228	Commerce and Finance
236	240	245	259	289	289	Other Services
1049	1111	1177	1251	1381	1354	Total Gross Domestic product
108.9	115.4	122.2	129.9	137.2	140.6	Index (1953/4 = 100
100.8	104.9	108.1	112.9	116.3	117.2	Per capita index
17	14	17	26	30	30	Gains from terms of trade
1066	1125	1194	1277	1351	1384	Total real gross National income
110.7	116.8	124.0	132.6	140.3	143.7	Index (1953/4 = 100)

Sources: calculated from

1. Bent Hansen and Mead op. cit
2. National income statistics, Statistical Dept.
3. National Bank of Egypt.
4. Annual averages of price index numbers (Statistical Dept.
5. Year Book of International Trade Statistics (United Nations).

From the previous two tables we can see that gross domestic product at current market prices was declining in the period 1950/1 - 1952/3, but that there was a nearly stable level of domestic product at constant prices of 1953/4. This implies a declining implicit income deflator or a depressed period characterized by falling money incomes and prices.

From 1953/4 gross domestic product rose steadily, both at current and at constant prices. The annual average rate of growth of real output in the period 1953/4 - 1961/2 was about 4.3%. Such a rate of growth has only been achieved because of the high rate from 1956/7 to 1960/1. If income at current prices is considered the average rate of growth will be higher since prices at that period were rising.

If the terms of trade are taken into consideration and real income calculated, the result only differs in the first period (1950/1 - 1952/3), during which the adverse movement in the terms of trade, after the Korean War, had a cosiderable effect on the level of real income. In this period the discrepancy between domestic product at constant prices and real income is significant. Prof. Bent Hansen [1] suggests that in the period 1950-54, the terms of trade contribution to the annual rate of growth was - 1.6% Compared with 0.4% in the period 1954-1959 and 0.1% in the period 1952/3 - 1960/1. It was suggested in Chapter II (p 38) that the favourable movement of the terms of trade contributed 3.5% per annum to

1) The growth of National income in the U.A.R.

the growth of real income from 1945 - 1950. This indicates how internal forces have become much more important in determining how the Egyptian economy develops.

The previous analysis has been made on the basis of total output without taking into consideration the increase in population. Egypt is known to be an overpopulated country and during the period, the rate of growth of population ranged between 2.5% and 2.7% per annum; this suggests that a better measure of development is income per head and not the absolute level of income.

Table IV_7 shows that index of per capital real output was declining between 1950 and 1957 while the growth of income per head in the period 1958-1962 was reasonably good. This indicates that the efforts made in the latest years to develop the economy were successful in offsetting the high rate of reproduction with a chance for a better standard of living.

Section 2 - Structural Changes

i) The need for a balanced growth

The concept of balanced growth has been discussed by many economists, often treating the problem from different angles.

Nurkse[1] treated the problem from the market point of view. He suggests that unless investment is made in a large number of industries, there will not be enough demand for the individual industries. He thinks that external economies can

1) R.Nurkse Problems of capital formation in underdeveloped countries, 1953. Chapter 1.

only be achieved from the existence of a wide market and this wide market could be realized by the establishment of many industries at the same time. Nurkse was not concerned with the problem of who invests, whether the government or the private sector, what is more important is that a number of industries must be set up simultaneously.

Lewis treated the problem of balanced growth in a more comprehensive way[1]. He introduced both the demand factor and the supply factor. He stressed the importance of growth of the various sectors of the economy in the right relationship. In this respect he says[2]

"But even an economy which has no chronic tendency towards deficiency of marginal demand, and is well disposed towards innovation and competitive struggles in the home market, has yet another hurdle to jump, namely that various sectors of the economy must grow in the right relationship to each other, or cannot grow at all. For example, suppose that there is a considerable innovation in the agricultural sector producing food for home market, the result is either a surplus of food to sell to towns, or a surplus of labour in agriculture seeking non-agricultural employment, or some combination of both. If manufacturing industry is growing simultaneously and at the right rate, it can absorb both the surplus goods and surplus labour. If it is not, the terms of trade will move against agriculture, and, as there will be a surplus of farm labour as

1) A. Lewis The theory of economy growth, 1955
2) Ibid, P 276.

well as farm products, agricultural incomes will be depressed and further investment and innovation in this sector may be discouraged. Exactly the same difficulty arises if economic development is concentrated upon industrialization, to the neglect of agriculture as happened in the U.S.S.R. There is an acute shortage of agricultural products and inflation in their prices, which drives up all other prices in a spiral movement. There is also difficulty in disposing of manufactures at a profit. If the farmers real incomes rise, real wages of factory workers must rise in sympathy, while the prices of factory products are being kept relatively low. Alternatively, if farmers real incomes are kept low they cannot afford to buy manufactures which cannot be then sold profitably unless foreign markets are developed, or unless the government takes the surplus manufactures over, as the U.S.S.R. did, for capital formation and defence, but there is then the problem of financing these purchases in an economy where farmers incomes are not rising."

This quotation from Lewis explains exactly what is meant by balanced growth. Some other writers may not advocate balanced growth but their argument may be similar to that of Nurkse or Lewis. Bauer and Yamey[1] for instance stress the importance of agriculture as a stimulus for economic growth. They think that it is essential to build up a strong agricultural

1) The Economics of underdeveloped countries, 1957.

sector before the establishment of any manufacturing sector. Agriculture with its cash crops paves the way for a modern exchange economy with more entrepreneurial and administrative abilities. Moreover it provides the government with a good source of revenue.

Hirschman[1] stressed the importance of induced investment which is created by the existence of an unbalanced growth system. He suggests that growth is communicated from the leading sectors in the economy to the followers and from one industry to another. If a certain sector advances more than the others, this will create opportunities for induced investments in the lagged sectors to catch up the developed ones. He thinks that individual investments which are created by such bottlenecks are more genuine than investments all being made at the same time. When supply difficulties arise in those sectors which are mainly performed by the state such as education and public utilities, the pressure on the part of the public will induce the government to do something. In this case the government desire to stay in power will be exactly the same as the profit motive for the individuals.

Perhaps the most recent argument about the concept of balanced growth was given by Rostow.[2] His argument is similar to that of Hirschman. He stressed the idea of the leading

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1) The strategy of Economic Development 1959.
2). W.W. Rostow Leading sectors and the take off. The economies of take off into sustained growth. International Economic Association 1963

sector which may have three effects -

1. The backward effect which stems from the need for imputs of raw materials, capital equipment and certain types of labour. This will encourage the development of such items in order to satisfy the requirements of the leading industry.

2. The lateral effect which is attributed to the fact that an establishment of a leading industry will transform the whole area into a commercial centre. More facilities will be provided and a favourable atmosphere for industrialization will be created.

3. The forward effect which is due to the fact that the new industry may reduce the cost of input for another industry or create a bottleneck which induces other industries. Most probably the leading industry will pave the way for the next leading industry. The overall effect of the leading sector could be measured precisely by means of a Leontief chain provided that the data are available.

These are the main theoretical arguments given by various economists concerning the concepts of balanced and unbalanced growth. In the light of this discussion we can consider the position of the Egyptian economy.

Sectoral growth in the Egyptian Economy

Analysis of the significance of the various sectors, table IV_8, shows a decline in the share of agriculture in the gross domestic product, from 30% in 1950/1 to 25% in 1961/2. The decline was appreciable as from 1959/60 while the period

before shows a fairly stable ratio to total output. The importance of industry increased gradually from 14% to 19% of total domestic product. The share of transport improved significantly while that of construction only increased in the last year. As for commerce and finance, it shows a decline in the ratio to domestic product; however, such decline was not very significant since the share of commerce and finance is assumed to be changing in proportion to the change in commodity flow (mainly agricultural and industrial products).

The growth of the various sectors, table IV $_9$, shows a tremendous increase as regards industry, construction and transport, while agriculture did not grow to the same degree. The tremendous rise in the index of income from construction in 1961/2 coincided with a sharp decline in the import content in industrial investments (p 131). This would be expected since the rise in income from construction is attributable to factory building(and other building) and therefore the equipment component in investment would be reduced, relatively.

Table IV_8

Share of each sector in gross domestic products

at 1953/4 constant prices %

Designation	1950/1	1951/2	1952/3	1953/4	1954/5
Agriculture	29.9	30.7	31.7	30.7	30.1
Industry and Electricity	13.6	13.6	14.2	14.5	15.0
Construction	2.9	2.8	2.6	2.8	2.6
Transport	5.6	5.5	5.6	5.7	5.9
Housing	5.3	5.8	6.1	5.8	6.3
Commerce and Finance	19.7	18.6	17.3	16.4	16.3
Other Services	23.0	23.0	22.5	24.1	23.8
Total	100.0	100.0	100.0	100.0	100.0

Source calculated from the figures in the table on page (141)

Table IV_8

Share of each sector in gross domestic products

at 1953/4 constant prices %

1955/6	1956/7	1957/8	1958/9	1959/60	1960/1	1961/2
30.0	30.3	30.0	29.9	29.4	27.6	25.0
15.6	16.2	16.7	16.8	16.7	17.7	19.0
2.4	2.7	3.0	3.2	3.4	3.0	4.1
6.0	5.5	5.6	5.9	7.0	7.3	8.2
6.3	6.4	6.1	6.0	5.8	5.6	5.6
16.6	16.4	17.0	17.4	17.0	16.9	16.8
23.1	22.5	21.6	20.8	20.7	21.9	21.3
100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table IV_9

Indices of growth of various sectors (value of net output) 1952/53 = 100

Designation	1950/1	1951/2	1952/3	1953/4	1954/5
Agriculture	93	98	100	97	98
Industry and Electricity	94	97	100	102	109
Construction	112	108	100	108	104
Transport	98	100	100	102	107
Housing	85	97	100	95	105
Commerce and Finance	112	103	100	95	96
Other Services	100	103	100	107	108

Source calculated from the figures in the table on page (141)

Table IV_9

Indices of growth of various sectors (value of net output) 1952/3 = 100

1955/6	1956/7	1957/8	1958/9	1959/60	1960/1	1961/2
101	104	109	115	120	120	111
117	124	136	144	152	171	188
100	112	132	152	168	156	220
115	107	115	128	163	180	205
110	113	115	119	124	125	129
102	103	113	123	127	133	136
109	109	111	113	119	133	133

The previous two tables show a change in the composition of gross domestic product in favour of industry accompanied by a decline in the share of agriculture. However, the share of material product which includes agriculture, industry and construction has not changed much. In an undeveloped economy, it may be desirable to increase the share of material production at the expense of services, since at low levels of per capita income a small proportion of income is usually devoted to services while in a country like the United States the demand for services is highly income elastic. This is illustrated by tables IV_{10}.

Table IV_{10a}

The share of material production in Egypt compared with real income per head.

Year	Ratio of material production to G.D.P. %	Real income[1] per head in dollars
1950/1	46	150.4
1951/2	47	138.9
1952/3	48	119.7
1953/4	48	124.6
1954/5	48	127.7
1955/6	48	132.1
1956/7	49	135.2
1957/8	50	140.7
1958/9	50	144.1
1959/60	49	153.9
1960/1	48	158.5
1961/2	48	132.5

Table IV_{10b}

Share of Material Production in various countries compared with real income per head in 1958

Name of Country	Ratio of material production to G.D.P. %	Real income per head in dollars
United States	43	2552
France	57	1280
U.K.	51	1243
W. Germany	58	1064
Chile	41	373
Greece	58	357
Columbia	61	316
Brazil	51	293
Turkey	68	218
Morrocco	58	184
Ceylon	64	126
India	67	74

Sources:- 1 Bent Hansen and Mead op. cit 2. U.N. Statistical year Book 1962. 3. Kuznets, Economic Development and cultural change October, 1964.

1. Figures of money income per head have been transferred from Egyptian pounds into dollars to make them comparable with other countries. The figures before 1961/2 may be swollen because the Egyptian pound in the preceding years was overvalued.

Tables IV $_{10\ a,b}$ show that Egypt has got a relatively low ratio of material production to total gross domestic product. The share of services in Egypt is the third after Chile and the United States which may suggest that certain structural changes have to be made. There is no doubt that the depletion of foreign reserves has been accompanied by more investment and more importedcapital equipment as explained at the beginning of this chapter, yet the increase in capital stock, still was not associated with a higher share of material produqt. The reason for this as shown in table IV_8 could be attributed to the big share of the item "other services" which mainly comprises incomes of civil servants and also domestic services. This in addition to the increasing share of transport which includes tolls from Suez Canal.

Sectoral growth and the Price level.

The impact of the previous pattern of growth on the price level could be analysed by examining the relationship between prices of agricultural products and industrial ones. The thesis of Arthur Lewis that both sectors must grow in the right relationship could be tested by examining the trend of the terms of trade between agriculture and industry. We may expect a rise in the prices of agricultural products if agriculture does not grow in proportion to the growth of industry, because more demand for raw materials and foodstuffs will be created (allowance must be made for the income elasticity of demand in both sectors). On the other hand,

growth of agriculture faster than industry will cause a drop in the prices of agricultural products unless industry is growing to absorb the surplus productd in the agricultural sector. However, prices of agricultural products may be determined by other factors such as the World prices of these products. For this reason we shall have to distinguish between two kinds of agricultural products.

1. the foodstuffs, which are mainly influenced by the internal forces in the economy such as industrialization
2. Other products including cotton, whose prices are determined according to the world prices.

Table IV [11]

Terms of trade between agriculture and industry

1953/4 = 100

Year	Agricultural implicit deflator	Industrial implicit deflator	Wholesale price of foodstuffs	Wholesale price of manufactures	Col. 1 - Col.2	Col 3. - Col.4
	Col.1	Col.2	Col.3	Col.4	Col.5	Col.6
1950/1	127	115	99	109	110	91
1951/2	104	109	101	117	95	86
1952/3	90	93	100	108	97	93
1953/4	100	100	100	100	100	100
1954/5	106	104	101	98	102	103
1955/6	110	106	107	105	104	102
1956/7	115	113	114	117	102	97
1957/8	111	117	119	121	95	98
1958/9	108	121	119	119	89	100
1959/60	111	129	117	121	86	97
1960/1	110	127	120	120	87	100
1961/2	122	125	124	118	98	105

Sources: calculated from
1. The figures of national income on page (139 & 141)
2. Annual averages of price index numbers op. cit.

The table above shows that in the period under study terms of trade have moved against agriculture as shown in Col. 5. This is mainly attributable to the change in the prices of cotton. If terms of trade are measured by the relationship between the wholesale price of foodstuffs and the wholesale price of manufactures, then no definite trend emerges.

However, in order to understand the reasons behind the movements in the terms of trade, a detailed study of the performance of both sectors must be made.

ii Agriculture

Agriculture is the main sector in the Egyptian economy. The share of net output of agriculture in total domestic product ranged from 30% in 1950 / 1951 to 25% in 1961 / 1962. Employment in agriculture comprises about 60.7% of the employed labour force and rural population totalled 16 million person in 1960 of which the agricultural labour force was estimated to comprise 26.1% as compared with 13.1 million person and 32.1% in 1947[1]. This implies that between 1947 and 1960 unemployment in agriculture increased considerably. Also, while total population rose during the period 1947-1960 by 37.4%, the cultivated area expanded only by 3.6% with an increase of 10.8% in the cropped area.

In 1959/60, the planning committee estimated that some 975,000 agricultural workers, or 23% of the total labour

1) Bulletin of the National Bank of Egypt 1962.

force in agriculture, were not really needed. Seasonal unemployment is also substantial; according to the estimates of the Ministry of Agriculture, the average number of working days for each agricultural worker amounted in the years 1953, 1954, 1955 and 1956 to 151, 164, 168, and 165 respectively. These estimates by the Planning Committee and the Ministry of Agriculture show how far disguised unemployment in Agriculture is prevalant and to what extent an industrialization programme is needed to absorb the surplus labour in agriculture.

In spite of the depressed situation of the agricultural sector in Egypt and the need for industrialization, agriculture has an important role to play. Most economists have stressed the importance of agriculture in the process of economic development. Boserup[1] has summarized the role of agriculture under the following points:-

1. To provide a marketable surplus of food for towns.
2. To create rural markets for industrial goods.
3. To secure a flow of surplus labour for an expanding industrial sector.
4. To provide real finance and entrepreneurship for industrial growth.
5. To provide export earnings.

He suggests that without preceding or concurrent expansion of agricultural output and productivity the economy will

1) Agrarian Structure and take-off, The Economics of take-off into sustained growth, International economic association 1963.

not enter the take-off period. Historical evidence showed that a low elasticity of supply in agriculture cannot be made good by imports of foods, except at a cost, in the form of worsened terms of trade, which would in itself preclude industrial gowth except in Japan, Britain and Holland where trade was favourable and imports of food were associated with rapid growth.

In the previous chapter we have seen how the growth of imports of foodstuffs exceeded the rate of growth of domestic product which necessitated an increase in the home production of such items. This increase may be in the form of more cultivated land or an increase in productivity. Boserup suggests that the increase in productivity must be in labour productivity rather than in land productivity since a higher labour productivity will involve a fall in the disguised unemployment.

In studying the agrarian problem in Egypt, we can divide the subject into the following sections:-

1. Production and productivity
2. Pattern of production.
3. Agriculture and the balance of payments.
4. Agriculture and manufacturing industry.

Production and Productivity

Agricultural production has been increasing steadily during the period under study. However, production is still vulnerable to natural disasters which have a depressing effect

not merely on agriculture but on the economy as a whole. In 1961 for example pests destroyed a large proportion of the production of cotton. This resulted in a sharp decline in the index of agricultural production for 1960/1 and also in 1961/2. When population increase is taken into consideration, the figures show a fairly constant per capita production. On the other hand the general index of production may conceal different rates of growth for different crops which means more emphasis on certain items than the others. This may stem from the fact that the government has been trying to increase the production of foodstuffs, which has become a major problem facing the economy.

Table IV_{12}

Agricultural Production and population growth 1953/4 = 100

Year	Production index	Population index	Per capita index of production	Production per acre (feddan)
1950/1	91.7	93	98.6	81.7
1951/2	93.9	95	98.8	84.8
1952/3	95.6	98	97.5	96.1
1953/4	100.0	100	100.0	100.0
1954/5	103.9	103	100.9	100.6
1955/6	104.8	105	99.8	99.5
1956/7	110.0	108	101.8	101.1
1957/8	114.0	110	103.6	102.8
1958/9	116.6	113	103.2	102.7
1959/60	121.4	115	105.6	105.0
1960/1	115.7	118	98.0	101.3
1961/2	112.7	120	93.9	N.A.

calculated from:
Sources - 1. Bulletin of the National Bank of Egypt.
2. U.N. Demographic Year Book.

Efficiency of agriculture could be measured by four methods:-

1. Productivity per man.
2. Productivity per unit of land.
3. Productivity per unit of capital.
4. Real cost of raw materials per unit of output.

As regards productivity per unit of labour employed, the number of employed farmers did not increase between 1947 and 1960 (4.2 million), consequently it may be assumed that productivity per man has increased to the equivalent of the increase in the production index. However, this does not imply an increase in the marketable surplus, especially if the rise in production is in the form of subsistence crops which is usually associated with a rise in the consumption of rural areas. The existence of the Agrarian Reform system and the social developments may also accelerate the rate of consumption which may absorb the whole increase in production. However, this will depend on the pattern of production and will reflect on the price level of foodstuffs.

As for the productivity per acre, it has also risen but not to the extent of the productivity per man. However, in 1952/3 the rise in the productivity of land was very marked. This could be due to:-

1. A small decline in the cultivated land in 1952.
2. A significant rise in the production of cotton associated with a significant fall in the share of cotton land in the overall cultivated area.

The preceding two measures of efficiency may not give a

true picture of the situation due to the existence of substitution between these two factors (labour and land) and other factors of production such as fertilizers and equipment. The increase in productivity may be attributed either to the increase in consumption of raw materials or to using more capital. In this case the best indicators will be the real cost of raw materials per unit of output and the output capital ratio. However, since the period under study is not long enough to measure the output-capital ratio properly, the indicator of capital intensity may be taken as the ratio between investment in agriculture and total income from agriculture both measured at current market prices.

Table IV_{13}

Real cost of raw materials per unit of output

Year	Cost of raw[1] materials at current prices (million pounds)	Agricultural product at current prices (million pounds)	Cost of raw[2] materials at 1952 prices (million pounds)	Agricultural product at 1952 prices (million pounds)	Real Cost per unit of output (pounds)
	Col.1	Col.2	Col.3	Col.4	Col.5 = Col.3/Col.4
1951	115.2	472.9	130.2	369.5	0.352
1952	122.2	399.2	122.2	399.2	0.306
1953	102.1	384.6	98.6	396.9	0.248
1954	98.4	415.5	96.3	391.5	0.246
1955	96.5	420.7	94.7	379.0	0.250
1956	104.7	471.6	97.8	410.0	0.238
1957	111.2	486.7	94.3	419.6	0.225
1958	114.1	491.7	97.2	439.0	0.221
1959	122.6	521.6	118.4	465.7	0.254
1960	126.0	555.8	125.4	491.8	0.255
1961	134.8	513.4	129.8	427.8	0.303

1) Includes fertilizers, seeds, fodder, fuel and insecticides.
2) Estimated by deflating money cost by the relevant deflators of various items of raw material.
3) Money product deflated by the implicit deflator of agriculture.

Table IV 14a

Consumption of various items of raw materials at 1952 prices (million pounds)

Year	Fertilizers	Seeds	Fodder	Fuel	Insecticides	Total
1951	19.1	15.3	88.9	6.2	0.2	130.2
1952	23.0	23.4	69.9	5.8	0.1	122.2
1953	20.5	13.7	58.3	6.0	0.1	98.6
1954	19.9	13.8	56.6	5.8	0.2	96.3
1955	20.3	14.0	52.0	7.6	0.8	94.7
1956	19.1	17.0	54.7	6.0	1.0	97.8
1957	20.0	16.4	49.8	6.8	1.3	94.3
1958	19.7	17.0	51.3	7.9	1.3	97.2
1959	20.2	23.4	64.3	8.6	1.9	118.4
1960	25.0	23.0	67.5	8.1	1.8	125.4
1961	26.5	18.1	72.3	8.4	4.5	129.8

Sources: calculated from
1. The Bulletin of the National Bank ofEgypt.
2. Annual averages of price index numbers (Dept of Statistics)

Table IV 14b

Indices of prices of main items of raw materials 1952 = 100

Year	Cost of raw materials deflator	Fertilizers deflation	Fodder deflator
1951	88	100	82
1952	100	100	100
1953	103	100	100
1954	102	100	100
1955	102	100	100
1956	107	100	105
1957	118	119	117
1958	117	119	117
1959	103	119	93
1960	100	100	93
1961	104	100	93

Sources: calculated from the same sources as the previous table.

The first table shows that the real cost of raw materials per unit of output has been declining in the period 1951-8 during

which the same amount of production was achieved by less imputs of raw materials. As from 1959 the cost per unit of output started to increase, which suggests that the law of diminishing returns may have begun to operate. This may agree with the United Nations Report (see p 40) which states that agricultural methods have improved so much that there is no longer scope for a spectacular increase in yields. Nevertheless, we cannot say whether the law of diminishing returns has started to work or not from two or three years especially if we know that 1961 was not a normal year.

Tables IV_{14} show that the main items of raw materials are fodder, fertilizers and seeds. The government was able to stabalize the prices of fodder and fertilizers and consequently the cost of raw materials deflator has experienced some sort of stability. It is not likely that the cost of raw materials deflator has much influence on the price index of agricultural products, therefore the problem of prices in the agricultural sector will be dealt with from the demand point of view in the coming section.

Finally, capital is an important factor of production which may not only raise the productivity of the existing land, but it may also increase the amount of cultivable land. The indicator taken here will be as mentioned before, the ratio between investment in agriculture and income from that sector.

Table IV_{15}

Investment in Agriculture and Irrigation projects

Year	Investment in million pounds Col.1	Income from agriculture in million pounds Col.2	Investment Ratio Col.3 = Col.1/Col.2 %
1950/1	9.8	360	2.7
1951/2	9.7	312	3.1
1952/3	13.7	275	5.0
1953/4	14.8	295	5.0
1954/5	15.3	315	4.8
1955/6	18.0	339	5.3
1956/7	19.6	365	5.4
1957/8	21.2	370	5.7
1958/9	24.8	381	6.5
1959/60	25.3	407	6.2
1960/1	32.9	403	8.2
1961/2	37.9	413	9.2

Sources: 1. Egypt in Revolution, Statistical Atlas, (Dept of Statistics.
2. The planning committee, Cairo.

Investment in agriculture has increased tremendously even if the above mentioned figures are deflated by the investment deflator to get the figures of real investment. Also the ratio of investment to income from agriculture has been increasing steadily, which may be an indication of a rise in the capital output ratio. Brahmanda[1] suggests that agricultural investment must grow more than population growth after which investment in agriculture may fall. In Egypt this principle has been achieved in the period under study whether figures of investment are taken in money terms or at constantprices. However, the increase in investment was not associated with an increase in the level of employment and this may be due

1) Economic Development for Latin America, International Economic Association, 1961

to the introduction of new techniques with a better system of mechanisation or, it could be because employment in agriculture is mainly determined by the amount of cultivable land rather than the level of investment.

Pattern of Production

The pattern of agricultural production has changed considerably. Cotton is known to be the main crop in Egypt. Its significance as a percentage of the value of production has been declining steadily from 37.8% in 1950/1 to 24.8% in 1960/1. This has been the result of the government policy to encourage the production of foodstuffs to cope with the growth of population. The Agrarian Reform system may also have contributed to such a change in the pattern of production.

Table IV [16]

Proportion of cotton production in total agricultural production value in million pounds at current prices

Year	Value of Cotton Col.1	Value of agricultural production Col.2	Ratio of Cotton production Col.3 = % Col.1/Col.2
1950/1	179	473	37.8
1951/2	143	436	32.8
1952/3	101	392	25.8
1953/4	95	400	23.7
1954/5	101	418	24.2
1955/6	113	446	25.3
1956/7	131	479	27.3
1957/8	134	489	27.4
1958/9	119	502	23.7
1959/60	136	539	25.2
1960/1	134	534	25.1

Source: Bulletin of the National Bank of Egypt.

However, the decline in the ratio may be due to the decline in the price of cotton, since the base year 1950/1 experienced high prices of fibres compared with other products, whereas, if we start off with 1952/3, the ratio of cotton production to total agricultural production does not change much over the whole period. For these reasons we have to eliminate the price effect and compare physical amounts, represented by the production indices of various crops.

Table IV [17]

Indices of various items of agricultural production
1953/4 = 100

Year	Total agr. Production Col.1	fibres production Col.2	foodstuffs production Col.3	animal production Col.4	Col.2 Col.1 Col.5	Col.3 Col.1 Col.6	Col.4 Col.1 Col.7
1950/1	91.7	112.1	86.8	104.0	122.2	94.6	113.4
1951/2	93.9	122.4	86.8	101.6	130.3	92.4	108.2
1952/3	95.6	115.7	90.8	96.4	121.0	95.0	100.8
1953/4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1954/5	103.9	102.4	104.8	103.6	98.5	100.9	99.7
1955/6	104.8	99.4	106.8	99.2	94.8	101.9	94.6
1956/7	110.0	110.3	110.3	112.0	100.3	100.3	101.8
1957/8	114.0	129.7	110.3	112.8	113.8	96.7	98.9
1958/9	116.6	138.2	111.5	114.8	118.5	95.6	98.4
1959/60	121.4	143.6	115.9	117.2	118.3	95.5	96.5
1960/1	115.7	121.2	109.6	118.4	104.7	94.7	102.3
1961/2	112.7	104.2	110.3	118.4	92.4	97.9	105.1

Source: calculated from the bulletin of the National Bank of Egypt.

The elimination of the price effect shows a declining tendency in the ratio of fibres to total agricultural production up to 1955/6. The fall in the share of fibres was associated with a rise in the importance of foodstuffs.

This may be the result of the application of the Agrarian Reform system and the government policy to encourage the diversification of output. However, as of 1956/7, it has been realized that the production of cotton may be more profitable in spite of the difficulty of the fluctuations in its prices. This resulted in a rise in the share of cotton again and a decline in the share of foodstuffs. The drop in theshare of cotton in 1960/1 and 1961/2 was certainly the outcome of the disaster which took place in 1961; but the planned policy towards cotton production was the same as the preceding years.

As regards animal production, its ratio to total agricultural production declined significantly up to 1955/6, which may also be attributed to the Agrarian Reform system which had unfavourable effects on that type of production. This was associated with a fall in the consumption of fodder as shown in the table on p. (161). As from 1956/7 animal production went up again accompanied by a rise in the use of fodder.

The impart of these changes in the pattern of production on the internal price level could be summed up as follows:-

1. As regards the price level of fibres,it is totally determined according to the world forces, which is beyond the scope of this research.

2. It is essential to analyse the forces behind the change in the price level of foodstuffs since they are mainly determined within the domestic economy. In a country like Egypt,

food prices are fixed according to the relationship between internal demand and available supply

This demand/supply relationship will be analysed by making the following comparisons -

a) per capita production of foodstuffs in relation to per capita real income, which is an indicator of the demand factor

b) per capita supply of foodstuffs (including imports) in relation to per capita real income (the demand factor).

Table IV_{18}

The impact of per capita food production on the price level of foodstuffs 1953/4 = 100

Year	Population index	Food production index	per capita food production	Index of real income	per capita real income	Price level of foodstuff.	
						General	Cereals
	Col.1	Col.2	Col.3	Col.4	Col.5	Col.6	
1950/1	93	87	93	113	121	99	89
1951/2	95	87	91	114	120	101	90
1952/3	98	91	93	101	103	100	92
1953/4	100	100	100	100	100	100	100
1954/5	103	105	102	103	100	101	105
1955/6	105	107	102	108	103	107	113
1956/7	108	110	102	111	103	114	117
1957/8	110	110	102	117	106	119	113
1958/9	113	112	99	124	110	119	110
1959/60	115	116	101	133	116	117	111
1960/1	118	109	92	140	119	120	113
1961/2	120	110	92	144	120	124	115

Sources: calculated from.
1. U.N. Demographic year book.
2. Bent Hansen and Mead op. cit.
3. Annual Averages of price index numbers op.cit.
4. Bulletin of the National Bank of Egypt.

The table above shows that during the whole period of study demand indicated by per capita real income has certainly risen relative to supply represented by the figures of per capita production of foodstuffs. This, it could be argued, resulted in a rise in the prices of cereals and also the general level of prices of foodstuffs.

It is worth noting that the price of cereals moves somewhat differently from the price of foodstuffs in general. In the earlier stage, when per capita real income was declining, the price level of cereals was rising while the general level of prices of foodstuffs was nearly constant. It may be suggested that at lower income levels people tended to consume inferior qualities of food mainly bread; when per capita real income started to rise the general level of prices which includes better qualities of food such as eggs, butter and meat was rising faster than the price level of cereals.

However, we cannot take the production of foodstuffs solely as representative of the supply of food; imports must be included otherwise the picture will be incomplete.

Table IV_{19}

Index of imports of foodstuffs
1956/7 = 100

Year	Volume of imports[1]	Number of population	Imports of foodstuffs per head
1952/3	96.7	90.7	106.6
1953/4	42.8	92.6	46.2
1954/5	32.2	95.4	33.7
1955/6	57.9	97.2	59.6
1956/7	100.0	100.0	100.0
1957/8	136.2	101.8	133.8
1958/9	153.3	104.6	146.5
195-/60	152.6	106.5	143.3
1960/1	153.9	109.2	140.9
1961/2	186.8	111.1	168.1

Table IV_{20}

Index of total supply of foodstuffs in in relation to the price level of food 1956/7 = 100[2]

Year	Volume of imports per capita	Food production per capita	per capita supply of food[3]	real income	Food int- ernal	Price imp- orted
1952/3	106.6	91.2	92.7	100.0	87.7	131.3
1953/4	46.2	98.0	92.8	98.0	87.7	137.3
1954/5	33.7	100.0	93.4	98.0	88.6	143.3
1955/6	59.6	100.0	96.0	100.0	93.8	122.0
1956/7	100.0	100.0	100.0	100.0	100.0	100.0
1957/8	133.8	100.0	103.4	102.9	104.4	90.0
1958/9	146.5	97.0	101.9	106.8	104.4	80.0
1959/60	143.2	99.0	103.4	112.6	102.6	77.3
1960/1	140.9	90.2	95.3	115.5	105.3	79.3
1961/2	168.1	90.2	98.0	116.5	108.8	85.3

1) Volume of imports has been estimated as the value of imports deflated by the price level of imported food which has been calculated in Chapter III. For the years 1953 and 1954 the source of infcrmation used was the United Nations Year Book of International Trade Statistics while for the rest of the period the classification of the Annual Budget Reports was used. This may create some differences in the calculations, although very minor.

2) The reason for not taking 1953/4 as a base year to make the figures corresponding to those in table IV_{18}, is that the volume of food imports in 1953/4 was exceedingly low, which may distort the results. The year 1956/7 was normal whether for domestic production or food imports.

3) The weights used to combine the volume of imports and domestic production are 10 and 90 respectively; which represent the value of both items in the base year.

Sources: 1. Same sources as table IV_{18}
2. Annual Budget reports
3. Year Book of International Trade Statistics.

The inclusion of imports, although it modifies the picture especially in the latter years, still does not satisfy the requirements created by the increase in per capita real income. This has been accompanied by a rise in the internal prices of food. Thus, there has been an inverse relationship between internal prices of food and the imported ones. This suggests that internal prices of food would have been higher if import prices had not fallen.

In sum, we can say that due to the shortage of food supply in relation to demand, internal prices went up. The rise would have been greater but for the substantial increase in food imports and the reduction in the price of imported food.

Agriculture and the balance of payments.

The impact of agriculture on the balance of payments operates in three ways:-

1. The imports of raw materials and capital equipment for agriculture are a burden on the balance of payments.
2. The increase in the production of food saves on the import side of the balance of payments since food is a major item of imports which creates a pressure on the existing foreign exchange reserves.
3. Agricultural exports are the most important source of earnings of foreign exchange. This renders the expansion of the agricultural sector essential if an increased import capacity is required.

As regards the buden of imported raw materials for agriculture, it has been mentioned before that the main imp· ts are fertilizers, fodders, selected seeds and fuel. The main imported item is fertilizers, while fodder and seeds are more or less home produce although there may be certain sorts of selected seeds imported. As for fuel, it may be imported as well as produced domestically.

The following table shows the percentage of imported fertilizers to total consumption and to total cost of raw materials at current market prices.

Table IV_{21}

Year	imports of fertiliz-ers [1] million pounds (Col.1)	Total consumption of fertilizers million pounds (Col.2	Total cost of mater-ials [3] mil- (Col.3)	Col. 1/ Col.2 %	Col.1/ Col.3 Col.5 %
1952	13.7	23.0	126.8	59.6	10.8
1953	9.5	20.5	102.8	46.3	9.2
1956	8.0	19.5	110.6	41.0	7.2
1957	13.2	23.8	117.6	55.5	11.2
1958	15.3	23.5	120.5	65.1	12.7
1959	6.7	24.0	129.9	27.9	5.2
1960	9.1	25.3	133.7	36.0	6.8
1961	7.1	26.8	141.2	26.5	5.0

Source: calculated from the National Bank of Egypt.

It can be seen from the table above that the imports of fertilizers as a percentage of total consumption of fertilizers or as a percentage of total cost of materials has been declining during the period of study. Therefore, we can say that agricultural production does not depend much on imported raw materials or, more precisely, the burden of imported raw

materials for agriculture has been falling along with the development process. However, in order to estimate the burden of agriculture on the balance of payments, we must consider both imported raw materials and capital equipment. The imports of capital equipment should not be neglected, especially if we know that agricultural development does not depend only on improving the productivity of the existing land but it also depends on the reclamation of new areas. This may involve a high amount of imported capital equipment.

As indicated at the beginning of this chapter, the ratio of equipment to total investment in agriculture was declining between 1952 and 1960 after which the ratio started to rise. There are two reasons for this:-

1. When the agrarian reform system was first applied, the large estates were divided among the small peasants and this resulted in a decline in the imports of tractors and other agricultural equipment.

2. In the later years and especially after the application of the second agrarian reform in 1961, when the new system had become an established fact, the need for imported capital equipment began to arise again. It is expected that the organization ofagriculture into large units will be associated with more imported capital equipment. In this respect we may quote Doreen Warriner[1] on the results of the agrarian reform and in connection with the field system[2] followed in

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1) Land reform and development in the Middle East, A study of Egypt, Syria and Iraq (second edition 1962). P 44

the production system,[1]

"The field layout facilitates deep ploughing (otherwise impeded in the Delta by permanent drains) and farming operations in general, as, for example, the co-operative picking of the cotton crop. In Sir Malcolm Darling's view the compulsory rotation is the most productive feature of the reform. There has been no change to small scale farming. On the contrary, in so far as estates were rented to tenants, as even the layout were in part, the scale of operation is larger. Tractor cultivation is being introduced, wherever it was not used before which should allow the cultivator to reduce his working live-stock and produce more meat and milk. It used to be said that Egypt is a country of large properties and small farmers. So far as the requisitioned land is concerned, the reverse is true, for it is now held by small proprietors and farmed in large units."

To sum up, an increased pressure on the balance of payments owing to increased imports of agricultural equipment is expected, either because of the direct effects of importing capital equipment to be used immediately in agriculture or because of the indirect effects of more equipment to be imported for subsidiary industries such as the industries established specially for the High Dam. As an example, the creation of the high dam will produce an increase in the consumption of fertilizers, since the Dam will obstruct the clay, which is carried by the Nile, and which is very useful for the soil. The impact of these indirect effects on the

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1. The area of the state is divided into blocks, and in each block the land is divided into three or more fields, each under a single crop.

balance of payments could be quite considerable. However, as has been shown before, the import content in agricultural input is still low, if compared with other sectors such as industry or transport, and, whatever equipment and materials are imported, we can assume that agriculture is rather a source of foreign exchange than a drain on reserves.

The discussion in the preceding passages was concerned with the relationship between agricultural inputs and the balance of payments, now the argument will be about the relationship between agricultural output and the balance of payments.

The most important item of agricultural imports is foodstuffs which are considered a threat to the balance of payments. In the last few years Egypt has been importing a considerable amount of foodstuffs in spite of the fact that Egypt is an agricultural country.

Table IV_{22}

Imports of foodstuffs in relation to the method of finance value in million pounds.

Year	Imports of[1] foods (Col.1)	Total imports (Col.2)	Col.1/ Col.2 (Col.3)	American aid[2] according to p L.480 (Col.4)	Change in foreign assets (Col.5)
1952	61.8	223.5	27.6	8.3	-60.4
1955	20.4	183.2	11.1	8.2	-36.7
1956	27.5	186.0	14.8	12.9	-41.9
1957	42.6	182.6	23.3	0.2	-36.7
1958	42.7	238.2	17.9	0.7	-21.2
1959	43.4	214.4	20.2	20.1	-20.4
1960	40.0	225.0	17.8	28.2	-19.6
1961	66.3	238.5	27.8	36.0	-21.6
1962	67.6	302.9	22.3	96.6	-51.1

Sources: - calculated from
1. Bulletin of the National Bank of Egypt.
2. Foreign aid to the U.A.R. op. cit.
3. International financial statistics.
4. Annual Budget Reports.

The table above indicates a high ratio of imports of food-stuffs to total imports although there is no clear trend. The significance of food pressure on the balance of payments is emphasised if the method of finance is considered. Up to 1958 the American foreign aid according to P.L.480 was far less than the imports of food. In that period the fall in net foreign assets was almost the same as the cost of food imports; note especially 1952, when the large amount of food imports was associated with the highest change in foreign reserves. This confirms what was stated at the beginning of this chapter, that net foreign assets have contributed much to the stability of the economy (by importing essential consumer goods) as well as by the build-up of the country's productive capacity.

An attempt to combine the two relationships - the relationship between inputs of agricultural raw materials and the balance of payments on the one hand, and the relationship between food imports and the balance of payments on the other may suggest that more raw materials have to be imported to increase the productivity of land and to save on the imports of food. However, both the increase in land productivity and

1) Imports of sugar are not cincluded because they are considered as semi-manufactured goods. All imports of food other than sugar are included.
2) The American foreign aid according to P.L. 480 is mainly in the form of food although in the last few years other items have been included. This is clear in 1962.

the increase in the amount of arable land affect the level of production. This may suggest that an increase in imports of capital equipment as well as in imports of raw materials necessary for production is required, and in both cases it will be worthwhile.

Finally agriculture phys an important part in the export sector, as it is considered the main source of foreign exchange. This can be demonstrated by the following table.

Table IV_{23}

Agriculture and Exports value in million pounds

Year	Exports of agricultural products	Value of total exports	Value of agricultural production	Col. 1. ÷ Col.2	Col.1. ÷ Col.3
	Col.1	Col.2	Col.3	% Col.4	% Col.5
1950	162.8	175.4	473.3	92.8	34.4
1951	184.5	203.1	472.9	90.8	39.0
1952	131.9	145.1	399.2	90.9	33.0
1953	125.8	137.3	384.6	91.6	32.7
1954	122.3	138.3	415.5	88.4	29.4
1955	122.9	138.4	420.7	88.8	29.2
1956	119.2	142.3	471.6	83.8	25.3
1957	146.6	171.6	486.7	85.4	30.1
1958	136.2	163.8	491.7	83.1	27.7
1959	124.2	154.3	521.6	80.5	23.8
1960	153.5	191.6	555.8	80.1	27.6
1961.	119.5	168.2	513.4	71.0	23.3

Sources-calculated from
1. Bulletin of the National Bank of Egypt
2. Accession of the U.A.R. to the G.A.T.T.

Table IV_{23} shows that the ratio of agricultural exports to total value of exports ranged between 80% in 1960 and 93% in 1950. An important reason for the sharp drop in agricultural exports in 1961 was the fall in agricultural production. But,

on the whole, there has been a change in the export structure throughout the period under study for two main reasons:-

1. The increase in the value of manufactured and semi-manufactured exports as has been explained in the previous chapter.

2. The increase in the domestic demand for agricultural products; cotton, which is the main crop in Egypt, has been responsible for the decline in agricultural exports. The improvement of the cotton textile industry has been associated with more consumption of raw cotton by the domestic industry. This will be further discussed in the coming section.

Agriculture and Manufacturing Industry

Manufacturing industry is one of the main users of agricultural products. The importance of agriculture as a supplier of raw materials to industry has gained strength as indicated by the rapid decline in the value of agricultural exports in relation to the value of total agricultural production. Another indicator is the ratio of raw cotton consumption to total production of raw cotton. Since the textile industry is an expanding industry in Egypt, as well as in most of the underdeveloped countries, we must expect a rising trend in the share of domestic consumption of raw cotton as shown in table IV_{24}.

Table IV [24]

Proportion of domestic raw cotton consumption to raw cotton production in relation to production of cotton textile.

Year	Proportion of raw cotton output domestically consumed %	Production of cotton yarn in thousand tons	Production of cotton fabrics in thousand tons
1952	16.5	56	43
1953	19.0	N.A.	N.A.
1954	23.0	N.A.	N.A.
1955	24.5	N.A.	N.A.
1956	27.0	N.A.	N.A.
1957	26.5	81	56
1958	24.5	87	60
1959	24.0	91	62
1960	24.5	102	64
1961	33.5	111	73
1962	36.0	121	78

Sources calculated from
1. The Bulletin of the National Bank of Egypt
2. The Federation of Industries, Year Book.

The table above shows a steady rise in the production of cotton yarn and cotton fabrics associated with a rise in the proportion of raw cotton output domestically consumed. However, the sharp rise in the ratio of domestic consumption of cotton in the years 1961 and 1962 does not only reflect a rise in the production of cotton textiles, but it is also the result of the destruction of the cotton crop. The destruction of the crop, although it had a detrimental effect on the exports of raw cotton, did not slow down the expansion of the domestic textile industry. This supports Cairncross's[1] thesis that underdeveloped countries often fail to expand their

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1) op. cit.

exports of raw materialsowing to the existence of industrial-ization programmes, which absorb a considerable amount of the raw materials produced. The problem then becomes, will industry be able to make up for the fall in agricultural exp-orts or not? This will be discussed in the part on industrialization.

Concluding Remarks on Agriculture

1. Agricultural production increased over the period under study; however, if population growth, pattern of production and real income changes are considered, it is likely that there was an inflationary pressure due to the inadequacy of food supply in relation to growth of real income.

2. Production and productivity increased due to the use of more fertilizers and more inputs of raw materials. However, after a certain limit it will be difficult to raise the productivity of land, and the need for capital will be urgent to increase the amount of cultivated land.

3. More investment in agriculture was made with a high import content in the last two years of our period. It is expected that the organization of agriculture into large units and the increase in the equipment / man ratio will create more pressure on the balance of payments. Yet it is suggested that more imports of raw materials and capital equipment will be more economical than importing foodstuffs.

4. There has been an increased demand on the part of industry for agricultural inputs, and this was responsible for the decline in the ratio of agricultural exports to total exports. It is not yet known whether industry will be able to make up for the drop in agricultural exports or not. A detailed study will be made of the effect of industrialization on the balance of payments in the next part of this chapter.

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iii Industrialization

Industry in Egypt has gained more importance in recent years, as a result of the efforts exerted by the government, to make the economy less dependent on agriculture which has always been the main source of income. It has been shown before, that the share of industry in gross domestic product, at constant prices, increased steadily from 14% in 1950/1 to 19% in 1961/2. The share of investment in industry and electricity in total investments rose gradually from 30% to 35%; between 1952 and 1962 investment in industry more than trebled. However, in the period 1947-1960 employment in industry did not increase appreciably. This must have been due to the use of advanced techniques, which involves a high ratio of capital to labour. It is probable that the government policy to encourage the establishment of new factories was at the expense of the old firms which resulted in a constant volume of employment over the period under study. However, we cannot lay much stress upon the figures of employment since we only have the figures of the population census in 1947 and 1960.[1]

1) Figures of Industrial census of production show that between 1952 and 1958, the volume of employment was almost constant, after 1959 the number of employment started to increase considerably. However the industrial census only covers establishments employing 10 workers or more which may not give a true picture of the situation. The figures of employment mentioned in the population census, which are more comprehensive (see chapter II)have not shown an appreciable difference between employment in 1947 and in 1960.

As the present chapter is concerned with growth and structural changes in Egypt, we may sum up the problems of industrialization as follows:-

1. The contribution of industry to the growth of total output; this will involve a study of the changes in productivity in the industrial sector compared with other sectors of the economy.

2. The pattern of industrial production particularly in view of the import substitution policy.

3. The relationship between industrialization and the balance of payments.

Industrialization and growth[1]

The main target of any development programme is to raise productivity throughout the whole economy. In Egypt although the productivity of agriculture is rising, it cannot cope with the growth of population, and the need for technological development to raise the productivity of the economy is urgent. It may be suggested that industry could be the spearhead of such development for many reasons:-

1. The abundant labour in the agricultural sector could be absorbed by industry; we may be able to transfer some of the labour force in agriculture to the industrial sector without affecting the overall agricultural production.

2. Industry is the sector which can absorb new techniques most easily and consequently technological development could

1) Progress and problems of industrialization in underdeveloped countries, United Nations, 1955.

spread from industry throughout the whole economy.

3. Industry can provide agriculture with the inputs of raw materials such as fertilizers and also capital equipment.

For these reasons, we may suggest that the improvement in the productivity of the economy and the change in the social structure will not be accomplished unless the industrial sector is growing side by side with agriculture.

Improved techniques are very important in raising productivity in underdeveloped countries. It is necessary to find out the techniques relevant to less developed countries which are consistent with their conditions and their ambitions of having a balanced growth economic structure. Underdeveloped countries have the advantage of using the stock of knowledge which has been accumulated by advanced industrial countries.[1]

In order to evaluate a certain technology, the problem of measurement will arise. The economist has his own evaluation which is different from that of the engineer. The economist always measure productivity in terms of inputs of capital, labour and land. A more advanced system of evaluation is the input-output tables which can be sstablished for the whole economy. Eckauis suggests[2] that "where input-output methods cannot be applied, something equivalent has to be developed for the purpose of establishing over-all consistency in the economic programming. The development of

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1) R.S. Eckauis, Technological Change in less developed areas. Development of the emerging countries, Brookings 1962.
2) Ibid, P 129.

input-output type information must therefore, be seriously considered in research plans for any underdeveloped area."

In this research, since one of our main concerns is the pressure on the balance of payments, we have tried to use simple measures such as the import content in the various sectors of the economy. However, this is certainly not an alternative for a system of input-output tables.

An empérical study of the Egyptian economy shows no increase in the labour force in industry, agriculture or in overall employment. The growth of productivity per man was set equal to the growth of production in every sector. Comparing the growth of productivity in agriculture and industry with the growth of domestic product per man employed, the result is as follows:-

Table IV_{25}

Productivity per man in Agriculture,
Industry and gross domestic product
1954 = 100

Year	Productivity in agriculture	Productivity in industry	Productivity in the overall economy
1951	87	92	98
1952	92	94	99
1953	90	95	98
1954	100	100	100
1955	98	109	103
1956	102	115	106
1957	108	123	108
1958	109	136	117
1959	113	140	123

Sources:1. Bent Hansen and Donald Mead op. cit.
2. Bulletin of the National Bank of Egypt.

The previous table shows an increase in the productivity of the industrial worker more than the productivity of the farmer. The growth of domestic product per man did not show a very different pattern from the growth of the productivity in agriculture. This supports the previous argument that industry is more influenced by technological changes than other sectors of the economy. However, in order to evaluate technical progress in industry, we have to consider the other factors of production, especially capital, which is scarce in most of the underdeveloped countries. However, we must have long series of figures in order to compute the output-capital ratio and these are not available.

An attempt was made by the Ministry of Industry in Egypt to compute the technical co-efficients for the various industrial sectors. The results are shown in the following table.

Table IV [26]

Co-efficients of industrial development

Industrial Sector	Capital Required (million pounds) Col.1	Fixed capital (million pounds) Col.2	Value added million pounds Col.3	Employment number Col.4	Col.1 / Col.3 c/O ratio Col.5	Col.1 / Col.4 c/L ratio Col.6
Textiles	24.7	12.4	9.5	10400	1.55	1410
Engineering	18.9	14.0	6.6	7411	2.85	2545
Food	9.5	7.7	3.2	3332	2.96	2845
Chemicals	57.1	49.6	18.8	7608	3.03	7501

Calculations ofCo-efficients

1. General co-efficient of capital to value added =

$\frac{\text{100.1 m. pounds}}{\text{38.1 m. pounds}} = 2.6$. This implies that an increase in the value added worth of L 100 requires and investment of L 2600.

2. General co-efficient of capital to labour calculated for the first industrial five year plan (not including mining and petroleum) = $\frac{\text{190.6 m. pounds}}{\text{63049 employees}} = 3023$

This implies that in order to employ a hundred worker in the industrial sector the investment required is 302300 Egyptian pounds.

The above mentioned calculations may give an idea about the technical co-efficients in the various industries. It is clear that the chemical industry has the highest capital/ labour ratio followed by the food industry. However, we shall not be able to know how the general co-efficient changed during the period unless we analyse the changes in the pattern of industrial production.

Pattern of industrial production

In this section a breakdown of industrial production has been made in order to determine how far the pattern of industrial growth changed and to what extent there was:-

1. a build-up capital intensive industries.

2. Expansion of the export sector.

3. Production of import substitutes.

Furthermore changes in the pattern of industrial production may affect the index of prices of industrial products and this must be considered.

The main industrial sectors in the Egyptian economy are:-

1. Textiles
2. Food
3. Chemicals
4. Engineering
5. Leather and Tanning
6. Construction materials
7. Mining and Petroleum
8. Electricity supply and Gas.

Table IV_{27}

Production of various industrial sectors at current market prices in million pounds.

Industrial Sector	1952	1958	1959	1960	1961
Textiles	85	157	183	230	259
Food	122	155	164	173	166
Chemicals	20	40	43	49	60
Engineering	30	53	52	81	N.A.
Leather and Tanning	4	6	7	8	N.A.
Construction materials	8	18	20	20	N.A.
Mining and Petroleum	38	67	65	74	82
Electricity and Gas	10	18	21	29	37
Total	317	514	555	664	717

Table IV_{28}

Proportions of various industries to total industrial production

%

Designation	1952	1958	1959	1960	1961
Textiles	26.8	30.5	33.0	34.6	36.1
Food	38.5	30.2	29.5	26.1	23.1
Chemicals	6.3	7.8	7.7	7.4	8.4
Engineering	9.5	10.3	9.4	12.2	N. A.
Leather and Tanning	1.3	1.2	1.3	1.2	N.A.
Construction materials	2.5	3.5	3.6	3.0	N.A.
Mining and Petrcleum	12.0	13.0	11.7	11.1	11.4
Electricity and Gas	3.1	3.5	3.8	4.4	5.2
Total	100.0	100.0	100.0	100.0	100.0

Table IV_{29}

Indices of production

1952= 100

Designation	1952	1958	1959	1960
Textile industries				
Cotton industry	100	150	160	188
Woolen industry	100	300	300	333
Silk industry	100	263	250	275
Jute industry	100	236	318	735
Hosiery	100	198	267	294
Food industries				
Canned industries	100	256	300	320
Sugar	100	162	172	178
Food,pastes	100	178	178	183
Rice, Husked	100	210	310	338
Soda water	100	224	247	256

	1952	1958	1959	1960
Chemical industries				
Sulpheric Acid	100	151	169	187
Supper phosphate fertilizer	100	170	158	179
Nétrogenous fertilizers	100	198	222	230
Paper	100	205	205	195
Plated glass raw crystal	100	226	260	299
Engineering industries				
Reinforcing and wires	100	218	267	327
Metallic furniture	100	200	207	217
Kerosene stoves	100	350	350	375
Electrical ~~lamps~~bulbs	100	258	300	279
Motor car batteries	100	361	472	433
Building materials				
Portland Cement	100	159	188	200
Bricks	100	625	688	588
Marble	100	208	229	469
Fireclay	100	300	325	375
Pipes and concrete	100	444	444	444

Sources of tables IV_{27} IV_{28} and IV_{29} are
1. Indicators of economic development, Ministry of Economy.
2. Bulletin of the Industrial Bank of Egypt.

The breakdown of manufacturing ihdustries into its main sectors shows the increased importance of textiles, chemicals and engineering industries while the share of food industries has declined. This change in the pattern of production, if related to the technical co-efficients mentioned in page 187 might suggest that the Egyptian industry has turned towards labour intensive industries. However, the increase in industrial investments gradually from 32.3 million pounds in 1952 to 93.4 million pounds in 1962, and

the slight increase in employment does not support this argument. In this case we can say that the reason for the small rise in the number of employment could be attributed to the change over time in the overall ratio of C/L as all industries tend to use more capital intensive methods, and this may not be a very sensible policy for an underdeveloped country in which L(Labour) is plentiful and C(capital) is scarce. It is always suggested that underdeveloped countries should utilize the existing capacity to the atmost, in order to achieve a high degree of employment.

The second point to be considered from the foregoing tables is how far the change in the pattern of production conforms to domestic markets or to foreign ones. It has been argued in the previous chapter that many developing countries lay stress upon a policy of import substitution to the neglect of export promotion, at a time when they are in need of large amounts of imported raw materials and capital equipment. It has also been shown, in the section on agriculture, that exports of agricultural products have declined, which suggests that more industrial exports have to be introduced to close the gap in the balance of payments. A pragmatic industrialization policy may be a burden on the economy rather than a relief. A good policy must score on the balance of payments both on the export and the import sides. If we analyse the Egyptian pattern of industrial

production we may find an element of pragmatism in the government policy. Many industries have been set up just for the sake of inport substitution, even extending to luxury products such as motor cars, butagaz cooking appliances, air conditioning sets, electrical refrigerators, electrical washing machines and radios and television sets. All these industries are highly dependent on imports of raw materials and capital equipment and do not match with the country's stage of development. However, some export industries have been promoted, such as the textile industry which may help by earning more foreign currency to be used in the financing of imports. Nevertheless, it is not certain that with the increase in the production of textiles, the foreign markets will be open to absorb all goods produced. The figures of stocks for all textile products show an increase year by year.[1] In 1961, the figures of cotton weaving stocks show an increase of 37% and for cotton spinning 43%. The existence of competition from other countries has rendered the problem of textile export very difficult and, as has been explained in the previous chapter a subsidy has to be paid due to the high cost of production in relation to world prices. Accordingly, we can say that the market problem is an important one even for such a well established industry as the cotton textile industry. However, this should not take us as far as to reject industrialization as such, because,

1) Annual Year Book for the Federation of Industries Cairo, 1962.

as Prcf. Prebisch[1] pointed out, even if output per man is less in industry than in the export sector, still productivity in industry is higher than in the rest cf the economy. (We have shown that this is true for the Egyptian economy).

Finally, let us consider how changes in the industrial sector have affected prices. In theory a key factor which influences the price level is the change in the wage claims. In advanced countries, in conditions of high employment, the existence of strong trade unions renders wage increase the basic force which drives prices upwards. Prof. Turner[2] suggests that in underdeveloped countries, owing to the existence of surplus labour, one would expect productivity and profits tc rise faster than average real wages, and wages fcr unskilled labourers to be kept close tc subsistence level. However, he states that in practice money wages have been rising pretty fast, certainly faster than in most western industrial countries; the average annual rate of increase in African wages during the 1950's appears to have been 7% or 8%. In Egypt, the period under study experienced a rise in industrial productivity as a result of the rise in production and the constancy of employment. Comparing money wages with the changes in productivity the result is as follcws:-

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1) op. cit
2) Wage policy and economic development, p.4.

Table IV [30]

Indices of wages, productivity and the price level 1954=100

Year	Index of money wages W	Productivity per man in industry (P)	Labour Cost W/P	Wholesale price level of industrial products
1951	89	92	97	120
1952	96	94	102	117
1953	95	95	100	103
1954	100	100	100	100
1955	105	109	96	101
1956	106	110	96	113
1957	111	123	90	126
1958	113	136	83	120
1959	112	140	80	121
1960	112	N.A.	N.A.	124
1961	113	N.A.	N.A.	120
1962	109	N.A.	N.A.	118

Sources: - 1. Bulletin of the National Bank of Egypt
2. U.N. Statistical Year Book.
3. Annual averages of the price index numbers (Statistical Dept).

The preceding table shows that the wage level increased in the period 1951-1957 after which the money wage level nearly kept constant. If productivity is considered, we find that the labour cost declined, especially as from 1954 when labour productivity was rising faster than money wage rates; at the same time the price level of industrial products rose.

This suggests that:-

1. If labour cost had risen prices of industrial products would have risen more; in other words the decline in the labour cost helped to offset the effect on the price level of industrial products of other price-raising forces.

2. Profits rose as a result of the rise in productivity and prices compared with the increase in money wage rates. This was associated with a leaning towards capital intensive methods as has been suggested before.

The second factor influencing the price level of industrial products is the prices of imported raw materials. It has been argued that the pattern of industrial production turned towards the production of goods which highly depend on imported raw materials. Even in industries like the textile industry, we have seen that the production of woollen and silk textiles have expanded faster than the production of cotton textiles. The inputs of woollen and silk products are imported while those of cotton are of domestic origin. Accordingly, we may expect a positive correlation between the internal price level of industrial products and the prices of imported raw materials.

Table IV_{31}

Indices of prices of imported raw materials and domestic industrial products
1952 = 100

Year	Index of prices of imported raw materials	internal prices of industrial products
1952	100	100
1955	85	86
1956	93	96
1957	99	108
1958	102	103
1959	104	104
1960	91	106
1961	80	103
1962	88	101

Sources: calculated from
1. Annual Budget Reports.
2. Annual averages of price index numbers op. cit.

The table above shows that prices of industrial products and imported raw materials were moving together in the period 1952-57. However, the correlation over the whole period does not seem to be very strong which may be attributed to the changes in the labour cost and profits. Between 1955 and 1962 import prices did not increase much (while prices of industrial products rose by over 17%). This reinforces the argument that profits in this period were rising and it also implies some demand inflation as regards industrial products.

However, the wholesale price index has shown a significant increase in the case of goods which depend heavily on imported raw materials; as an example of this, metal products, leather and tanning and fuel. The prices of textiles, cement, soap and fertilizers have nearly kept constant while the rise in the price of sugar may be attributed mainly to the high excise duties.

Perhaps the main reason for the rise in the prices of goods which depend on imported raw materials was the severe exchange restrictions rather than the rise in the international prices of raw materials.[1] The high profits which accrued in the fifties were an important factor in bidding up the value of import permits in the black market. This was very clear in most of the period under study which supports the idea

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1) The Bulletin of the National Bank of Egypt; the Egyptian economy in ten years (industry) No. 183 1962.

that the industrial sector was subject to a demand inflation.

Table IV_{32}

Indices of prices of various industrial products

1947= 100

Year	Metals	Textiles	Tanning and leather	Fuel	Sugar	Cement	Soap	Fertilizers
1952	138	178	110	124	138	119	108	139
1955	116	157	109	134	170	107	86	139
1956	131	162	110	141	168	122	89	141
1957	150	173	129	179	181	127	105	164
1958	157	169	160	172	184	124	103	165
1959	167	164	167	163	180	121	102	165
1960	171	166	164	154	177	125	104	148
1961	177	162	161	155	177	128	105	139
1962	185	162	163	157	187	129	106	139

Source:- Annual averages of price index numbers

Industrialization and the balance of payments

One of the most serious problems of industrialization is its impact on the balance of payments. Underdeveloped countries usually resort to policies of import substitution as a solution to the balance of payments problems. However, high imports of raw materials and capital equipment may create more demand for foreign exchange, which in turn aggravates the balance of payments situation. In this section we shall try to obtain a measure of the burden of industrialization on the balance of payments. The measure obtained here will be the import content in total inputs of raw materials in industry. Another measure is the import content in industrial investments which has been discussed at the beginning of this Chapter (p 131). Import content in investment did not show a certain trend and

it could be considered constant overmost of our period. However, in the last two years of the period a sharp decline took place which can be attributed to an increase in factory building. This low ratio cannot be expected to occur in future when the construction period is over. On the other hand, import content in industrial investments has been proved to be higher than in investment in any other sector. This, together with the need for importing raw materials may explain why industrialization is likely to have a serious influence on the balance of payments.

However, the increase in importing raw materials for industry may be compensated by a rise in the ratio of exports of manufactured goods to total industrial production. For this reason if we want to estimate the burden of industrialization on the balance of payments we must consider both measures, the import content and the export co-efficient.

Table IV_{33}

Burden of industrialization on the balance of payments value in million pounds

Year	Value of materials inputs in industry Col.1	Value of[1] imported materials in industry Col.2	Import content Col.2 / Col.1 Col.3 %	Value of industrial exports Col.4	net value added in industry Col.5	Export co-efficient Col.4/Col.5 Col.6 %
1952	197.0	34.7	17.6	11.8	136	8.7
1956	216.8	55.4	25.5	31.0	181	17.1
1957	270.9	53.1	19.0	34.8	205	17.0
1958	278.9	74.1	26.6	37.9	229	16.6
1959	269.5	64.9	24.1	25.7	254	10.1
1960	328.8	69.9	21.2	30.4	283	10.7
1961	362.5	74.7	20.6	30.8	309	10.0
1962	334.7	79.0	23.6	-	-	-

Sources calculated from:-

1. Annual Budget Reports
2. Bulletin of the National Bank of Egypt
3. Bulletin of the Central Bank of Egypt.
4. Bent Hansen and Mead op. cit.

Table IV_{33} shows that the share of imported raw materials in all materials used, has kept nearly constant. This suggests that:-

1. The rate of growth of imported materials will be about the same as the rate of growth of industrial output.
2. If the import co-efficient is higher in the industrial sector than in other sectors of the economy, and if industry is the fastest growing sector, then imports of raw materials will grow faster than total product.

Considering the export co-efficient, we cannot rely much on the promotion of exports to make up for the increase in the demand for foreign exchange in a short period of time. This is shown by the falling export co-efficient in recent years.

Dr. G. Eleish, a prominent Egyptian economist, suggests[1] that, in estimating the foreign currency required for the development plan, it is necessary to take into consideration the indirect requirements as well as the direct needs for foreign exchange, whether in the stage of establishing the project or in the stage of production. Indirect requirements in this context is defined as the foreign exchange needed in other sectors of the economy due to the establishment of the project. It has been found that indirect requirements, are

1) An estimation of foreign exchange required for the Development projects, the Economic office of the President.

always neglected when estimating the need for foreign currency, although they are very significant. In the stage of establishing the project he found that in twelve sectors out of thirty-two, the indirect requirements exceeded the direct needs for foreign exchange. He introduces an input-output model to measure precisely the direct and the indirect needs.

The import content co-efficient which is mentioned above may be a simple way of measuring direct and indirect requirements of foreign exchange.

Concluding remarks on industrialization

1. The rate of increase of productivity in industry exceeds that in other sectors of the economy, even if capital investment is considered. Although certain problems may arise in the industrial sector such as high costs of production and inadequate markets, it may be recommended to expand the industrial sector for its high productivity in relation to the overall productivity of the economy. This must be qualified in that only the industries which can survive in the future, without lavish assistance from the government, should be established.

2. The import content in industrial investments is higher than in other sectors of the economy; however, in 1961 and 1962 the import content declined significantly due to the increased factory building.

As regards the share of imported raw materials in the overall inputs of materials in industry, it has kept nearly constant. This may produce more pressure on the balance of payments along with the expansion of the industrial sector. Furthermore, it is not certain that industrial exports will make up for the increased demand for imported raw materials and capital equipment.

3. During the period under study, it may be suggested that there has been a demand inflation as regards the industrial sector; labour cost declined, import prices did not rise much while profits increased. However, the relative increase in further the prices of goods depending on foreign raw materials may be attributed to the exchange restrictions rather than the rise in import prices.

Chapter V

Public Finance and Economic Development

Deficit financing is a leading factor which causes price instability. According to the Keynesian theory an increase in the aggregate amount of money expenditure which exceeds the increase in real output is the main reason for price inflation. Since government expenditure is a major component of national income, budgetary policy could act as a stabilizer of incomes and prices.

Public policy must be related to the state of capacity utilization.[1] In a situation of full employment, deficit finance certainly produces price instability while in a state of underemployment deficit financing will not create any inflationary tendencies, rather, it will be the solution to combat stagnation. On the other hand, various patterns of stabilization policy may lead to different results which means that the choice of the particular public policy is very important; for example, it will be necessary to examine the extent to which the deficit is created by increased transfer payments or the rise in the expenditure on goods and services.

Public finance is no less important in the long run than in the short run, Furthermore, the role of public finance in

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1) Income analysis and policy, M. Ross 1964, see also, the theory of public finance, a study in public economy, R.A. Musgrave 1959.

a growing economy, differs in the underdeveloped countries from the advanced ones.[1] In an advanced country, the government objective is to maintain stable growth, in other words to achieve stability along the existing path of economic growth. This means a warranted rate of growth equal to the natural rate of growth and this can be achieved through changing the government propensity to spend and to tax.

In an underdeveloped country the main government objective is rather to raise the rate of growth of capacity and not merely to maintain the existing rate. This will require:-

1. A change in the propensity to tax and to spend in such a way as to achieve a budget surplus or to reduce the budget deficit; this in order to offset the low propensity to save on the part of the private sector.

2. A change in the government propensity to consume (or to raise the propensity to invest) in order to add to the stock of capital and consequently increases the utilizable resources.

However, in practice owing to the huge development programmes, most underdeveloped countries have been unable to achieve budget surpluses, on the contrary, budget deficits have become associated with financing economic and social development. Economists have become not so much concerned with the impact of deficit financing on the price level as on economic development. In this respect we may quote Prof. V.K. Rao who

1) K. Kurihara, The Keynesian theory of economic development 1959.

says[1] "In my view it is not deficit financing as such which has been responsible for inflation, it is the unproductive character of the outlay thus financed and the unsatisfactory response of the community, in terms of both work and saving to the increased outlay that is responsible for inflation. No doubt, historical experience bears out the association of inflation with deficit financing but historical experience also bears out the fact that deficit financing was mostly incurred only for war purposes, and not for economic development."

Deficit financing is suggested as a means of increasing capital formation and raising the productivity of the economy. It could be used to break the vicious circles and to improve the mobility of the factors of production. In this case the question will not be whether underdeveloped countries should resort to deficit finance or not but whether the type of government expenditure undertaken is of the right sort. However, the impact on the price level will differ in the case of financing the deficit by genuine borrowing (without increasing the money supply) from the case where the deficit is covered by credit creation. In the former case the deficit will be accompanied by one or a combination of the following changes[2]:-

1. A voluntary reduction of private consumption without an increase in private capital formation or in the export

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1) Deficit financing for capital formation and price behaviour in an underdeveloped economy: Essays on economic development 1964 p 110

2, Singer H.W. Deficit financing of public capital formation, International Development, growth and change, 1964, P.135.

surplus.

2. A voluntary reduction of private capital formation without an increase in private consumption.

3. An import surplus which can be paid for by running down foreign ruserves or by means of foreign borrowing.

In the case of credit creation, since the economy is working at full employment, the transfer of resources from the private sector to the government will only be made at the expense of price stability.

Turning to the policy of the Egyptian government during the period of study, we can say that deficit financing has been adopted as a measure for econonic development. In this respect we may quote the Undersecretary of the Treasury, who criticized the budgetary policy before 1952 on the basis that expenditure were fixed according to the revenue with a surplus to be added to the government reserves.[1] He mentions the English Proverb, "to cut the coat according to the cloth." In his opinion what matters is the state of the economy, not the state of the budget. This conforms to the previous agument which gives a priority to the balanced econony before the balanced budget. As a matter of fact a large number of underdeveloped countries are coming to accept the idea of deficit financing which may involve credit creation as a nethod to promote development. However, an eminent economist like Prof. Singer indicates how the existence of inelasticities

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1) Badre Handy, Problems of the budget, Economic Bulletin, Ministry of Economy Feb 1964 (ARABIC).

of supply in underdeveloped countries makes deficit financing, in the sense of credit creation, dangerous. He thinks that it is preferable to use other sources of financing, stating that, "even where deficit financing leads to increased capital formation, the danger of deficit financing must still be weighed against the dangers of economic stagnation or deterioration, and it is often far from clear that the nonexistence of better alternatives should be accepted as a genuine premise of debate"[1]

Prof. Singer is known to be one of the advocates of foreign aid on a large scale. This may suggest that a part of the burden of development could be shouldered by the advanced countries. It will be our job to analyse the figures of the Egyptian economy in order to see how the policy of deficit financing in Egypt was carried out.

Structure of the Egyptian public accounts

The public sector in Egypt has been growing tremendously during the fifties and in the early sixties. It is very difficult to explain the Egyptian public accounts without first explaining the complex system of organizations which performs the public services and commercial activities. On the other hand, the system of public accounts must be consolidated in such a way as to make it easier to discover the impact of the public sector as a whole on the level of activity.

1) op. cit

Thus, separate accounts must be reclassified as a step towards the consolidation of accounts; this will imply two operations:-[1]

1. The elimination of the inter-transfers between the various accounts.

2. A classification of expenditure according to sectors instead of the existing classification which is made according to institutions. Finally, most of the figures used are estimates rather than final figures, and this is one of the main shortcomings of the Egyptian figures, especially if the difference between estimated figures and realized ones is significant. However, this did not prevent the International Bank of Reconstruction and Development (I.B.R.D.) from using the estimated figures in their report on Spain, where the realized figures of the expenditure are also not available. Furthermore, we can compare some of the realized figures available with the corresponding estimates, which may given us an idea about the reliability of the estimated figures.

As regards the institutions of the public sector in Egypt, the dassification of such institutions will be annexed to this chapter(see appendix A)

The accounting system followed in the ordinary budget, or the Exchequer budget, is to divide it into four chapters:- Chapter I for wages and salaries.

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1. Economic Development of Spain (I.B.R.D.)

Chapter II for current purchases

Chapter III for new works, which is considered as investment in the ordinary budget and

Chapter IV for other payments.

As of 1960/1, Chapter III of the ordinary budget was added to the development budget, since both are concerned with investment in the public sector. This classification, as mentioned in the budget report of 1960/1, was in conformity with the requirements of the National Plan. The National Bank of Egypt on the other hand has carried out this operation of merging chapter III of the ordinary budget into the development budget for the whole period under study, in order to make the figures comparable from year to year[1]. However, the figures of public investment may be exaggerated if they are represented by the sum total of Chapter III in the ordinary budget and the development budget since both items include some current expenditure. Nevertheless, the result will not be distorted much so long as the same system is used for the whole period. The same classification applies to the independent budgets (or the annexed budgets). As for the business sector budget, it is also divided into wages, current purchases, investments and transfers. However, in this case, current purchases represent the cost of raw materials necessary for production, which do not count in total final consumption.

1) See the Budget Report of 1960/1; see also the Bulletin of the National Bank of Egypt, No.4. 1961.

On the otherhand, transfers paid according to this budget are capital transfers as compensations for nationalized property.

Structural changes in the public sector.

The public sector in Egypt has undergone many changes which can be summarized as follows:-

1. Before 1952/3 there used to be only the ordinary budget and a very small number of annexed budgets. Some of the organizations which perform trading activities, such as the Railways Organization and the petroleum authority, used to be departments in the government body and included in the exchequer (ordinary) budget. As from 1958/9 the two organizations have become independent entities with separate budgets.

2. In the fiscal year 1953/4, the Development Budget was introduced listing a number of projects to be implemented by the government as a programme for economic development.

3. The number of annexed budgets has increased, whether for organizations performing trading activities or for institutions doing ordinary public services covered by taxation and subsidies from the main government body.

4. As of 1960/1, Chapter III in the ordinary budget was added to the development budget.

5. In 1962/3 the public sector underwent a radical change. It was divided into four budgets, the services budget

(corresponding to the ordinary or the Exchequer budget), the local authority budget, Budgets annexed to the services budget and the business sector budget.

Table V$_1$

Classification of Expenditure

according to institutions[1]

value in million pounds.

Year	Ordinary Budget	Annexed Budgets	Development Budget	Business Sector Budgets	local authorities	Total
1952/3	206.0	4.4	-	-	-	210.4
1953/4	197.0	16.7	42.6	-	-	256.3
1954/5	228.0	27.5	42.2	-	-	297.7
1955/6	238.0	37.4	54.2	-	-	329.6
1956/7	280.0	14.7	45.8	-	-	340.5
1957/8	282.0	27.0	28.3	-	-	337.3
1958/9	271.0	122.5	46.0	-	-	439.5
1959/60	294.0	132.3	98.0	-	-	524.3
1960/1	301.0	176.9	285.8	-	-	763.7
1961/2	335.0	197.3	320.0	-	-	852.3
1962/3	472.0	31.4	-	821.0	138.7	1463.1

Sources:- 1. Budget estimates - Annual Budget Reports
2. The Bulletin of the National Bank of Egypt No.3 and 4 1963.

The foregoing figures show a tremendous rise in the annexed budgets in the period 1952/3 - 1961/2, and an enormous increase in the development budget in 1960/1 which is partly due to the inclusion of Chapter III (new works) of the ordinary budget in the development budget but more importantly, to the rapid expansion of development expenditure. The sharp

1) Gross figures without deducting inter-budget subsidies and transfers and without taking into consideration the changes in the activities performed according to each budget and including the share of the Egyptian region during the Union with Syria (1958/9 - 1961/2).

decline in the annexed budgets in 1962/3, is attributable to the inclusion of all public institutions performing trading activites in the business sector budget; this was accompanied by the complete abolition of the development budget.

However, the previous table does not indicate the significance of the public sector as a whole, because of the changes which have taken place and because of the inter-budget transfers. For these reasons it is necessary to have a consolidated system of accounts, which can explain the impact of the whole public sector on the level of activity.

Pattern of public expenditure

Aggregation of total public spending could be achieved by eliminating the inter-transfers between the various budgets. However, a consolidated system of accounts could be approached from three view points:-

1. Total expenditure of all types including both final demand for goods and services and intermediary purchases.
2. Resource transfer to the public sector which incorporates only final demand for goods and services (G).
3. Production activities of the public sector which comprise the demand for intermediary goods and services only.

Table V_2

Distribution of public expenditure[1] among sectors (value at current prices in million pounds).

Name of Sector	1952/3	1953/4	1954/5	1955/6	1956/7
Agriculture and Irrigation	12.4	20.2	25.2	31.0	29.3
Industry and Electricity	9.9	27.1	28.0	32.4	53.1
Transport	28.2	31.6	34.5	38.8	43.4
Suez Canal	-	-	-	-	-
Housing and Utilities	4.7	6.6	14.3	24.4	17.6
Defence and Security	45.4	44.4	58.5	88.8	89.6
Services	109.3	103.1	109.5	127.6	125.1
Other	-	-	-	-	-
Total public spending	209.9	233.0	270.0	343.0	358.1
Index 1952/3 = 100	100.0	111.0	128.6	163.4	170.6

Sources:- 1. Bulletin of the National Bank of Egypt
2. Annual Budget Reports (1960/1, 1961/2, and 1962/3)

Table V_3

Proportions of various sectors in total public spending

%

Name of Sector	1952/3	1953/4	1954/5	1955/6	1956/7
Agriculture and Irrigation	5.9	8.7	9.3	9.1	8.2
Industry and Electricity	4.7	11.6	10.4	9.4	14.8
Transport	13.4	13.6	12.8	11.3	12.1
Suez Canal	-	-	-	-	-
Housing and Utilities	2.2	2.8	5.3	7.1	4.9
Defence and Security	21.6	19.1	21.7	25.9	25.0
Services	52.2	44.2	40.5	37.2	35.0
Other	-	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0

1) The figures above are actual figures up to 1959/60, as from 1960/1 we have used estimated figures.

1957/8	1958/9	1959/60	1960/1	1961/2	1962/3
32.5	33.6	46.5	90.4	94.1	147.7
35.7	91.4	137.2	170.9	189.3	200.5
42.3	52.0	54.6	81.4	91.9	81.4
-	-	-	19.0	18.0	21.5
13.5	13.2	13.0	35.6	30.6	86.1
65.8	87.9	92.3	103.3	112.2	138.2
129.3	135.2	141.2	196.8	231.2	294.6
-	-	-	2.6	6.6	-
319.1	413.3	484.8	700.0	773.9	970.0
152.0	196.9	231.0	333.5	368.7	462.1

1957/8	1958/9	1959/60	1960/1	1961/2	1962/3
10.2	8.1	9.6	12.9	12.2	15.2
11.2	22.1	28.3	24.4	24.5	20.7
13.3	12.6	11.3	11.6	11.9	8.4
-	-	-	2.7	2.3	2.2
4.2	3.2	2.7	5.1	3.9	8.9
20.6	21.3	19.0	14.8	14.5	14.2
40.5	32.7	29.1	28.1	29.9	30.4
-	-	-	0.4	0.8	-
100.0	100.0	100.0	100.0	100.0	100.0

Table V_4

Allocation of Development Expenditure[1] among various sectors (value at current prices in million pounds.

Name of Sector	1952/3	1953/4	1954/5	1955/6	1956/7
Agriculture and Irrigation	5.3	11.1	14.9	19.8	16.9
Industry and Electricity	4.5	19.1	13.3	16.7	16.2
Transport	6.6	8.8	11.5	13.3	17.4
Housing and Utilities	3.2	5.1	11.2	20.9	9.5
Suez Canal	--	-	-	-	-
Other	5.0	3.5	6.0	16.9	6.6
Total Development expenditure	24.6	47.6	56.9	87.6	66.6
Index, 1952/3 = 100	100.0	193.4	231.3	356.0	270.7

Sources: Same Sources as the previous tables.

Table V_5

Proportions of various sectors in total development expenditure %

Name of Sector	1952/3	1953/4	1954/5	1955/6	1956/7
Agriculture and Irrigation	21.5	23.3	26.2	22.6	25.4
Industry and Electricity	18.3	40.1	23.4	19.1	24.3
Transport	26.8	18.5	20.2	15.2	26.1
Housing and Utilities	13.0	10.7	19.7	23.8	14.3
Suez Canal	-	-	-	-	-
Other services including defence and security	20.4	7.4	10.5	19.3	9.9
Total	100.0	100.0	100.0	100.0	100.0

1) These figures are not comparable with the figures of investment mentioned in the previous chapter since development expenditure includes some current expenditure.

1957/8	1958/9	1959/60	196 0/1	1961/2	1962/3
11.8	16.9	33.7	70.0	72.2	93.6
14.4	25.7	58.4	93.1	108.6	131.7
15.9	16.2	19.6	46.6	56.5	33.3
9.5	8.6	7.0	29.2	23.9	46.0
-	-	-	19.0	18.0	9.3
7.4	10.2	8.6	27.8	35.8	48.4
59.0	77.6	127.3	285.7	315.0	362.3
239.8	315.4	517.5	1161.4	1280.5	1472.8

1957/8	1958/9	1959/60	1960/1	1961/2	1962/3
20.0	21.8	26.5	24.5	22.9	25.8
24.4	33.1	45.9	32.6	34.5	36.3
26.9	20.9	15.4	16.3	17.9	9.2
16.1	11.1	5.5	10.2	7.6	12.7
-	-	-	6.6	5.7	2.6
12.6	13.1	6.7	9.8	11.4	13.4
100.0	100.0	100.0	100.0	100.0	100.0

Table V 6

Share of Development expenditure in total public spending (Main sectors)[1]

%

Name of Sector	1952/3	1953/4	1954/5	1955/6	1956/7
Agriculture and Irrigation	42.7	54.9	59.1	76.1	57.7
Industry and Electricity	45.4	70.5	47.5	51.5	30.5
Transport	23.4	27.8	33.3	34.3	40.1
Housing and Utilities	68.1	77.3	78.3	85.6	54.0
Suez Canal	..	-	-	-	-
Other Services including defence and security	3.2	2.4	3.6	7.8	3.1
Share of total development expenditure	11.7	20.4	21.1	25.5	18.6

1) Each figure of development expenditure has been divided by the corresponding figure in total public spending.

1957/8	1958/9	1959/60	1960/1	1961/2	1962/3
36.3	50.3	72.5	77.4	76.7	63.4
40.3	28.1	42.6	54.5	57.4	65.7
37.6	31.1	35.9	57.2	61.5	40.9
70.4	65.1	53.8	82.0	78.1	53.4
-	-	-	100.0	100.0	43.2
3.8	4.6	3.7	9.3	10.4	11.2
18.5	13.8	26.2	40.8	40.7	37.3

As regards the government activities using the first approach, it can be observed that from the preceding tables how total public spending rose rapidly whether in the form of development expenditure or current expenditure. Spending on industry experienced the most significant increase, which is in line with the government policy of industrialization. The most significant changes were in 1953/4 and in 1958/9. In 1953/4 the increase in theshare of industry was due to the introduction of the development budget whereas the jump in 1958/9 coincided with the first industrial five year plan in Egypt. As for Agriculture, the increase in its share in 1953/4 is also attributable to the new development budget, which included some agricultural projects, while the rise in 1960/1 was mainly the result of the inclusion of the High Dam expenditure. The share of defence, transport and services has declined throughout the period, although they have increased rapidly as absolute figures.

On the whole the following conclusions can be drawn:-

1. Capital outlay has grown quicker than total public spending, which is compatible with a policy aiming to promote economic development through the public sector. The implementation of such a policy was first supervised by the National Production Council, after which the policy was executed by the various economic organizations. The government was acting as an entrepreneur in a country where the entrepreneurial ability is not adequate.

2. As regards the achievement of a balanced growth system between agriculture and industry, we can say that in the period 1953/4 - 1959/60, the stress was mainly on industry while the share of agriculture remained almost constant. As from 1960/1, the High Dam expenditures were added to total agricultural spending, which swelled the amount of expenditure. However, three distinct periods can be distinguished; first, the period 1952/3 - 1955/6, when the difference between the share of agriculture and the share of industry was negligible; second the period 1956/7-1959/60, when the gap started to widen; and then the latest period, when the gap started to close again. This indicates that, at the earlier stage, the policy of industrialization was not as intensive as in the later periods. However, in the third period the government realized the importance of agriculture to meet the increasing demand on the part of industry and to feed the growing population. Thus total expenditure on agriculture was approximately doubled in the year 1960/1.

As for public investment in each sector, we can see that the ratio of development expenditure to total public spending has increased much quicker in the case of agriculture than in the case of industry; This indicates that a considerable amount of the increase in spending on industry was on current expenditure rather than capital development, especially in the period up to 1958/9. This was probably the

result of the need for more construction projects in agriculture, while the development of industry required not only more investment but also more imputs of raw materials, which are listed under current expenditure.

3. It is the duty of the government to build-up the infrastructure projects, which cannot be established by private individuals since they do not yield direct returns but rather increase the marginal social productivity. As mentioned before, the absolute figures of infrastructure projects increased significantly. The government was much concerned about such projects as road construction, railways and telecommunications, as well as cheap dwellings, education and public health. However, the overall ratio of these items has declined, due to the rise in the share of agriculture and industry, although they still absorb a high share of public spending.

4. As regards defence expenditure, although the value in absolute terms increased rapidly during the whole period, the ratio to total public spending declined. However, since defence expenditures represent a final demand, they are better related wither to total resource transfer (G) or to total national outlay. This will be explained in the coming section.

Resource Transfer (G)

The second method of consolidating the public accounts

is to measure the overall final demand for goods and services, on the part of the public sector. This will include the following items.

1. Current consumption, after the exclusion of organizations which perform trading activities. Transfer payments (interest on public debt, consumer subsidies, producer subsidies and pensions) are also excluded, which means that only expenditure on goods and services is considered. In this case current consumption will be the sum total of Chapter I (wages), Chapter II (purchases of goods and services) and Chapter IV (other items after the exclusion of transfer payments) in the ordinary budget. As regards annexed budgets which are not performing trading activities, they can be ignored, since they are mainly financed by a subsidy which is already counted in the ordinary budget. The difference between total expenditure of the annexed budgets and the total subsidies from the main government body does not exceed two million pounds.

2. All public investments whether in the ordinary budget or in the public business sector. Actual figures of public investment are available for the period up to 1961/2, while the figures used for current consumption are budget estimates rather than actual figures. However, this will not distort the results much, especially when we know that the difference between estimated figures and actual figures in the ordinary budget is not great[1]

1) See the Bulletin of the National Bank of Egypt No 4 1961.

Table V_7

Public Expenditure on goods and services

in million pounds
(at current market prices)

Year	Current public consumption (Col.1)	Gross public investment[1] (Col.2)	Total resource transfer (G) (Col.3) = (Col.1+Col.2)	Col.2 GI/ Col.3 G (Col.4) %
1952/3	131	25	156	16.0
1953/4	132	34	166	20.5
1954/5	143	53	196	27.0
1955/6	150	62	212	29.2
1956/7	196	66	262	25.2
1957/8	193	N.A.	N.A.	N.A.
1958/9	233	N.A.	N.A.	N.A.
1959/60	208	134	342	39.2
1960/1	257	173	430	40.2
1961/2	278	215	493	43.6

Sources:- calculated from
1. The Annual Budget Reports (Budget estimates)
2. The National Planning Committee, Cairo.
3. U.N. Economic Develepment in the Middle East 1956/7.

Public Expenditure and
National outlay in million pounds
(at current market prices)

Year	Total Col.1	G National outlay (Col.2)	Col.1 Col.2 Col.3 %	Total Gross investment (Col.4) =Col.6+Col.7	Col.4 Col.2 Col.5 %	Public invest-ment Col.6	Private invest-ment Col.7	Col.6 Col.4 Col.8 %
1952/3	156	905	17.2	118.0	13.0	25	93	21.1
1953/4	166	963	17.2	132.0	13.7	34	98	25.8
1954/5	196	1014	19.3	146.0	14.4	53	93	36.3
1955/6	212	1072	19.8	172.0	16.0	62	110	36.0
1956/7	262	1125	23.3	151.0	13.4	66	85	43.7
1957/8	N.A.	1195	N.A.	165.0	13.8	N.A.	N.A.	N.A.
1958/9	N.A.	1256	N.A.	181.0	14.4	N.A.	N.A.	N.A.
1959/60	342	1372	24.9	171.0	12.5	134	37	78.4
1960/1	430	1447	29.7	225.0	15.5	173	52	76.9
1961/2	493	1550	31.8	248.0	16.0	215	33	86.7

Sources: 1. The same sources as the previous table.
2. National income of the U.A.R. Hansen and Mead op.cit
3. National Bank of Egypt.
4. Egypt in Revolution, Statistical Dept. Cairo.

1) All are capital expenditure and not the same figures as in Table V_4

From the previous two tables, it is clear that the government demand for available rescurces (G) has gained in importance whether in absolute terms or as a ratio of total national outlay. In this respect two points have to be emphasised:-

1. The share of G in total national outlay has grown faster than the growth of the overall investment ratio.

2. The share of public investment in the total amount of investment (G_I/I) has increased tremendously with a diminution of private investment.

This confirms the expansion of the role of the public sector as a purchaser of final products; as regards the production activities of the public sector, they will be discussed in detail, later on.

Finally, the pressure of defence expenditure on total available resources is shown in the following table:-

Table V_8

Defence expenditure in million pounds at current prices

Year	Spending on defence Col.1	National outlay Col.2	Total G Col.3	Column I Column 2 Col.4 %	Column I Column 3 Col.5 %	G_I/G Col.6 %
1952/3	45.4	905	156	5.0	29.1	16.0
1953/4	44.4	963	166	4.6	26.7	20.5
1954/5	58.5	1014	196	5.8	29.8	27.0
1955/6	88.8	1072	212	8.3	41.9	29.2
1956/7	89.0	1125	262	8.0	34.2	25.2
1957/8	65.8	1195	N.A.	5.5	N.A.	N.A.
1958/9	87.9	1256	N.A.	7.0	N.A.	N.A.
1959/60	92.3	1372	342	6.7	27.0	39.2
1960/1	103.3	1447	430	7.1	24.0	40.2
1961/2	112.2	1550	493	7.2	22.8	43.6
1962/3	138.2	1679	N.A.	8.2	N.A.	N.A.

Sources: calculated from the same sources as the previous tables.

The previous table shows a clear rise in the share of defence expenditure in total national outlay. The ratio of defence is very high especially in a country planning to develop its productive capacity and in which per capita income is certainly low compared with other countries. However, in the later years the ratio of defence expenditure to total resource transfer has declined; moreover the share of public investments in total G has exceeded the share of defence. This may have a good effect on development but inflationary tendencies may arise.

Wages and Transfer payments

The share of wages in the total exchequer budget has declined throughout the period under study. This may indicate that the government policy was concerned about keeping the wage level in the public sector down even with an increasing level of government activites. As regards the share of wages in total expenditure of the business sector, we do not have a complete series of figures for the whole period, but only for 1962/3. However according to the 1962/3 budget, the share of wages in the business sector is relatively low due to the large amounts of expenditure on intermediary goods. This makes the change in the wages of the exchequer budget a good indicator for the wage bill in the public sector.

Transfer payments consist of pensions, public debt interest, consumers' and producers' subsidies. The share of transfer payments in the ordinary budget declined up to

1958/9, after which it started to rise again. However, it will be useful to break down transfer payments into the various items, in particular to see how far the share of prime subsidies altered over the period.

Table V_9

Wages and Transfer payments in relation to the Exchequer Budget in million pounds.

Year	Wages Col.1	Transfer payments Col.2	Ordinary Budget Col.3	Col.1/Col.3 Col.4 %	Col.2/ Col.3 Col.5 %
1952/3	79.7	26.9	188	42.4	14.3
1953/4	77.8	21.8	176	44.2	12.4
1954/5	86.9	18.8	194	44.8	9.7
1955/6	89.9	18.9	203	44.2	9.3
1956/7	79.9	21.5	244	32.7	8.8
1957/8	81.0	22.9	259	31.3	8.8
1958/9	79.8	31.9	276	28.9	11.6
1959/60	78.9	36.9	340	23.2	10.8
1960/1	87.7	46.7	301	29.1	15.5
1961/2	94.6	57.1	335	28.2	17.0
1962/3	133.4	76.1	472	29.3	16.1

Source calculated from the Budget statements.

Analysis of Transfer Payments in million pounds

Year	Consumers subsidies (Col.1)	Producers subsidies (Col.2)	Total Col.1+ Col.2 Col.3	Pensions (Col.5)	Public Debt Interest Col.6	Grand Total Col.7	Col.3 Col.7 Col.8 %
1952/3	15.5	-	15.5	4.9	6.5	26.9	57.6
1953/4	6.2	-	6.2	8.7	6.9	21.8	28.4
1954/5	1.7	-	1.7	10.4	6.7	18.8	9.0
1955/6	1.9	-	1.9	10.2	6.8	18.9	10.0
1956/7	3.0	-	3.0	10.9	7.6	21.5	13.9
1957/8	2.1	1.2	3.3	11.6	8.0	22.9	14.4
1958/9	6.7	2.0	8.7	12.8	10.4	31.9	27.3
1959/60	8.9	1.6	10.5	15.2	10.8	36.9	28.4
1960/1	9.0	6.5	15.5	16.3	14.9	46.7	33.2
1961/2	16.2	6.5	22.7	17.5	16.9	57.1	39.8
1962/3	36.5	2.5	39.0	13.7	23.4	76.1	51.2

Source: The same source as the previous table.

This disaggregation of transfer payments showed that, in 1952/3, price subsidies were relatively high whether as absolute figures or as a ratio of total transfer payments. This was immediately after the Korean war when the prices of essential consumer goods shot up. However, from 1952/3 price subsidies fell until 1955/6, and did not become significant again until 1958/9. This will be discussed further in Chapter VI where government control of prices is its main concern.

Production measurement

A measurement of the production activities of the public sector is set equal to the purchases of raw materials and intermediary goods plus wages and salaries in the trading units plus wages and salaries in the Exchequer budget. Since the figures of intermediary purchases are not available, we can calculate the value of production activities as follows:-

Total public expenditure - resource transfers - transfer payments + wages in the exchequer budget.

In this case, the result will be illustrated in the following table.

Table V_{10}
Production activities of the

public sector

Year	Production activites in million pounds	index of production activities 1952/3 = 100	Index of Total spending 1952/3 = 100
1952/3	107	100	100
1953/4	123	115	111
1954/5	142	133	129
1955/6	202	189	163
1956/7	155	145	171
1957/8	N.A.	N.A.	152
1958/9	N.A.	N.A.	197
1959/60	185	173	231
1960/1	311	291	233
1961/2	319	298	369

Sources calculated from 1. The Bulletin of the National Bank of Egypt.
2. Annual Budget Reports.

Table V_{10} shows that index of production activities was rising faster than the index of total public spending up to 1955/6; in the later years the reverse was true as a result of the rise in final demand for goods with special reference to the rise in public investment.[1] The drop in the index of production activities in 1956/7 was mainly due to the increase in the demand for final consumption. This can be attributed to the Suez Crisis which had a result of increased defence expenditure as shown in Table V_8. According to the Egyptian figures, spending on defence is almost a

1) Final demand for services (wages in the Exchequer budget) has not increased, on the other hand it is included in the figures of production activities.

consumption type of expenditure, this was not mentioned explicitly in Table V_6, since the share of development expenditure was negligible.

Tax structure

Tax yield is the main source of financing government expenditure. When government spending is increasing quickly it is necessary to raise tax revenue at a similar rate to avoid inflation.

However, the functions of taxation are not just limited to its role as a source of revenue. Any tax policy must aim at the realization of the three following objectives:-[1]

1. Optimum allocation of resources.
2. Stabilization of incomes and prices.
3. Equitable distribution of income.

In an underdeveloped country, where growth is the main target, any tax policy must take into consideration the achievement of this target. This will require a high saving ratio in the form of a budget surplus, associated with an increase in the productivity of the economy. In terms of the foregoing three objectives, a tax policy which conduces to a better allocation of resources will raise the productivity of the economy. This will imply a selective tax policy which encourages those activities which are needed; also it should improve factor mobility. As for the second

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1) R.A. Musgrave, The theory of public Finance, a study in public economy 1959, op. cit.

objective, the meaning of stabilization must not be limited to a mere stabilization of incomes or even the rate of growth of income; our aim should be the acceleration of growth by realizing a persistent budget surplus. Finally, a tax policy must alleviate the very unequal distribution which exists in underdeveloped countries, although such an objective is the least important one, since the government may resort to other social measures (such as the Agrarian Reform System in Egypt).

An examination of the relevant financial statistics of the Egyptian economy shows that tax yield, during the whole period under study, experienced a decline compared with the figures of money income. At the same time the ratio of G/Y rose considerably, which meant that the budget deficit (or fall in the budget surplus) increased. This is illustrated in the following table.

Table V_{11}

Tax yield compared with government expenditure and total national outlay in million pounds.

Year	All Taxes taxes T	National outlay	All taxes/ national outlay %	Total G/ national outla Y %	Y
1952/3	129	905	14.2	17.2	
1953/4	138	963	14.3	17.2	
1954/5	133	1014	13.1	19.3	
1955/6	144	1072	13.4	19.8	
1956/7	130	1125	11.5	23.3	
1957/8	150	1195	12.5	N.A.	
1958/9	158	1265	12.5	N.A.	
1959/60	155	1372	11.3	24.9	
1960/1	185	1447	12.8	29.7	
1961/2	186	1550	12.0	31.8	

Sources calculated from.

1. The Bulletin of the National Bank of Egypt.

2. The same sources as tables V_7
3. The same sources as table JV_6

Table V_{11} shows that the gap between G/Y and T/Y has widened throughout the period, owing to the rise in the expenditure ratio and the fall in the tax ratio. This may suggest that the tax system in Egypt is not flexible enough to match the increase in government activities. However, some comments have to be made on the Egyptian tax structure

1. The figures of taxes mentioned above include all direct taxes, customs duties and excise duties, but they do not include government dues on certain public services.

Table V_{12}

Direct taxes as a ratio of total tax yield

in million pounds

Year	Direct taxes	Tax yield	Direct taxes/Tax yield %
1952/3	41	129	31.8
1953/4	37	138	26.8
1954/5	35	133	26.3
1955/6	41	144	28.5
1956/7	42	130	32.3
1957/8	52	150	34.7
1958/9	51	158	32.3
1959/60	51	155	32.9
1960/1	59	185	31.9
1961/2	54	186	29.0

Main Direct Taxes
in million pounds

Year	Land and buildings	Taxes on Commercial and industrial profits	Taxes on movable property	Taxes on wages and salaries	General income tax
1952/3	14.5	4.9	7.2	3.4	5.7
1953/4	N.A.	N.A.	N.A.	N.A.	N.A.
1954/5	N.A.	N.A.	N.A.	N.A.	N.A.
1955/6	N.A.	N.A.	N.A.	N.A.	N.A.
1956/7	12.3	6.4	7.2	4.7	5.4
1957/8	15.4	10.6	8.5	4.5	4.6
1958/9	15.9	10.4	7.5	4.9	4.7
1959/60	13.5	10.1	7.4	5.1	4.6
1960/1	18.8	11.5	5.8	5.3	4.9
1961/2	21.5	5.8	2.2	3.4	3.6

Sources:- 1. Bulletin of the National Bank of Egypt.
2. Annual Budget Report.

2. The share of direct taxes in total tax yield remained roughly constant; this was in spite of the government policy to redistribute incomes in favour of the lower income groups. As is shown in the first table, the share of direct taxes is still far less than the share of the indirect ones (which is the rest), which suggests that there must be other measures to be taken in order to achieve a better distribution of income and wealth. In this respect, the Egyptian government depends more on direct measures such as the redistribution of land or the nationalization of big firms.

A disaggregation of direct taxes into its main items shows an increase in the yield from, land and buildings taxes and also taxes on commercial and industrial profits. It is interesting to note here, that the significant rise in the

taxes on profits supports what has been said before (p.196) that, during the period under study, profits were rising. However, in 1961/2, as a result of the nationalization laws, taxes on profits declined sharply; this also happened to taxes on movable property.

2. As regards indirect taxes (custom duties and excise duties), they have not experienced a significant change as a ratio of total tax yield. However, the composition of indirect taxes has changed with a tendency towards a bigger share of excise duties. This is a direct result of the process of industrialization which increased the number of goods subject to excise duties. As for the ratio of customs duties to total imports, we can say that between 1953/4 and 1956/7, the ratio declined, owing to the change in the import structure in favour of essential goods, which are subject to a low tariff rate. Since 1956/7 the ratio hardly changed because the pattern of imports became so rigid that it did not allow for further changes. A list of the tariff rates on the various commodities is annexed to this Chapter.

Table V 13

Structure of Indirect taxes (in million pounds).

Year	Excise duties Col.1	Custom duties Col.2	Total indirect taxes Col.3=Col.1+ Col.2	Ratio of value indirect taxes to imp- total tax yield Col.4 %	Col.1 of Col.3 Col.5	Col.2 Col.5 Col.6 %	Col.7 %
1952/3	12	76	88	68.2	205	13.6	37.1
1953/4	18	83	101	73.2	172	17.8	48.2
1954/5	19	80	99	74.4	176	19.2	45.4
1955/6	22	80	102	70.8	187	21.6	42.8
1956/7	21	67	88	67.7	184	23.9	36.4
1957/8	18	80	98	65.3	210	18.4	38.1
1958/9	25	82	107	67.7	226	23.4	36.3
1959/60	23	81	104	67.1	220	22.1	36.8
1960/1	37	88	125	67.6	235	29.6	37.4
1961/2	33	99	132	71.0	270	25.0	36.6

Source calculated from
The Bulletin of the National Bank of Egypt.

4. There has been a tendency towards an increasing revenue from government dues for the services offered by the public sector. This is a direct result of the expansion of the government activities. Such dues could be classified as follows:-

a. Stamp duties.

b. Dues for agricultural services, which consist mainly of the receipts from selling seeds to the farmers.

c. Dues for justice, which are mainly incurred by those who sell their private property; also dues collected by courts of justice are included.

d. Dues for education, mainly fees paid for examinations and also the receipts from selling books to the students.

e. Dues collected by the Ministry of Health.

f. Profits accruing from selling the supply goods; in the next chapter a comparison will be made between this item and the price subsidies in order to see how far the government contributed to price stability through price subsidies.

g. Sundry dues such as export and import dues (other than customs duties), and dues paid by certain industries.

This classification of public dues may give us an idea about the importance of such dues in financing public expenditure. However, it is difficult to obtain the actual figures of government dues, since they are numerous, and are not comparable from year to year. For this reason, we shall depend on the overall budget situation, which includes all public expenditure and revenue; this will be discussed in the next section.

5. As regards the function of taxation in realizing a better allocation of resources, although the government, at the beginning of the period, used tax policy as a means to encourage investments by exempting newly established projects from taxes (Law No 430/1953), we can certainly say that the Egyptian government has come to rely more on direct investments by itself. This is shown by the expansion of such investments at the expense of private investments, already eommented upon above (p.223).

Concluding this section, we can say that the role of taxation within the existing structure of the Egyptian economy, is not as important as in the industrial advanced countries, whether in the sphere of allocation, stabilization or distribution. For this reason other sources of finance have to be examined.

Financing of the Government Deficit.

It has been explained above how the Egyptian public sector expanded throughout the period under study, and how the rigid system of taxation could not match the increase in public expenditure. This is not something strange, since all underdeveloped countries have indulged in more government activity either to achieve a higher rate of growth or to meet the increasing demand for current services. In the case of Egypt, we must distinguish between two measures of the government's financial position.

1. The exchequer budget, through which the minister of finance manipulates budgetary weapons by changing the tax level and the level of ordinary expenditure (on goods and services or transfer payments).

2. The overall position of the public sector, which not only includes the ordinary budget, but also embodies the organizations performing trading activities. The financing of the overall public expenditure consists of:-

a. The ordinary budget revenue.

b. The revenue from trading activities of the various public organizations.

c. Some other irregular sources such as loans (internal and external) and accumulated foreign assets.

The overall budget position is the one that counts in determining the effect of the public sector on the rate of growth of income and the price level. Nevertheless it may be useful to separate the ordinary budget from the overall position of the public sector in order to determine:-

a. The degree of dependence of the exchequer budget on the public business sector.

b. The degree of dependence of the overall public sector on the private sector.

Table V 14

The balance in the ordinary budget in million pounds

Year	Expenditure Est.[1]	Actual	Revenue Est.	Actual	Surplus or def cit Est.	Actual
1952/3	206.0	208.4	206.0	198.1	0	-10.3
1953/4	197.5	199.7	197.5	206.4	0	+ 6.7
1954/5	227.9	228.1	221.9	219.7	-8.0	- 8.4
1955/6	238.3	275.6	238.3	267.5	0	- 8.1
1956/7	280.5	308.0	280.0	264.6	0	-43.4
1957/8	281.8	-	300.5	-	+18.7	-
1958/9	271.5	-	280.7	-	+ 9.2	-
1959/60	293.8	-	321.5	-	+27.7	-
1960/1	355.5	-	350.5	-	- 5.0	-
1961/2	383.7	-	321.4	-	-62.3	-
1962/3	471.8	-	420.8	-	-51.0	-

Sources:- 1. Bulletin of the National Bank of Egypt No. 34 1963
2. Budget statements for 1960/1, 1961/2.

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1) These are the same figures as the ordinary budget, table V, with the difference that the figures for 1960/1, 1961/2 have been modified to include investment in the ordinary budget.

The foregoing table indicates that most of the years have shown a deficit in the ordinary budget especially in the last two years. In 1956/7, the drop in actual public revenue which was associated with an increase in actual government expenditure, resulted in a big difference between the estimated budget balance and the actual balance.

The significance of the deficit in the ordinary budget is that it affects the supply of finance available for the public business sector. A deficit in the ordinary budget can be covered by either of the following methods:-

1. The Minister of Finance may acquire a larger share in the profits from government astablishments; this will reduce the accumulated savings in the business sector, and may affect the level of investment in the development projects.

2. The Minister of Finance may draw upon the accumulated reserves and loans available for the business sector, this will in turn affect the efficiency of that sector due to the lack of finance. It was stated in the Budget Report of 1962/3 that credit facilities used by the Exchequer budget were 57 million pounds in 1961/2 and 51 million pounds in 1962/3. This indicates that the Ordinary budget is highly dependent on the business sector and also on the private sector. This brings us to the next point, which is the overall position of the public sector.

Table V 15

Overall Balance in the public sector
(in million pounds)

Year	Expenditure in the ordinary budget Col. 1	Revenue in the ordinary budget Col.2	Surplus or deficit in the ordinary budget Col.3	Overall expenditure in the public sector Col.4
1952/3	208.4	198.1	-10.3	209.8
1953/4	199.7	206.4	+ 6.7	233.0
1954/5	228.1	219.7	- 8.4	269.9
1955/6	275.6	267.5	- 8.1	340.3
1956/7	308.0	264.6	-43.4	358.1
1957/8	281.8	300.5	+18.7	335.3
1958/9	271.5	280.7	+ 9.2	430.2
1959/60	293.8	321.5	+27.7	511.1
1960/1	355.5	350.5	- 5.0	700.1
1961/2	383.7	321.4	-62.3	778.9
1962/3	471.8	420.8	-51.0	970.0

Sources The same sources as table V 14

1) Figures as from 1957/8 are budget estimates.

Overall revenue in the public sector Col.5	Overall surplus or defecit Col.6	Col.1 Col.4 Col.7 %	Col.2 Col.5 Col.8 %	Deficit in the business sector Col.6 minus Col.3 Col.9
199.3	-10.5	99.3	99.4	-0.2
212.3	-20.7	85.7	97.2	-27.4
232.4	-37.5	84.5	94.5	-29.1
292.8	-47.5	81.0	91.3	-39.4
276.3	-81.8	86.0	95.8	-38.4
333.9	- 1.4	84.0	90.0	-20.1
403.2	-27.0	63.1	69.6	-36.2
440.7	-70.4	57.5	72.9	-98.1
448.1	-252.0	50.8	78.2	-247.0
620.3	-158.6	49.3	51.8	-96.3
727.5	-242.5	48.6	55.5	-191.5

The previous table shows that the overall deficit in the public sector is far greater than the deficit in the ordinary budget especially in the latest years. The overall balance has been estimated by the National Bank of Egypt in such a way as to include all government expenditure, both on final products and on intermediary goods and also all government revenue, even the receipts from selling goods produced by the public sector(gross revenue). It may be observed that there is a rapid decline in the ratio between the items of the ordinary budget and all items of the public sector (Col.7 and Col.8). However, the increase in the expenditure of the business sector was faster than the increase in revenue which resulted in a big deficit in that sector (Col.9). Thus we must now consider the financing of the public deficit.

Foreign aid has been a main source of financing the deficit especially since 1958/9. The role of foreign aid is explained in Table V_{16} - where it is shown that a substantial part of the overall deficit in the public sector is covered by this important item. In this context foreign aid means both foreign borrowing and grants.

Table V
16
Foreign aid as a ratio of the overall public deficit (in million pounds)

Year	Foreign aid Col.1	Overall deficit Col.2	Col.1/Col.2 Col.3 %
1952/3	0.557	10.5	5.3
1953/4	4.528	20.7	21.9
1954/5	1.184	37.5	3.1
1955/6	22.675	47.5	47.7
1956/7	13.410	81.8	16.4
1957/8	0.418	1.4	29.8
1958/9	30.930	27.0	114.5
1959/60	55.729	70.4	79.2
1960/1	68.925	252.0	27.4
1961/2	93.913	158.6	59.2
1962/3	152.609	242.5	62.9

Sources: 1. Said El Naggaar, op.cit.
2. The Bulletin of the National Bank of Egypt No.3 and 4 1963.

Another source of external finance is the running down of foreign assets, which have been accumulated during the good years. In this respect as Prest suggests[1] the government will be able to kill two birds with one stone, maintaining its own expenditure irrespective of any reductions in tax revenue and without recourse to net internal borrowing; and at the same time releasing the foreign exchange to keep up the level of imports. It is important to note here that Egypt is one of the countries which accumulated a significant amount of foreign reserves during the second world war; these reserves were mainly sterling balances.

The sum total of foreign aid, borrowing abroad and running down foreign assets comprises the external part

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1) public Finance in underdeveloped countries, p.19.

of finance. The relationship between external finance and internal finance is expressed by the following equation.[1] Internal finance= overall deficit -(foreign aid + fall in reserves).

Foreign finance versus internal finance in Egypt in million pounds.

Year	Net foreign aid 1	Fall in reserves[2] 2	Overall deficit 3	Aid and fall in reserves 4=1+2	Internal borrowing 5= 3-4
1952/3	- 2.0	34.0	10.5	32.0	-21.5
1953/4	+ 1.9	11.5	20.7	13.4	+ 7.3
1954/5	- 1.5	26.1	37.5	24.6	+12.9
1955/6	+19.8	36.7	47.5	56.5	- 9.0
1956/7	+10.6	28.1	81.8	38.7	+43.1
1957/8	- 1.7	20.3	1.4	18.6	-17.2
1958/9	+26.0	21.3	27.0	47.3	-20.3
1959/60	+34.1	20.4	70.4	45.5	+24.9
1960/1	+45.6	20.6	252.0	66.2	+185.8
1961/2	+82.6	36.4	158.6	119.0	+39.6

Sources calculated from:-
1. Said El Naggar op. cit
2. The Bulletin of the National Bank of Egypt
3. International financial statistics

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1) Assuming c = private consumption, I = private investment, G = government expenditure, E = exports, M = imports, Sp = private saving, T = tax yield, OD. = Budget deficit, then we have

$C+I+G+E-M=C+Sp+T$

$I+G+E=SP+T+M$

$(G-T)+I+(E-M)=Sp$

$OD+I=Sp+(M-E)$

If (M-E) is the foreign aid + borrowing + fall in reserves and, therefore, Sp=OD - (foreign aid and borrowing + fall in reserves) + I then (Sp-I) = OD - external finance,or private lending to the government (government borrowing from the private sector) = government deficit - external finance.

2) After the exclusion of capital outflows

The previous table can explain to us the extent to which the public sector depends on foreign finance as compared with internal borrowing. In this respect a comparison between the figures of internal finance and the development of money supply may indicate how far credit creation is involved. During the period under study, the government resorted to the banking system to meet the increasing public expenditure. The government, instead of only borrowing from the banking system to finance the cotton crop, began to borrow for its development projects as stated in the law No 242/1955. In the following table the figures of money supply are presented together with the figures of internal borrowing andmational income.

Money supply, Internal Borrowing and National income in million pounds

Year	Internal borrowing Col.1.	Money[1] supply Col.2	Money income Col.3	Domestic product at constant prices Col.4	income velocity of circulation Col.2/Col.3 Col.5	Col.4 Col.6 %
1952/3	-21.5	406.5	905	964	2.2	42.2
1953/4	+ 7.3	426.5	963	963	2.3	44.3
1954/5	+12.9	446.5	1014	989	2.3	45.1
1955/6	- 9.0	446.2	1072	1028	2.4	43.4
1956/7	+43.1	500.8	1125	1049	2.2	47.7
1957/8	-17.2	513.4	1195	1111	2.3	46.2
1958/9	-20.3	524.3	1256	1177	2.4	44.5
1959/60	+24.9	565.6	1372	1251	2.4	45.2
1960/1	+185.8	620.1	1447	1321	2.3	46.9
1961/2	+39.6	647.9	1550	1354	2.4	47.8

1) Figures of money supply are yearly averages (fiscal years) based on quarterly data.

Sources: calculated from.
1. International Financial Statistics
2. The same sources as the table on page

The table above shows that there is a close connection between the expansion of money supply and the figures of internal borrowing. The most clear cases were from 1955/6 to 1956/7 and between 1959/60 and 1960/1, when the appreciable increases in internal borrowing were associated with the most significant changes in money supply. In both periods the ratio of money supply to gross domestic product at constant prices experienced upward tendencies. As regards the income velocity of circulation, it has not changed much throughout the period, which indicates that pressure on the price level has tended to be associated with increases in the quantity of money and increases in internal borrowing.

Concluding Remarks

The present chapter could be summarized in four main points:-

1. The Egyptian government has used the public sector to encourage development and to break the vicious circles inhibiting growth. This resulted in a growing public sector with more expenditure on development projects.

2. The growth of the public sector has created a business sector which is concerned with trading activities and which has become more significant than the exchequer budget. This

necessitated a system of consolidation of accounts in order to measure the overall impact of government activity on the domestic economy.

3. The growth of public expenditure has not been accompanied by a similar increase in public revenue. The tax system has shown a rigidity which rendered it unable to perform its functions adequately.

4. Foreign aid, in addition to previously accumulated foreign assets, has contributed much in financing the public deficit. Nevertheless the banking system has also played a major role, since internal borrowing was highly associated with increases in the money supply.

APPENDIX A

Institutions of the Public Sector

1. The services budget which provides goods and services that are financed directly by taxation and ordinary budget revenue. This consists of many different sectors as shown below.

The Agricultural Sector
The Ministry of Agriculture
Ministry of Agrarian Reform
Ministry of Public Works
Ministry of Religious Affairs (WAKF)
Irrigation and Drainage
Ministry of Treasury
Ministry of Public Works
Electricity
Ministry of Public Works
The High Dam
Ministry of the High Dam
Defence and Justice
Ministry of War
Ministry of Interior
Ministry of Justice
Administration of Fishing
Education
Ministry of Education
Ministry of Higher Education
Ministry of Public Health
ALAZHAR and other Religious Institutes
Social and Religious Services
Ministry of Social Services
Ministry of Religious affairs (WAKF)
Supply goods and Storing
Ministry of Economy
Ministry of Supply
Scientific Research
Ministry of Economy
Ministry of Education
Ministry of Scientific Research
Industry
Ministry of Industry
Transport
Ministry of Transport
Suez Canal Organization
Dwellingsand Other public Works
Ministry of Dwellings
Public Health
Ministry of Public Health
Culture and Entertainment
Ministry of Culture

Organizational Services
The presidency of the Republic
The Parliament
Ministry of Foreign Affairs
The Auditing Department

The administrative investigation court
Commercial and Financial Services
Ministry of Treasury
Ministry of Economy

These are the main departments of government. It is clear that the same service is often provided by different departments, which make it essential to classify expenditure according to the service and not according to the administrative unit. This operation has been done in the recent budget reports and was made for earlier years by the National Bank of Egypt. Some of the organizations which perform trading activities used to be included in the services budget but later on these institutions became independent with separate budgets.

2. The Development Budget

The development budget is implemented by independent organizations, which used to be supervised by the National production council. Such organizations will be listed under the heading of annexed budgets.

3. Annexed Budgets

Independent organizations, whether performing trading activities financed by selling their products or performing ordinary services financed by a subsidy from the government body, have got separate budgets. These organizations can be listed as follows:-

Organizations performing trading activities
The organization for the implementation of the industrial five year plan.
The Egyptian Railways
The Public organization for construction
Organization for Land Reform projects.
General organization for agricultural production.
Joint WAKFS
General printing Organization
Broadcasting Station
General Organization for export stimulation
General Organization for Fairs and International Markets
General Organization for Storage.
General Organization for Inland water Transport
Post Office Saving Dept.
General Petroleum Organization
Insurance and Pensions Fund.

Organizations performing Ordinary Services
Cairo University
Alexandria University
Ein Shams University
Assuit University
National Centre for Research
Egyptian Public Library
Egyptian Antiquities Registration Centre
Kaliub Training Centre
High Institute for Public Health
General Council for Youth Welfare
Atomic Energy Organization
National Centre for Social and Criminal Research
Arabic Language Accademy
Public Administration Institute

4. The Business Sector Budget

The Business Sector Budget covers those organizations which perform trading activities and whose expenditures are financed by the sale of their products, profits from investments and loans whether internal or external. This budget was instituted after the nationalization laws in July 1962. However, some of the institutions listed under the business sector budget existed before 1962 as has been shown in Section III.

The Institutions of the business sector can be summed up as follows according to the activity performed

Agriculture
The Egyptian Organization for Co-operative Agriculture
The Egyptian Organization for Agricultural Production
The Agrarian Reform Project
The Egyptian Organization for desert urbanization
The Egyptian Organization for Land Reclamation
The Egyptian Organization for Land Urbanization

Electricity
The Egyptian Organization for Electricity

The High Dam
The High Dam Projects

Industry
The public organization for printing
The public organization for Mining
The Egyptian organization for Metal industry
The Egyptian organization for Engineering Industry
The Egyptian organization for food products
The Egyptian organization for Petroleum
The Egyptian organization for Textile
The Egyptian organization for co-operative production
The Egyptian organization for chemicals
The Egyptian organization for building materials
The public organization for the Five year plan
The Egyptian organization for military industries

Transport and Communications
The Railway Organization
The public organization for communications
The general post organization
The Egyptian organization for Transport by sea
The Egyptian organization for internal transport
The Suez Canal public organization.
Dwelling and Public works
The Egyptian organization for construction and contracts
The Egyptian organization for public buildings
The Egyptian organization for co-operative dwellings
The Egyptian organization for dwelling and urbanization
Alexandria public works.
Public Health
The Egyptian organization for medicine and medical products
Culture and Entertainment
The Egyptian organization for Broadcasting and Television
The Egyptian organization for Tourism and Hotels
The Egyptian organization for publishing, distribution and printing
The Egyptian organization for the Cinema
The Egyptian organization for theatre and music
The Egyptian organization for writing, translation, printing and publishing.
Supply goods and Storing
The Egyptian organization for consumption
The Co-operative organization for consumption
The Egyptian organization for Sea Wealth
The Egyptian organization for Storing
The public organization for mills and bakeries.
Commerce and Finance
The Central Bank
The Public organisation for exhibitions and international markets
The Egyptian organization for banks
The Public organization for insurance and pensions
The Egyptian organization for commerce
The Egyptian organization for insurance
The Egyptian organization for savings
The public organization for social insurance
The Egyptian organization for cotton
The public organization for the promotion of exports.

Sources: Budget Report 1962/3 Ministry of Treasury

5. The Local authorities Budget which only emerged in the last two years of the period and which is still unimportant compared with the other budgets.

APPENDIX B

Tariff imposed on various imports

Exempted Goods

Tariff No	Description of Products
1.02	Live Animals, bovine species
2.01	Meat
4.02	Milk and cream processed
7.01	Potatoes, sowing
7.05	Dried leguminous vegetables
10.01	Wheat
10.03	Barley
10.05	Maize
27.01	Coal
27.04	Coke
27.09	Petroleum oil cride
27.10	Kerosene
48 .01	Newsprint
49 .01	Printed books
11.01	Cereal flours
89.01	Ships
	Goods Subject to 1% Import Duty
3.02	Fish, salted, smoked
12.01	Oil seeds
	Goods subject to 2% Import Duties
15.02	Unrendered fats for industry
15.02	Unrendered fats of bovine
15.07	Cotton seed oil
15.07	Cocunut oil
15.07	Coconut oil for industry
15.07	Olive oil for industry
15.07	Oil, others for industry
15.07	Oil for soap manufacture
15.07	Other oils
16.04	Tunny fish
16.04	Other preserved fish
25.02	Pyrites
28.03	Carbon black
40.01	Natural rubber
57.03	Jute, raw
59.17	Textile fabric for tyre industry
73.01	Pig iron
73.02	Ferro-alloys
74.01	Copper slabs
78.01	Lead slabs
85.01	Electric motors and generators
84.00	Machinery and parts
	Goods subject to 4% Import Duties
53.01	Wool raw

Goods subject to 5% Import Duties

Tariff No	Description of Products
12.07	Plants and parts
13.01	Vegetables for dyeing or tanning
16.02	Prepared or preserved meat
25.07	Clay
38.11	Disinfectants
32.05	Dyestuffs
32.01 02	Tanning extracts
41.01	Raw hides
47.01	Pulp (paper making industry)
73.13	Tinplate
73.17	Special steel
85.19	Electric appliances
39.01	Artificial resins
	Goods subject to 5% Import Duties
53.01	Dyed wool
53,05	Carded or combed wool
	Goods subject to 10% Import Duties
25.24	Asbestos
25.03	Sulphur
28.42	Sodium carbonate
28.42	Bicarbonate of sod. and pot.
30.03	Medicaments
29	Chemical products
29.38	Provitamins and vitamins
28	Chlorates
28.38	Sulphates
28 & 29	Other chemicals
32.07	Lithopone
32.07	Colouring matter
42.04	Articles of leather
44.03	Wood in rough
44.04	Wood roughly squared
73.13	Common steel sheets and plates
73.13	Galvanized sheets
73.12	Baling hoops and strips
84.06	Engines for trucks
89.03	Dredges
90	Measuring apparatus

Goods subject to 15% Import Duties

Tariff No	Description of Products
2.02	Dead poultry
9.01	Coffee
16.04	Prepared sardines
18.01	Cocoa beans
27.10	Maxout
27.10	Diesel oil
27.10	Solar
28.17	Caustic soda
37.01	Photographic plates and films
31.02	Fertilizers
40.10	Transmission belts
44.05	Wood, sawn
44.14	Veneer sheets
25.15	Marble
73.17	C.I. Pipes more than 6" ø
85.13	Telephonic and telegraphic apparatus
87.06	Parts of vehicles
38.08	Rosins
59.17	Other textile fabrics for industry

Goods Subject to 20% Import Duties

7.01	Olives
32.13	Printing Ink
33.01	Essential Oil
34.03	Lubricating preparations
48.01	Cigaratte paper
68.13	Fabricated asbestos
73.10	Steel bars and profiles
73.10	Hot-rolled steel
73.17	Rails and sleepers
73.14	Black wire
73.18	Steel pipes, black
73.18	Steel pipes, galvanized
48.01	Printing and writing paper

Goods Subject to 25% Import Duties

4.04	Cheese
8.05	Nuts
13.03	Vegetables for the preparation of soft drinks
27.10	Lubricating oil
27.10	Other oils
44.15	Plywood
44.26	Bobbins
69.02	Refractory bricks
70.17	Laboratory glassware
76.03	Aluminium sheets

Goods Subject to 30% Import Duties

Tariff No	Description of Products
32.08	Prepared colours
34.02	Organic surface agents
40.11	Rubber tyres and tubes for cars
40.11	Rubber tyres and tubes for bicycles
44.28	Other articles of wood
48.01	Paper board
48.01	Wrapping paper
48.01	Other paper
73.14	Galvanized or coated wire
85.23	Electric cables
87.04	Chassis for trucks

Goods Subject to 40% Import Duties

10.06	Rice
53.06	Wool yarn
53.06	Other wool and products
62.03	Sacks and bags of jute
73.21	Structure steel
87.02	Trucks

Goods Subject to 50% Import Duties

9.02	Tea
17.01	Sugar, raw
11.08	Starches
76.04	Aluminium foils
85.03	Primary cells
85.15	Radios and parts
87.02	Buses

Goods Subject to more than 50% Import Duties

17.01	Sugar, refined
17.02	Sugar syrups
18.06	Chocolates and other foods
22.09	Whisky
22.09	Other spirituous beverages
69.10	Sanitary articles
69.11	Tableware and other articles
70.06	Surface ground glass
70.10	Bottles
87.02	Passenger cars

SPECIFIC DUTIES ON TOBACCO

Tariff No	Description of Products
24.01	Tobacco in leaves (£/ 4.600 per k.n.)
24.02	Manufactured tobacco (£E 6.500 per k.n.)

Source: Accession of the U.A.R. to the G.A.T.T. Document L/1816.

Chapter VI

Price Indicators and pricing policy in Egypt

This chapter is mainly concerned with the extent to which the government has succeeded in controlling the general level of prices. The general level of prices, as explained in Chapter I, could be measured by numerous indicators. In practice, although it is realised that the various price indicators tend to move closely together, especially in inflationary periods, some economists feel strongly about the significance of particular indicators in the context of the analysis of inflation.[1] Various price indices may move in the same direction and with the same sensitivity, but this may be due to the fact that they are subjected to a variety of common pressures. In a country like Egypt, where price control is very significant, it is important to select the indicator which is least affected by government control, in order to use it when measuring the relationship between growth and the price level. Thus, as has been mentioned earlier, the differences between the various indicators may enable us to isolate the factors responsible for the changes in the general price level.

The chapter will be divided into two parts:-

1) The changes in prices over the whole period under study; an exposition of the macro aspect as well as the micro

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1) R.J. Ball, inflation and the theory of money, paper-back pp 18-19, 1964.

aspect of inflation (the relative price changes).

2) The impact of price controls on the growth of domestic product and on the development of the various sectors of the economy.

1. Facts and Figures

Indicators of price changes are numerous whether for goods prices or factor prices. In the context of economic policy, it is essential to consider not only the general level of prices, but also the relative changes in prices of various commodities, in addition to the relative changes in prices of factors of production.[1] The breakdown of the general level of prices becomes more urgent if the government is planning a policy aiming at growth without inflation. A global economic policy may not realize the target wanted, and recourse is had to selective policies. In Egypt, where the government has a strong grip on the economy, selective policies have been applied on a large scale. We have seen before how the government has acted to stabilize the prices of essential consumer goods or the so called supply goods. Also, the government tended to interfere even in the determination of prices of certain industrial items which compared with the supply goods, may be considered non-essentials.

Changes in the general level of prices could be expressed by one of the following indicators:-

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1) V.K. Rao, pricing policies and economic development, Essays in economic development, 1964.

1. The implicit national income deflator, which includes all goods and services produced by the economy and which is directly affected by the prices of exports and imports as well as prices of goods and services produced and consumed by the domestic market. Unlike other indicators, it is not based on selected commodities and it does not differ in Egypt from any other country as regards its main components.

2. The wholesale price index number, which only incorporates certain commodities, agricultural and industrial, which may differ from one country to another, but they are usually most essential to the economy. In the case of Egypt, these commodities are, cereals, dairy products, fats and oils, meat and fish, sugar tea and coffee, some other food products, fuel, soap, paper, construction materials, fertilizers, metals, cotton and woolen cloth,[1] leather and tanning and pharmaceutical products.[2] The index does not include capital equipment prices since Egypt does not produce much of this item.

3. The retail price index which embodies fuel, soap and food products. Most of the items included in this index are listed among the supply goods.

4. The cost of living index number which consists of food prices, clothing prices, accommodation prices, and the

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1) including raw cotton.

2) Annual averages of price index numbers, statistical dept. op. cit.

prices of entertainment and other services. It is estimated according to a family budget survey, which determines the share of spending on each of the above mentioned items. The importance of this index is that it indicates the purchasing power of the currency inside the country, and that it is used when determining the real wage level and the standard of living as a whole. It may also correspond with the value of the currency in foreign markets. However, in an underdeveloped country, most probably the value of the currency in the foreign markets (the exchange rate) will change the internal cost of living and not the other way round. The main snag as regards the Egyptian cost of living index is that it is highly controlled by the government, which makes it less flexible than other indicators in response to market forces.

Indicators of prices of factors of production are expressed by:-

1. The wage level in manufacturing industry. This may, of course, be divided by an index of labour productivity to give an index of labour costs.

2. The index number of capital equipment prices which was constructed according to the prices of imported machinery.

3. The index number of prices of building materials such as cement and iron and wood for structures.

Table VI [1]

Product Prices 1952 = 100

Year	Export Price index	Import Price index	General wholesale price index	Retail price index	Cost of living index	Implicit income deflator
1950	83	74	93	95	92	-
1951	131	85	103	102	100	110
1952	100	100	100	100	100	100
1953	73	97	96	94	93	97
1954	83	93	93	95	89	102
1955	81	95	95	96	88	104
1956	89	97	105	97	91	106
1957	98	103	114	103	95	108
1958	91	96	112	103	95	108
1959	75	85	112	104	95	109
1960	-	-	113	105	96	111
1961	-	-	115	105	96	112
1962	-	-	114	106	94	-

Sources: calculated from.

1. The same sources as the tables IV6 and IV7
2. Annual averages of price index numbers op. cit.
3. U.N. Year Book of International Trade statistics
4. The National Bank of Egypt no 1 1962.

Agriculture			Industry	
Implicit deflator	Food prices	Internal price of cotton	Implicit deflator	wholesale price index
-	97	-	-	88
119	104	150	111	103
100	100	100	100	100
98	103	97	95	88
106	100	101	101	85
111	104	96	104	86
116	113	137	109	96
117	119	119	114	108
113	121	110	118	103
113	119	-	124	104
114	118	-	127	106
119	125	-	125	103
-	126	-	-	101

Table VI_2

Factor Prices 1952 = 100

Year	Wage[1] level (Col.1)	Productivity level (Col.2)	labour cost Col.1/ Col.2 Col.3	prices of equipment Col.4	construction materials Col.5	col.1 col.4 col.6	col.1 col.5 col.7
1952	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1953	98.4	101.0	97.4	N.A.	93.3	N.A.	105.5
1954	103.7	106.4	97.4	N.A.	87.4	N.A.	118.6
1955	108.5	116.0	93.5	90.9	89.9	119.4	120.7
1956	109.6	117.0	93.7	98.3	102.5	111.5	106.9
1957	115.5	130.8	88.3	97.7	106.7	118.2	108.2
1958	117.1	144.7	80.9	99.7	104.2	117.4	112.4
1959	116.6	149.8	77.8	106.6	101.7	109.4	114.6
1960	116.6	N.A.	N.A.	107.0	105.0	108.4	110.5
1961	117.1	N.A.	N.A.	106.4	107.6	110.0	108.8
1962	113.4	N.A.	N.A.	115.5	108.4	98.2	104.6

Sources: calculated from:-
1. U.N. Statistical Year Book.
2. Budget reports
3. Annual averages of price index numbers, Statistical Dept.

The first table shows that the degree of inflation differs from one pride indicator to another. The wholesale price index is the most sensitive one to economic fluctuations while the cost of living index is the least responsive one to market forces. The retail price index has moved between the cost of living index and the wholesale price indicator. The reason for this is that the retail price indicator is more controlled than the wholesale price index, since it mainly includes foodstuffs whose prices are either subsidized by the government or totally controlled. The cost of living index has experienced less increase than the retail price

1) wages in the manufacturing sector.

indicator; this can be attributed to the inclusion of rent in the former which has been kept down by the Rent Acts.[1] The implicit income deflator has been the nearest one to the wholesale price index especially as of 1952.

As regards the relationship between the various price indicators and the prices of exports and imports, we shall have to analyse year to year changes since an aggregate picture of the whole period under study might be misleading. On the other hand, we shall ignore the retail price index and the cost of living index as measures of inflationary pressure since they have been proved to be highly controlled by the state.

Table VI_1 shows that, in the period 1951-3, the wholesale price index and the implicit income deflator, were highly affected by external forces. However, it could be argued that the wholesale price index, though including raw cotton, was more highly influenced by the import prices, while the implicit income deflator was more influenced by the prices of exports.[2] Between 1951 and 1952, the sharp decline in the implicit income deflator was certainly the result of the fall in export prices while in the case of the general wholesale price index, the fall in export prices was offset by the rise in import prices, and the result was

1) The Rent Acts will be further explained in the coming section.
2) The construction of the wholesale price index exhibits a high weight for the imported goods, but on the other hand it is influenced by export prices since raw cotton weights 15% in the overall index (I.f.s. Nov 1960). The implicit income deflator has been calculated as:-G.D.P. at current market prices + G.D.P. at constant prices without taking into consideration adjustments for the terms of trade. This made it more influenced by the prices of exports and the internal prices.

a small decrease in the wholesale price index. However, in 1953, the drastic change in export prices was not accompanied by a similar change in the implicit income deflator. In the case of agriculture, the fall in the implicit deflator was even less than the overall implicit income deflator. This may be attributed to the rise in food prices, though it was not the only factor. It could be argued that, in 1953, the internal pricing policy for cotton was the main reason responsible for the relative stability of the agricultural implicit deflator.[1]

Also in 1957, in spite of the rise in export prices, it was not accompanied by a significant increase in the agricultural implicit deflator due to the decline in, the internal prices of cotton. Again, we can say that government control plays an important role in the determination of the implicit income deflator for agriculture. As regards the industrial sector, both the industrial implicit deflator and the wholesale price index were strongly influenced by the external forces in the earlier period of study. However, in 1954, they moved differently, since the implicit deflator was more tied to the export prices while the wholesale index was influenced by the fall in import prices. Since 1956, the industrial implicit deflator has experienced a rising trend, most probably related to the working of the

1) The cotton policy will be explained in the coming section.

internal forces, while the wholesale price index was still strongly influenced by the import prices together with the internal factors. For this reason the implicit deflator may be better used to explain the demand inflation in the industrial sector than the wholesale index.

To sum up, certain remarks have to be made:-

1. The cost of living index and the retail index numbers, are not the ideal indicators to measure the degree of price inflation, since they are highly controlled by the state.

2. In our analysis in chapter VII, we shall use the wholesale price index or the implicit income deflator to show the movements of prices in Egypt and how they are connected with economic growth. It was explained above how the two indexes reacted to the internal forces in the later period of study, but further explanation will be made in the next chapter.

3. The implicit deflators shown in table VI_1, sometimes need to be adjusted, since they are based on fiscal year figures which had to be transferred into calendar year figures. This may change the results in certain years, especially in 1955 and 1956, where all implicit deflators would be more satisfactory if reduced somewhat in 1955 and correspondingly raised in 1956.

The preceding discussion has been concerned with the relative changes in the prices of final products; as regards the prices of factors of production, they are shown in

table VI_2.

Wages in industry are to a certain extent within the control of the state while the prices of imported capital equipment are completely beyond the control of the government. Wages have kept nearly constant since 1957, while prices of capital equipment have increased. Column 6 of table VI_2 shows a declining ratio between money wage level and prices of capital equipment from 1957. However, it could be argued, that the relative stability in the money wage rates was due to the stability in the cost of living index number. In this respect, we can say that the pricing policy of the government was successful in preventing a price wage spiral.

With regard to prices of construction materials, they show an upward trend. Although there is no clear trend of the relation between prices of such items and money wages over the whole period, they are certainly an important item in the process of economic development. As an example, the last three years which experienced more construction in the agricultural and industrial sectors, have also shown a significant rise in the prices of such items and the ratio between money wage rates and prices of building materials has declined.

Finally, wages in other sectors like agriculture and services have not shown a significant rise. It has been

suggested that the Agrarian Reform system did not benefit the agricultural workers much since the money wage rates in this sector has advanced between 1952 and 1961 by about 9% only.[1] This was due to the difficulty of applying the government regulations in the agricultural sector where the existence of a large number of units made control very difficult.

As regards wage rates in the Civil service, they have kept constant over the whole period, in spite of the expansion of the public sector and the increasing responsibilities of the government. The increase in money wage rates in the public sector, was in the form of increased payments to the Pensions Fund;[2] but on the whole there has been a declining tendency in the share of wages in total public spending.

Pricing policy and production

Government policy to stabilize prices has acted as a major factor in determining the price level. Since World War II, the Egyptian government has controlled prices of essential consumer goods or what are called supply goods; this has been in addition to other agricultural and industrial items.

In an advanced economy price control is used usually during war periods, when the government competes with the

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1) The effects of the Agrarian Reform in Egypt (Arabic), Institute of National Planning, Cairo, Memo 356.
2) Hansen, Mead op.cit.

private sector to increase the production of war equipment[1]. The bidding for resources on the part of the government or on the part of the private sector results in an increase in prices which produces forced saving by cutting down the consumption of lower income groups. An alternative to rising prices is direct action, taken by the government, to stabilize the prices of essential consumer goods. In this case the government may apply rationing in order to bring supply and demand into equilibrium. However, if control is not universal but merely a partial control, prices will rise in the uncontrolled market and this may divert the available resources to the production of uncontrolled goods, which becomes more profitable than producing essential consumer goods. For this reason it is suggested that the government must control the allocation of factors of production, and not merely the final products, since demand must be dampened down in both the goods market and the factors market. In the British economy direct control was put in force both in the war period and in the early nineteen fifties.[2] Essential consumer goods were rationed and physical controls were applied to important items such as steel and other materials which were considered a major bottleneck in the economy.

In an underdeveloped country, the development process may be considered similar to the conditions of war expenditure

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1) The economics of repressed inflation, H.K. Charlesworth 1956.
2) The British economy 1950 - 1959, G.D.N. Worswick; The British economy in the nineteen fifties, Worswick and Ady.

in an advanced country; the government may resort to goods and factors control especially of those items which affect the masses. Allocation of resources should be determined by a plan or a programme according to an order of priority. Nevertheless, in an underdeveloped country, unskilled labour is abundant; only capital (including foreign exchange reserves), construction materials and skilled labour are the scarce factors. Allocation of such factors must be firmly controlled by the government; as regards foreign exchange reserves, a foreign exchange budget may be required, while the allocation of skilled labour can be made in very special cases, such as the allocation of the Egyptian engineers according to a plan set by the competent departments of the government. In the case of construction materials, they are often imported from other countries which means that they can be allocated through the exchange control department.

Government policy to stabilize prices may take one of the following forms:-

a) To subsidize the production of certain items to be sold at fixed prices or to reduce or remove the indirect taxes imposed on such items.

b) Direct control of prices and this may or may not involve rationing the consumption of these items. In the first case where controlled prices are not accompanied by rationing, the result will be people queueing up to buy

such goods and there will be a black market where goods are dealt in at higher prices than the official ones. In the latter case where rationing is used supply and demand will be brought into equilibrium.

c) Under the heading of price control we can also include import licenses and overvaluation of the currency. As was said above about the restraint of consumption, import licenses may be considered as a special case of consumption or investment rationing. Currency overvaluation is also a special case of selling goods to the people at lower prices than those fixed according to market forces. On the other hand the government can pursue a policy of multiple exchange rates, according to which the government can subsidize or penalize certain industries. However, while the government can control the internal price level for a long time, currency overvaluation cannot continue for a long time unless the country has sufficient foreign reserves to fill the gap in the balance of payments.

How far did the Egyptian government rely on one or more of these types of price control?

As regards price subsidies, two types of subsidy appear on the exchequer budget:-

a) Subsidies for reducing the cost of living (consumers subsidies).

b) Subsidies to consolidate the economy (production subsidies).

These subsidies can be set against the profits which accrue to the government from trading in the supply goods; such profits are reaped on the following items:-

1. Profits accrued on the various kinds of oil outside the rationing system.

2. Profits accrued on selling sugar outside the rationing system.

3. Profits accrued on the distribution of high qualities of flour.

4. Receipts from selling fodders to the farmers.

5. Other dues imposed on certain consumer goods.

Table VI_3

A comparison between price subsidies and profits accrued on consumer goods in million pounds

Year	consumers subsidies Col.1	producers subsidies Col.2	total Col.1 and Col.2 Col.3	Profits accrued on supply goods Col.4	Net subsidies Col.3 - Col.4 Col.5
1952/3	15.5	-	15.5	7.1	+8.4
1953/4	6.2	-	6.2	5.0	+1.2
1954/5	1.7	-	1.7	6.0	-4.3
1955/6	1.9	-	1.9	6.4	-4.5
1956/7	3.0	-	3.0	7.5	-4.5
1957/8	2.1	1.2	3.3	11.6	-8.3
1958/9	6.7	2.0	8.7	7.9	+0.8
1959/60	8.9	1.6	10.9	8.0	+2.9
1960/1	9.0	6.5	15.5	8.5	+7.0
1961/2	16.2	6.5	22.7	9.8	+12.9
1962/3	36.5	2.5	39.0	17.0	+22.0

Source:Annual Budget Reports

The preceding table shows that total price subsidies (Col.3) have increased since 1957/8, the year when production

subsidies were introduced. The sharp increase in 1960/1, 61/2 and 62/3 was certainly an important factor in stabilizing prices, especially after we have seen the role which has been played by the banking system in financing the deficit in the public sector. Moreover, if the figures of subsidy are compared with the profits accrued on the supply goods, the result is an increasing amount of net subsidies as from 1958/9. However, the success of the policy will partly depend on the availability of foreign exchange to import the essential consumer goods.

The second measure of price stabilization is the direct control of the prices of essential consumer goods. In this respect the Egyptian government rationed certain items such as sugar, oil, and Kerosene, while others were controlled by the government but not subject to the rationing system. Among the second type of goods were bread, rice, meat, tea and coffee.

The government policy was to a certain extent successful in stabilizing the prices of the very essential items like bread which is highly subsidized, but in other cases, such as sugar, tea, coffee and meat, the policy was not of great success. This could be demonstrated by the rise in the index number of foodstuffs faster than the index number of cereals from 1955/6 - $\overset{\text{table}}{\text{IV}_{18}}$ - which may be attributed to the fact that people tend to consume better qualities of food

when their living standards improve. However, the increase in the prices of sugar, tea and coffee may also be related to the increased taxes and profits accrued on these items, which suggests that budgetary policy plays an important role in the determination of prices in Egypt.

An important item which has been controlled by the state, and which is a main component of the cost of living index number is rent. In this field the government promul - gated many acts to stabilize the rental value of buildings. In 1952 law No 199 was issued according to which the rental value of buildings which had been established after 1944, was subject to a 15% reduction. This coincided with a greater decline in the cost of living index number than in the other price indices in 1953. In 1958 law No 55 stipulated a reduction of 20%.which had to be applied to all buildings established after 1952. A general law was formulated in 1961 (No 169), according to which tax exemption was granted to all flats whose rent did not exceed three pounds a room. The law stated that the benefit of tax exemption must go to the tenants and not the landlerds. This lawwas very important since a large number of houses, even those built before the war, was subject to the reduction. The net result of this act was a 2% decline in the cost of living index in the following year 1962.

How far did price control affect the level of production?

It may be detrimental to the economy to freeze the prices of essential consumer goods especially if the increased production of these goods is highly desirable. A serious contradiction is involved here, for while the government wants to sell these goods at stabilized prices, the incentive to increase production requires leaving prices flexible. As far as the Egyptian economy is concerned we find:-

1. In the case of agriculture, the government fixed the prices of most of the agricultural products. A marketing board was set up to buy the cotton crop with prices to be fixed by the board. We noted when considering table VI_1 that in certain years the internal prices of cotton differed from the export prices as a measure of stabilization of incomes and prices. However, productivity in agriculture throughout the period increased owing to the use of better techniques, in addition to the rise in government investment in agriculture. For these reasons we may suggest that pricing policy might not have been an important limitation on productivity, but rather other technical factors. Moreover government control of the agricultural sector always prevails in the so-called hydraulic societies, which makes the peasant familiar with such policies.

2. Perhaps the detrimental effect of the pricing policy is most clear in the case of dwellings, where the Rent Acts

may have discouraged the people from investing their money in dwellings, and aggravated the accommodation problem. However, from the development point of view, it may be desirable to restrict investment in housing, especially if this type of investment absorbs a large share of the available resources, as was the case in the earlier years of the period under study when investment in housing comprised about one third of total investments. On the other hand, more facilities were given to stimulate cheap dwellings; this is shown by the establishment of a number of public organizations concerned with construction of co-operative dwellings (see Appendix A of Chapter V).

3. Finally, pricing policy is a major problem in the export-import sector. Export promotion is urgently needed to stimulate the economy while imports of raw materials and capital equipment are essential for any industrialization programme.

The government policy in the foreign sector has changed many times, but its main core has been the favouring of certain items at the expense of the others. A multiple exchange rate was used favouring the imports of capital equipment and penalizing other imports. In the field of exports, raw cotton did not receive the same premium as that received by less important exports such as vegetables and antiques.

This policy was successful to a certain extent in reducing the share of cotton in total exports. However, we must not neglect other factors such as the subsidy given to the exporters of textiles and other products

As regards the impact of the foreign exchange policy on the pattern of imports, we may have some reservations. We cannot say that giving a favourable exchange rate to the import of capital equipment has improved the situation of the private sector; on the contrary, private investment has declined sharply. Even that small amount of private investment has been directed towards the production of luxury products, partly due to the encouragement given in the form of a favourable exchange rate to import the necessary equipment. Furthermore, the public sector was deluded into thinking it could produce such articles at low costs and the principles of competetiveness disappeared completely.

The exchange control policy, together with other factors, resulted in certain reduction in the prices of luxury products, such as refrigerators, while the country was short of foreign exchange to import the most essential items[1]. Furthermore, the stimulation of consumption of

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1) The price of a 9ft refrigerator was reduced in January 1960 from 198 pounds to 169 pounds. In August of the same year a ministerial decree No 409/1960 was issued and the price was reducedagain to 154.5 pounds, then to 140 according to the ministerial decree No 347/1961.

such types of goods is certainly detrimental to saving, especially if it is accompanied by credit creation.[1]

For these reasons, we can say that, in certain sectors, the policy of multiple exchange rateswas not acceptable, and it would have been better if a subsidy had been given to the most essential projects, leaving the non-essential ones to the market forces.

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1) In this respect certain banks have been specialized in the hire purchase business (Algoumhoria Bank): also the Ministry of Economy has sent a mission to some European countries to study the system of credit insurance.

Chapter VII

Inflation and Growth in Egypt

Conclusions

This concluding chapter is concerned with the outcome of the various economic forces and policies which have operated during the period under study and which have been examined separately in the earlier chapters of the thesis. The movements of certain key economic variables have been studied in order to explain the behaviour of income and the price level in Egypt. In this respect it is clear that no single theory applies to the whole period of study; certain forces have predominated at particular times. In each sub-period, the variables studied must be taken into consideration to see the weight of each one against the others. Now, after we have studied the various economic forces separately, we are in a position to decide which factors were the main determinants of the behaviour of economic growth and the price level at particular times within the whole period, 1950-1962.

The relationship between inflation and growth has been studied from two points of view:-

1. From the view-point of demand which is divided between:-

a. external demand

b. internal demand

2. From the view point of supply which involved a study of:-

a. structural changes in the economy.

b. cost analysis with special reference to labour costs and import prices.

c. particular pricing policies and their impact on domestic production.

The Demand Factors

An underdeveloped economy is highly influenced by fluctuations in external demand where the export sector is the main accelerator of the economy. A rise in the prices and volume of exports results in an expansion throughcut the whole economy and not merely in the export sector. In this context, we can say that the boom period in Egypt, between 1945 and 1950, was mainly attributable to the high export prices which were associated with an increase in the gains from the terms of trade. It has been estimated that the contribution of the terms of trade to the growth of real income in the period 1946-50 was approximately 3.5% per annum. This enabled the country to improve its productive capacity without much sacrifice on the part of the indigenous population. This expansionary phase extended up to the end of the Korean War, and was characterized by a high rate of growth of income and an increasing price level. Here, we can say that the foreign sector was the main determinant of the level of activity and also the price level. This means that growth and inflation were highly dependent upon and correlated with the high export prices. In this case it is better to correlate the price level with the index of real income rather than that of the gross domestic product.

The role of the foreign sector was also significant in the period 1951-3, when incomes and prices declined due to the fall in export prices. Again we can say that the foreign sector was the main determinant of both the level of activity and the internal price level, during this period.

As from 1953, internal demand emerged as another important factor. This started with the introduction of the first development budget for the fiscal year 1953/4. Domestic demand may be divided into private consumption, private investment, and government expenditure on goods and services. In the Egyptian case figures of private consumption are estimated as residuals which made them uncomparable from year to year. All errors in the estimation of other items of expenditure will cumulate in the series of consumption. As regards private investment, it declined throughout the period, while public investment expanded tremendously together with other items of public expenditure. Thus the role of the government sector in the economy increased relative to that of the foreign sector. In the period 1950-3, the government was not able to prevent the undesirable consequences of the external fluctuations which occurred. In the following years the role of the government became more positive for two main reasons:-

1. The attitude of the government changed from advocating a mere balanced budget to advocating balance in the whole economy. This implied more development expenditure to

improve growth and productivity of the economy.

2. The rise in the defence expenditure especially after 1955 when the first important arms deal was concluded with Czechoslovakia, this was carried further during the Suez Crisis. While development expenditures were mainly capital expenditures, spending on defence was mainly on consumption items.

These two factors together were responsible for the expansion of the public sector, and the index of government activities whether estimated in terms of final demand for goods and services, all government expenditure or production activities has shown a tremendous rise. It could be argued that the nationalization schemes in Egypt were the responsible factors for the expansion of the public sector, but we believe that such schemes were secondary to the need to increase governmental development expenditures.

In spite of the increase in public expenditure, it was not associated with an increasing tax yield to cut down private consumption. It is true that a great deal of public investment was made at the expense of private investment, but the final situation of total investment was a significant rise whether in absolute terms or as a ratio of money income. In the British economy, where the ratio of public investment to total investment was about 42% in 1959, it has long been advocated . that variations in public investment should

be used to offset the variations in private investment.[1] In the Egyptian case, the role of public investment has become not just a weapon to offset the changes in private investment, but rather that of the pioneer in the process of economic development. This, in conjunction with the increased defence expenditure, created a huge deficit in the public sector both in the exchequer budget and in the budgets of other public institutions. In this respect we must not forget the role of the expansion of the money supply which helped a great deal in financing the government deficit especially in 1956/7 and in the last three years of our period.

In order to measure the relationship between growth and the price level in the period 1954-62, we must select the price indicators which are most appropriate. It has been stated in Chapter VI, that the implicit income deflator is more responsive to the demand factors while the wholesale price index is more sensitive to changes in the import prices. This helps us to understand when inflation was the outcome more of demand factors than of increases in the costs of production. On the whole, however the period 1954-62 experienced both an increase in the rate of growth of domestic product and a rise in the price level as measured by either of the above mentioned indicators. The main determinant of both variables was the behaviour of the

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1) I.M.D. Little, Fiscal policy, The British economy in the hineteen fifties, edited by Worswick and Ady, 1962.

government sector. The index of the production activities of the government measures the contribution of the public sector tc the growth of domestic product, while the budget deficit (of all institutions) and the accompanying expansion in money supply, is indicative of the pressure on the available resources and the impact on the price level. In an underdeveloped country, where the government is pioneering the process of economic development, it is most likely that growth will be associated with inflation. In a mainly private enterprise economy, the financing of investment will tend to be made by genuine real saving, while in an economy where the government is doing most of the investment, the failure of the government to obtain saving through taxes or borrowing from abroad, may induce the government to depend on the banking system, especially if the Central Bank is highly controlled by the government, as inthe case of Egypt.

This brings us to the next point which is concerned with the government borrowing from abroad. Balance of payments disequilibrium is another means to avoid price inflation. This method has been an important source of financing development expenditure in Egypt and has acted as an offsetting factor to the increasing budget deficit. The expansion of the public sector to improve the rate of growth of income was accompanied by a severe depletion

in the country's foreign reserves despite the lavish foreign assistance which has been received since 1958; either in the form of food and consumer goods or for productive purposes. However, in 1956/7, even after making allowance for the import surplus, it was necessary to finance a significant part of the deficit through the banking system and this was associated with an appreciable rise in the price level as measured by either of the price indicators. Also, between 1959 and 1962, there was significant government borrowing from the banking system accompanied by a rise in the implicit income deflator by about 6%, although government control of prices acted as an important stabilizing factor in this period.

In sum, in order to see the relationship between growth and inflation throughout the whole period of study, the following two tables have been set up.

Table VII_1

Growth of National income in relation to prices
1953/4 = 100

Year	Index of domestic product at constant prices	Index of real income	Implicit income deflator	Wholesale price index[1]
1950/1	98	113	114	103
1951/2	101	114	105	107
1952/3	100	101	94	103
1953/4	100	100	100	100
1954/5	103	104	102	99
1955/6	107	108	104	106
1956/7	109	111	107	115
1957/8	115	117	107	119
1958/9	122	124	106	119
1959/60	130	133	110	119
1960/1	137	140	109	120
1961/2	141	144	112	121

1) In the original figures which are based on calendar years, the significant increase in prices was only between 1955 and 1957(see table VI_1). The interpolation process distributed the rise in prices over four years which may alter the picture.

Sources:- calculated from:-
1. The figures of national income mentioned in tables IV_6 and IV_7
2. Averages of price index numbers (op. cit)

Table VII_2

Money, supply money income and the income velocity of circulation value in million pounds

Year	amount of money supply	index of money supply (1953/4=100)	money income	index of money income (1953/4=100)	income velocity of circulation
1952/3	406.5	95	905	94	2.2
1953/4	426.3	100	963	100	2.3
1954/5	446.5	105	1014	105	2.3
1955/6	446.2	105	1072	111	2.4
1956/7	500.8	118	1125	117	2.2
1957/8	513.4	120	1195	124	2.3
1958/9	524.3	123	1256	130	2.4
1959/60	565.6	133	1372	143	2.4
1960/1	620.1	146	1446	150	2.3
1961/2	647.9	152	1550	161	2.4

Sources:- calculated from
1. The figures of money income mentioned in table IV_6
2. International financial statistics.

Table VII_1 shows that in the period 1950-53, changes in the terms of trade greatly affected the behaviour of real income; this is clear in the big difference between the index of domestic product at constant prices and the index of real income. Also, the drop in real income was associated with a decline in the implicit income deflator which was highly influenced by the export prices while, in the case of the wholesale price index, the fall in export prices between 1951/2 and 1952/3 was counteracted to a considerable extent by the rise in import prices. Between

1952/3 and 1953/4 the rise in the implicit income deflator was accompanied by a decline in the wholesale price index due to the rise in both the external and the internal demand at a time when import prices declined. Between 1953/4 and 1961/2, the implicit income deflator has shown a rise of 12% over the whole period, which can be explained mainly by the rise in internal demand and the increase in money supply. Table VII_2 exhibits a good correlation between the money income and the change in the money supply; the income velocity of circulation remaining fairly steady. This is what would be expected in a country where the government sector is significant and relying to a considerable extent on the banking system. In this respect we must not forget the sharp increase in the wholesale price index between 1955 and 1957 since it was influenced by both the high import prices and the internal demand increase. However, as from 1958, the implicit income deflator rose faster than the wholesale price index, since the economy was more subject to the pressure of demand than to the change in import prices.

In conclusion, we can say that the period under study can be divided into two parts, the first covers the period 1950-53 when the external demand was the main derminant of both the level of activity and the price level. The second part incorporates the rest of the period under study when internal forces, chiefly emanating from the government sector, were the main operating forces.

The Supply Factors

The first theory which has been tested in this context, is the one which states that price increase is the outcome of the unbalanaced growth of the economy. In recent years, this theory has been much stressed by some economists in Latin America who have been named the "Structuralists". They suggest that, in most of the underdeveloped countries, the process of development tends to be more concerned with industrialization to the neglect of agriculture and other infrastructure projects, which are essential to the economy. It has been found that, in Egypt, the share of agriculture in total gross domestic product has declined, while that of industry has increased. However, the change in the composition of domestic product cannot be considered a drastic one, since the fall in the share of agriculture and the rise in the share of industry were less than 5% throughout the whole period of study. Moreover, investment in agriculture has been increasing at a faster rate than in industry. The terms of trade betwen agriculture and industry turned against agriculture, but only due to the fall in cotton prices. However, when the terms of trade were considered between foodstuffs and industrial products, no clear trend emerged. This suggests that rises in prices of foodstuffs were not mainly responsible for the general rise in prices; industrial products also produced an equivalent

price increase. Nevertheless, we cannot ignore foodstuffs as a bottleneck for many reasons:-

1. The rise in the prices of foodstuffs would have been greater if the imports of such items had been more restricted. During the period of study, food imports were a major factor responsible for the balance of payments instability. In a country like Egypt, the increase in population and the rise in per capita income must be accompanied by an increased supply of food.

2. Prices of foodstuffs were much more controlled than the prices of industrial goods. This must have concealed the real trend of the terms of trade between the two sectors.

3. Since money wages in under-developed countries are closely related to the price of food it is important to keep such prices reasonably stable.

This brings us to the next point which is concerned with the determination of prices in the industrial sector. In an advanced economy, where trade unions are strong, a wage push is often an important factor in driving the price level upwards. Furthermore the goal of the unions is often to reduce wage differentials, which again tends to result in an increase in the wage level beyond the increase in productivity. The situation in Egypt is entirely different; the supply of labour is virtually unlimited and employment between 1947 and 1960 did not change in spite of the wave of

industrialization. This meant that every year the increasing labour force was faced with an increasingly severe problem of unemployment. Furthermore trade unions are still infant and weak and they are not able to perform their functions properly. During the period under study, wages increased less than productivity which suggests that there has been a profit inflation in the industrial sector especially during the years when import prices remained steady such as the period after 1957. Between 1957 and 1962 the implicit income deflator in the industrial sector showed a steady advance, while the wholesale prices of industrial goods remained fairly stable, being highly influenced by the stability of the import prices. In the period 1955-57 the wholesale index number advanced more than the implicit income deflator since that period was subject to both demand and cost inflation and the wholesale index number gives relatively more weight to the effect of an increase in import prices. In this respect it is important to re-emphasise the role of the government, since a significant part of the profit inflation arose from the government's endeavour to develop the economy. Thus what happened in Egypt was similar to what happens in an industrial advanced country in war-time.

The importance of the structural aspect within the industrial sector stems from the fact that a large number of industries which have been established in Egypt were highly dependent on foreign raw materials and capital

equipment. In spite of the policy of import substitution, the import content of industrial output has not shown any signs of decline. Egypt was rather fortunate to have stable import prices in the last five years of our period which made the internal price level only influenced by the demand factor. It could be argued that after 1962, the year of the devaluation of the pound (I.M.F. stabilization programme), Egypt may face a rise in the import prices of raw materials and cost inflation may start playing its role side by side with demand inflation. But even so it must be admitted that, so far, demand has been the dominant factor and this corresponds with what Oliviera states in a recent article,[1] "Many countries, in fact, by force of their "structural" features, have a strong proclivity to demand pull inflation. Underdeveloped economies, especially, show a chronic tendency to invest more than the amount of voluntary savings for any given level of income. Yet, however, deeprooted in their economic structure such propensity might be, the corresponding inflationary disturbances cannot be envisaged as a structural inflation. This is quite clear from the above analysis; but the structuralist school has not been very particular about the point. One thing is structural inflation and another structural proneness to inflation. Sometimes the "structuralist" school sound as if they were including every case in which an underdeveloped country tries to grow at a rate higher than the ex-ante equilibrium of saving and

1) I.H.G. Oliviera: Structural inflation and Latin American Structuralism; Oxford economic papers Nov. 1964 pp 331-32.

investment would permit. This has a far reaching implication from the stand poiht of economic policy. Even if genuine structural inflation is also at work in such cases, the element that it contributes will be therein associated with a sheer demand inflation."

It seems that Egypt falls under the category of demand inflation because, as has been argued above, the problem facing Egypt at present is not mainly a structural problem. There has been a relative balance in the growth of the various sectors, and, to a certain extent within the individual sectors, in spite of the establishment of some projects which do not match the scale of economic development, such as some luxury industries. Care has been given to agriculture as well as to industry; in addition, there has been considerable expenditure on infrastructure projects. Bottlenecks are not likely to arise in such projects, especially when it is realised that Egypt is one of the underdeveloped countries which started developing them a long time ago.

For these reasons, we can state that fluctuations in the price level were mainly attributable to the change in aggregate demand. In the earlier part of our period, fluctuations in prices were created by the export sector while, in the later part, the increase in prices was attributable to the rise in the internal demand, stemming mainly from the government sector. Some cost elements (rise in import prices) contributed much to the rise in prices in 1955-7, but, even

during this period, the economy was under pressure from the increasing public sector demand. In this case, it is possible to say that growth was highly correlated with inflation, because, while in the case of cost inflation the rise in prices may retard growth due to the high costs of production, demand inflation is created either by the favourable terms of trade or the increased development expenditure and both are welcome from the viewpoint of economic growth. Again we can say that the control of the money supply, according to the I.M.F. stablization programme, while it is expected to curb the rise in the price level, may result in a slow down in the rate of growth. However, it is important to note that the inflationary effects of a rise in the internal demand may be offset by a rise in the import surplus; in this respect Egypt was fortunate during the period studied to have a considerable amount of foreign exchange reserves - mainly sterling balances - in addition to the significant amount of foreign assistance which was delivered to the government and which contributed a great deal to the financing of the public deficit.

Finally, price control has been an important weapon to stablize prices. This has certainly been a limitation on our analysis. In comparing the various price indicators we have seen that the cost of living index number was the indicator least responsive to market forces, since it incorporates many price controlled items, especially rent, which has always been kept down by government acts. The wholesale price indicator and the implicit income deflator were reasonably

good in measuring the vulnerability of the economy to market forces. However, even these two indicators were affected to some degree by price oontrols, and we would have expected more price increases but for government interference in the form of subsidies and price controls. But the point is, can the government control prices indefinitely?

The answer is, no. To the extent that the government succeeded in reducing the degree of price inflation, this was largely because it could draw on large foreign reserves, in conjunction with the huge foreign assistance it received. Whatever the policy followed, unless the development process is associated with an increasing amount of exports or a constant stream of foreign aid, the gap in the balance of payments will widen and successive devaluations in the currency will follow. In this case pricing policy will be ineffective since the problem will be beyond the control of the state. The government will have to allow either a considerable degree of inflation or forgo a reasonable rate of growth.

In view of the foregoing analysis we may expect more inflation to take place in Egypt especially after the labour laws in 1961 and the devaluation in 1962. In the past, Egypt was mainly subject to a demand inflation created by

the expansion of the public sector. In the future, both demand and cost inflation are likely to come into play as in the period 1955-57. If this happens, it will not be possible to consider Egypt among the stable countries and we shall have to accept the fact that if growth is our target, we must be prepared to sacrifice a considerable degree of price stability.

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