THE OPEN DOOR POLICY AND INDUSTRIALIZATION IN EGYPT: A PRELIMINARY INVESTIGATION

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TABLE OF CONTENTS

ABSTRACT

In this paper a discussion of the Open Door Policy in Egypt is divided into five parts: 1) a description of the Open Door Policy and its development over the past ten years, 2) a summary of changes in the balance of payments during the same time period, 3) a discussion of changes in the distribution of imports, 4) an analysis of the impact of the Open Door Policy on industrialization by examining changes in output and prices and considering the performance of the private sector relative to the public sector, and 5) the conclusions and suggestions for further research.

The Open Door Policy is composed of three major policy changes: the parallel market (now the unified market) for foreign exchange, the system of imports without transfer, and Law 43 of 1974 which provides incentives for foreign investment. Although it is seen that these policies were introduced in a somewhat ad hoc and at times inconsistent way, they have indicated a major attempt at liberalization of the foreign exchange control system in Egypt.

Unfortunately the new policies have not led to an immediate substantial improvement in the balance of payments situation. The balance of trade worsened almost steadily from 1971 to 1978, in spite of increases in export earnings from petroleum. The balance on services has shown a much more promising development throughout the 1970's, due primarily to increased Suez Canal dues, tourism revenues, and remittances from Egyptian workers abroad. Foreign capital inflows are on the increase, but the total impact of the foreign investment law is yet to be seen. Overall the balance of payments picture is not very promising, at least for the short run, although there are a few bright spots. It is clear that if Egypt is to continue its attempts to relax quantitative restrictions on foreign exchange and unify the exchange rates, the continued support through aid from abroad will be required.

The data indicate changes not only in the total value of imports but in the composition. Imports of fuels and primary commodities have declined as a share of total imports, while capital and consumer goods, particularly

consumer durables, have increased. The supply of foreign exchange for imports without transfers have grown dramatically relative to the parallel (unified) market. This implies that any constraints on the availability of foreign exchange for the private sector have been substantially relaxed during the 1976-1978 period, while public sector firms may still be facing shortages and long waiting periods for imports.

Industrialization in Egypt during the early years of the Open Door Policy is analyzed by making use of data provided by the Federation of Egyptian Industries in its annual Yearbook. According to the sample data, the manufacturing sector has shown a respectable real average annual growth rate in the 1976 through 1977 period of about 6.6%, up from 3.8% in the 1973 through 1975 period. It appears, however, that is is the public sector that is leading the way in the later period, with a real growth rate of 7.3% relative to 4.8% for the private sector.

Accompanying the higher real growth in the 1976-1977 period was a decreased inflation rate for both the public and private sector (5.1%, down from 14.5%), although the inflation rate for the private sector (10.1%) remained substantially higher than that of the public sector (3.0%).

Perhaps the most important implication of this paper is the need for further investigation into the operation and performance of Egyptian industry and its relation to the balance of payments situation. Although knowledge of the economy certainly doesn't guarantee sound, consistent economic policy-making, it is clearly a necessary condition. It is suggested that high priority be put on the following areas of research: 1) compilation of a complete set of reliable data into price and quantity indices, disaggregated by sector and commodity type, in order to give an overview of the performance of Egyptian industry; 2) analysis of the components of industrial growth on both a theoretical and empirical level, including analyses of the roles played by the availability of foreign exchange, the existing capacity utilization of plants, price changes, new investment flows, and differential treatment of the private and public sectors; 3) analysis of the emigration of Egyptian workers to Arab states, both in its impact on foreign exchange availability and savings in Egypt through remittance flows and on the size and composition of the remaining Egyptian labor force.

RESUME

Cette note de recherche porte sur la politique egyptienne d'ouverture et de libéralisation des échanges et comprend cinq parties: 1) une description de la politique d'ouverture et de son développement durant les dix dernières années, 2) un sommaire des changements qui ont affecté la balance des paiements durant la même période, 3) une discussion des changements survenus dans la distribution des importations, 4) une analyse de l'impact de cette politique sur l'industrialisation à travers un examen des changements de production et de prix et en comparant l'importance du secteur privé à celle du secteur public, et 5) certaines conclusions et suggestions portant sur la recherche future.

La politique d'ouverture et de libéralisation des échanges comporte trois changements de politique majeurs: la création d'un marché parallèle pour les devises étrangères (actuellement le marché unifié), le système des importations sans transferts, et la loi 43 le 1974, qui encourage l'investissement étranger. On verra que ces décisions furent prises d'une facon quelque peu aléatoire et parfois discordante, mais qu'elles n'en ont pas moins indiqué une tentative majeure de libéraliser le système égyptien de controle des devises étrangères.

Ces décisions n'ont malheureusement pas conduit à une amélioration immédiate et substantielle de la situation de la balance des paiements. La balance commerciale s'est deteriorée de facon presque continue entre 1971 et 1978, malgré les gains achevés en recettes sur les exportations de produits pétroliers. Pour ce qui est des services, par contre, un progrés beaucoup plus prometteur a eu lieu durant les années soixante-dix, principalement en raison de l'augmentation des redevances perçues au canal de Suez, des recettes touristiques et des paiements effectués par les travailleurs égyptiens à l'étranger. On observe aussi un accroissement de l'influx de capitaux étrangers, mais l'impact total éventuel de la loi sur l'investissement étranger reste obscur. Dan l'ensemble, la balance des paiements n'est pas prometteuse, tout au moins pour le court terme, bien qu'il y ait quelques points encourageants. Il apparait clairement que si l'Egypte désire continuer

dans la direction du relachement des controles sur les devises étrangères, et d'utiliser un taux unique pour chaque monnaie, elle devra continuer à faire appel à un certain soutien d'aide financière de l'étranger.

Les données reflètent des changements non seulement dans la valeur totale des importations, mais aussi dans leur composition. Les importations de carburants et produits primaires ont diminué de facon relative, mais la proportion occuppée par les biens d'investissement et de consommation, en particulier les biens de consommation durables, a augmenté. La quantité offerte de devises étrangères pour importations sans transferts s'est accrue de facon dramatique relativement au marché parallèle. Ceci semble indiquer que dans le cas du secteur privé, les contraintes sur l'accés aux devises ont été assouplies durant la période 1976-1978, par contre les entreprises du secteur public font encore face à une pénurie de devises, et à de longues périodes d'attente.

Cette note comprend une analyse du degré d'industrialisation achevé en Egypte pendant les premières années de la politique d'ouverture sur la base de données fournies par la Fédération des Industries Egyptiennes à travers son annuaire statistique. D'aprés l'échantillon sélectionné, le secteur manufacturier a accusé un taux de croissance annuel moyen de 6,6 pourcent pendant le période 1976-1977, comparé à 3,8 pourcent entre 1973 et 1975. Il semble pourtant que ce soit le secteur public qui soit en tête pour la période la plus récente, avec un taux de croissance réel de 7,3 pourcent au lieu de 4,8 pourcent dans le secteur privé.

La croissance réelle plus elevée observée durant la période 1976-1977 s'est accompagnée d'une diminution du taux d'inflation pour les secteurs public et privé (5,1 pourcent au lieu de 14,5 pourcent). Le taux d'inflation au sein du secteur privé est cependant demeuré nettement plus élevé que celui affectant le secteur public (10,1 au lieu de 3%).

Il est possible que la conclusion majeure de cette note porte sur le besoin que l'on éprouve d'enquètes sur l'opération et l'efficacité de l'industrie égyptienne, et de la facon dont elle est liée à la balance des paiements. Bien qu'une certaine connaissance de la structure économique egyptienne ne puisse garantir un processus de prises de décisions bien fondé et logique dans l'ensemble, elle n'en demeure pas moins une condition clairement nécessaire.

On suggère que la priorité dans la recherche soit placée sur les questions suivantes:1) un recueil organisé d'un ensemble de données fiables présentées sous forme d'indices de prix et de production, par secteurs et types de produits, pour obtenir une vue d'ensemble de l'efficacité de l'industrie égyptienne, 2) une analyse, au niveau théorique aussi bien qu'empirique, des éléments de la croissance industrielle y compris une analyse du role joué par l'accés aux devises étrangères, la capacité d'utilisation actuelle des usines, des changements de prix, des nouveaux flux d'investissement, et des différences entre les secteurs public et privé; 3) une analyse de l'émigration des travailleurs égyptiens vers les états arabes, à travers son impact sur la disponibilité en devises étrangères en Egypte créee par leurs rapatriements de fonds, et sur la taille et la composition de la main d'oeuvre demeurant en Egypte.

LIST OF TABLES

In a less developed or semi-industrial country such as Egypt, foreign exchange policy is integrally linked with industrialization policy. The purpose of this paper is to review the Open Door Policy - a major attempt towards trade and foreign exchange liberalization, and to explore the implications of these policy changes for the degree and structure of industrialization in Egypt.

In the late 1960's and early 1970's, the allocation of foreign exchange was almost completely done through quantitative rationing, making use of an ever-growing bureaucracy and to some degree a system of multiple exchange rates. The essence of recent changes has been a gradual, but major devaluation, eventually accompanied by a relaxation of quantitative controls and some attempts at unifying the exchange rate. This is in line with the attempts at liberalization of foreign exchange control regimes in a number of countries studied in the well known NBER series directed by Krueger and Bhagwati,[1] and with policies commonly recommended by the IMF.

The benefits of a successful transition are generally thought to be two-fold. First, at least in the long run, the balance of payments should improve. To the extent that exports and imports are responsive to price changes, the trade balance will improve. And, often the policy changes encourage direct foreign investment, either directly or through the general improvement in the functioning of the economy. This brings us the second benefit. Devaluation and liberalization work to "get the prices right". This, along with a presumable decrease in shortages and bottlenecks due to rationing schemes, lead to a general increase in efficiency in the economy.

But, in many cases problems have arisen preventing a country from moving into a period of sustained liberalization. A country undergoing this type of radical policy change is often doing so in a crisis situation, the result being that policies are ad hoc and at times inconsistent with one another. This in itself decreases the chance of a successful transition. In addition there may be political opposition to such policy changes. A

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[1]See Krueger (1978) and Bhagwati (1978) for the summary volumes of this study. Hansen and Nashashibi (1975) have written the volume for Egypt dealing with the period directly before the Open Door Policy.

successful transition implies substantial structural change in the economy, and in turn some redistribution of income. The government in question must be strong enough to withstand such a change if success is to be had. Speculation might also play a role in the effectiveness of policy changes. If it is supposed that the liberalization scheme will not continue for long, there is likely to be a speculative increase in imports in the short run, thereby further worsening the trade balance. Alternatively, as is more appropriate to the Egyptian economy, if it is believed that the attempted liberalization will bring about rapid growth and an increase in the availability of imports, the short run costs of transition may be even more difficult to absorb if the performance of the economy does not live up to expectations. Last, though perhaps most importantly, in the short run the balance of trade is likely to worsen with liberalization. The price elasticities of export supply and import demand are often thought to be small in the short run, and a lifting of quantitative restrictions on imports may lead to a substantial increase in the effective demand for imports. Thus to move to a period of sustained liberalization, in most cases funds for financing an initially worsening balance of payments must be available.

The above generalizations apply at least to some degree to the Egyptian case. In addition, there are several special circumstances that are important in evaluating recent policy changes in Egypt. First, a large percentage of industrial production in Egypt is controlled by the public sector. Thus the responsiveness of industry to changes in profitability and prices is dependent on the particular incentive structure and the degree of government control in public sector enterprises, along with the administrative and legal treatment of private sector relative to public sector firms. Second, both the structure of production and price setting have been the major tools for income redistribution in Egypt. Equity has long been an important policy goal in Egypt, and removal of these major policy tools without any type of replacement could be a potential source of political problems. Third, changes in political relations have had a major impact on the direction and volume of trade. In 1970, the Soviet Union was the major trading partner. Since then there has been a dramatic decrease in the volume of trade between Egypt and the Soviet Union. Egypt's relations with the Arab countries have also had their impact on trade. The extent of the impact of the current Arab boycott is still in question, but it has clearly dampened the development of regional trade.[1] Last, the geographic location of Egypt amidst the major oil-exporting countries of the world has been significant in its impact on the balance of payments. Not only has there been a substantial flow of foreign aid and investment from OPEC countries, but the remittances provided by Egyptian migrant workers have become increasingly important.

The remainder of the paper is divided into five parts. Part I contains a brief description of the Open Door Policy and its development over the past ten years. In Part II, changes in the Egyptian balance of payments over the same time period are discussed, both in terms of exogenous shocks and the impact of the new policies. Part III begins the discussion of the impact of the transition on the structure of the Egyptian economy by examining the changes in the distribution of imports during this ten year period. Part IV focuses on the impact on industrialization by examining relative changes in output and prices and considering the performance of the private sector relative to the public sector. Part V contains the conclusions and suggestions for further research.

I. The Open Door Policy

A. Setting the Scene - The Administrative System and the Foreign Exchange Budget.[2]

1. The Foreign Exchange Budget and the Control of Traded Goods. The administrative system of trade and foreign exchange in 1970 was essentially the same system that had come into being soon after the nationalization of the economy in the early 1060's. To a large extent exports and imports were controlled directly through the Foreign Exchange Budget. The exchange rate was not used as an allocation tool, and the foreign trade sector was largely publicly-owned. These public commercial companies were affiliated with the Egyptian General Trade Organization and were supervised

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[1] The impact of the Arab boycott thus far is discussed in Severiens, pp. 52-54; and Tinnin, p. 72.

[2] For background material on the Egyptian industrial sector and its administration before the Open Door Policy, see Ahmad (1976), Cooper (1979), Girgis (1977), Hansen and Nashashibi (1975), and Mabro and Radwan (1976).

by nine Commodity Boards, replaced by twenty Determination Committees in 1971. The Committees were divided by Commodity type, and each committee determined overall export and import policy for those commodities. Imports by private industry were permitted in small amounts (up to L.E. 5000 a year per firm in 1970), provided that no transfer of foreign exchange was required. Similarly imports by individuals for their own use were permitted up to a value of L.E. 3000 a year, again provided that no transfer of currency was required. The allocation process began each year with questionnaires sent from the Foreign Exchange Office of the Ministry of Economy to the other ministries, and from there to various state organizations and firms. The allocations were specified according to the type of goods to be imported, the type of currency required for payment, and the method of settlement.

Beginning in 1973, importation without an import permit has been allowed. Imports are regulated primarily through exchange allocations. Law No. 118 of 1975 permitted private sector companies and individuals to engage in export trade, provided that they were listed in the Exporters Register of the Ministry of Commerce. Similarly, imports were permitted subject to certain restrictions and provided that they were within the limits of the foreign exchange budget.

2. The system of tariffs. The tariff structure in Egypt developed according to a familiar pattern. During the 1950's tariffs were used as one of several policies to discourage import demand and protect national industries during periods of foreign exchange shortages. In the early 1960's, during the period of nationalization, a new tariff schedule was introduced. In general, the impact of the new system was to discriminate against agriculture, mining products and exports, by providing lower rates of protection for those sectors. In addition, the new law reduced tariffs on investment and intermediate goods while raising rates on consumer goods.[1] Essentially the same tariff structure stands today. The effective rate of tariff protection, as calculated by Girgis, is shown in Table I.

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[1] See Girgis, pp. 104-109.

TABLE I

NOMINAL AND EFFECTIVE RATES OF TARIFF PROTECTION, 1966/67

Sector	Nominal tariff rates %	Nominal tariff rates rank	Effective tariff rates %	Effective tariff rates rank
Agriculture, hunting, forestry and fishing	35	16	34	14
Coal Mining	22	21	22	20
Crude petroleum and natural gas	20	22	1	23
Metal ore mining	20	23	9	21
Other mining	26	20	22	19
Food products	61	7	156	4
Beverages	100	2	191	1
Textiles	65	6	8	22
Wearing apparel, excluding footwear	93	3	150	5
Leather and leather and fur products	49	9	35	13
Footwear	84	4	189	2
Wood products, furniture and fixtures except metal	43	10	51	9
Paper and paper products, printing and publishing	102	1	179	3
Industrial chemical products	38	14	32	16
Petroleum refineries	29	19	31	17
Rubber products	37	15	33	15
Pottery, china and earthen ware	39	12	53	8
Glass and glass products	66	5	147	6
Other non-metallic mineral products	39	11	23	18
Iron, steel, and other nonferrous basic industries	32	17	43	11
Metal products, machinery, and electrical machinery	39	13	50	10
Transport equipment	32	18	37	12
Other manufacturing industries	58	8	136	7

SOURCE: Girgis, Maurice. Industrialization and Trade Patterns in Egypt. Tubingen: Mohr, 1977, p. 115.

NOTE: Effective tariff protection is calculated as the difference between value added measure in domestic and world prices, divided by value added at world prices, and adjusted for exported output and differences in capital depreciation.

3. Administration of the public sector. At the beginning of the decade, and throughout most of the seventies, the manager of a public enterprise had limited control over its operations. The supply of raw materials, output, and prices were all regulated. Even employment was largely controlled. Since in Egypt every graduate was to be assured a job upon graduation, some public sector companies have been forced to hire graduates in excess of the number required for firm operations.

In recent years the administration of the public sector has been decentralized in the move towards the liberalization of the economy. In 1975, Law 111 provided for the liquidation of the General Organizations. These organizations were responsible for the coordination of production, purchases of imputs (particularly imports), the allocation of foreign exchange to the firm level, and any communications between the firm and the Ministry of foreign corporations. Now the chairman of each firm in the public sector is responsible for reaching production targets, making financial arrangements, maintaining quality control, and communicating with the ministry and outside world. Most prices of industrial products are still controlled or restricted within guidelines, but a number of increases have taken effect recently. In particular, some firms have been allowed to increase prices to cover the recent increases in costs of imported inputs. Also, public sector companies can now determine the level of employment of graduates.

Foreign exchange is generally acquired directly from the appropriate ministry (i.e. Ministry of Industry for manufacturing firms) through the annual budget. This budget is guided by the Five Year Plan, but in the end must be approved by the Ministry of Economy. Allocations for investment and current production needs are made quite separately, and the budget is divided according to type of foreign currency required, so that needs for credit and liquid foreign exchange can be treated distinctly. In the past divisions of liquid foreign exchange between hard currency and bilateral agreements were also important, but since 1973 the importance of bilateral agreements has been steadily decreasing. Public sector firms now have some alternative sources of foreign exchange. Receipts from exports exceeding export targets may be retained by the firm. Also, some firms, such as automobile companies, are permitted to sell their products domestically for hard currency. Third, beginning in 1975 some public sector companies were authorized to borrow foreign exchange from domestic commercial banks, provided that borrowing would allow them to increase their export proceeds by an amount at least sufficient to repay the loan.

B. The Open Door Policy

1. The parallel market.[1] The late sixties showed the initial signs of foreign exchange liberalization. From 1967 to 1972 the policy of paying a premium on certain categories of specified foreign currencies exchanged at authorized banks was re-initiated, having been a policy tool during the 1950's. This premium was initially 35% on the official rate, and was available primarily for tourists. Certain nontraditional exports were also eligible for ad hoc subsidies. Overvaluation of the Egyptian pound during this period seems evident. According to Girgis during the 1963 to 1973 period the black market foreign exchange rate varied between $1.25 and $1.70, as compared with the official rate of $2.30.[2]

In 1973 the first major steps towards the liberalization of foreign exchange policy took place. In September of 1973 the parallel market was introduced. Transactions in the parallel market were to take place through commercial banks at fixed rates, calculated as a 50% premium (for buying) on the official rate. Sources of foreign exchange for the parallel market were to fall into five categories: 1) savings and private remittances of Egyptians abroad; 2) receipts from foreign countries; 3) funds transferred by citizens of Arab countries for purposes other than investment; 4) proceeds from exports of mostly nontraditional commodities (i.e. exports other than raw cotton, cotton yarn and textiles, rice petroleum and petroleum products, onions, garlic, potatoes, cement, and re-exports of foreign goods); and 5) fifty percent of convertible currency proceeds in excess of annual export targets for cotton yarn and cotton textiles. Also, the

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[1]Administrative and legal changes in the parallel market have generally been listed in various issues of IMF, Exchange Rate Restrictions.

[2]Girgis, p.100.

Minister of Finance, Economy, and Foreign Trade was permitted to transfer foreign exchange from the official to the parallel market.

The use of foreign exchange from the parallel market was also divided into five categories: 1) all permitted payments, on the basis of existing exchange control regulations, for current invisibles by private individuals and the rest of the private sector, including travel expenses; 2) payments for private sector imports of production requirements, machinery, instruments and spare parts; 3) payments for imports by the public and private sectors of the tourist industry of machinery, instruments, and spare parts; 4) payments for any other current invisibles and production requirements, when financed from the payor's own receipts from exports or tourism; and 5) payments for any other import transactions that might be approved by the Ministry of Finance, Economy, and Foreign Trade, such as luxury items needed in the tourist sector, or machinery, etc. needed by the private sector or the tourist sector and imported by a Foreign Trade Company to meet overall domestic requirements.

Foreign exchange eligible for the parallel market could be retained for a maximum of 6 months, if deposited at an authorized commercial bank. At the end of the period, remaining foreign exchange had to be sold to the bank. Although dealings in the parallel market were exempt from authorization or exchange licenses, application for permission to import had to be submitted to the Misr Company for Export and Import. Foreign exchange was finally purchased, if available, after presentation of the approved application to the authorized commercial bank. Imports, except for very small quantities, were still effected by the Misr Company for Export and Import.

In the 1973 to 1978 period the parallel exchange market was gradually expanded to include a large number of transactions. In 1974 the original order creating the parallel market was revised. First it expanded the operations of the parallel market to include tourist companies, hotels, and certain shops selling goods for foreign exchange. Also, there was a substantial increase in the types of eligible funds, including 1) all amounts transferred from abroad to persons in Egypt, unless intended for investment; 2) all interest, profits, commissions, and other income accruing abroad to individuals, professional offices, and public sector companies; 3) donations and subsidies received from abroad by various kinds of governmental organizations and societies; and 4) fifty percent of the proceeds from the exports of cement above the target level. In addition, the importation procedure was somewhat simplified.

At the same time a committee was created to determine the appropriate exchange rate in the parallel market. It was to operate on the principle that any rate adjustments would serve to promote the liberalization of imports, but that the premium and surcharge applied to the official buying rate would not be reduced from the existing levels of 50 and 55%.

Broadening of the parallel market continued. Ministerial Decree No. 417 of 1977 authorized commercial banks to provide parallel market exchange for certain imports without restriction or requirement for prior approval. The items appearing on the initial "open list" included most of the production requirements of the leather and furniture industry, automotive spare part, medical equipment, and a variety of minor items such as electric lamps. By 1978 sources of foreign exchange for the official market were limited to proceeds from the sale of cotton, rice, petroleum and oil products, and dues from the Suez Canal and Sumed pipeline. Expenditures through the official exchange rate were restricted to payments for wheat, wheat flour, edible oil, sugar, tea, fertilizers, insecticides, and the non-capital import requirements of the petroleum sector, as well as current invisible payments (i.e. freight and insurance on imports brought in at the official rate and interest payments and charges on public sector external debts).

On Jan. 1 of 1979 the use of the official rate was discontinued, and, except for the calculation of payments under bilateral trade agreements, all payments are made at the parallel or "unified" rate. The key export earnings and essential import expenditures listed above as restricted to the official market remain separated from other foreign exchange transactions. Accompanying the dissolution of the official rate was the creation of the "Central Bank pool", to accommodate the transactions for the above commodities. The previous parallel market transactions now take place through the "authorized or commercial bank pool". The immediate impact of this policy change, then, was to dramatically increase the Egyptian pound denominated costs of imported, subsidized essential goods and the servicing of foreign debt.

2. Imports without transfer. The "own-exchange system" or "imports" without transfers" has been developing alonside the parallel market. Allowing imports without the transfer of foreign exchange for private sector enterprises had been permitted in limited amounts during various periods in the past 30 years, including the first two years of the 1970's. The policy was reinitiated, but with fewer limitations than before, in 1974. Egyptian traders and individuals who held currency generated by transactions which fell under the parallel market regulations were permitted to use that currency for direct goods imports. Implicitly a free market for foreign exchange was approved, consisting largely of purchases for foreign exchange by private firms from Egyptians with remittances from abroad.

In 1975 the list of goods which could be imported under the own exchange system was replaced by a negative list specifying prohibited commodities. In the process, the number of permitted goods was greatly increased, reserving 18 basic commodities and a small number of other commodities for import exclusively by the government.

Regulations in the foreign exchange market were altered in 1976, legitimizing to some extent the already existing "free" exchange market. Private sector entities were now free to carry out a number of transactions at freely negotiated rates, provided it took place through an authorized dealer, and obligations to surrender foreign currency receipts were greatly relaxed.

Since transfers from abroad were expected to be a major source of foreign exchange for the parallel market, imports without transfer had a significant impact on limiting the level of activity in the parallel market. Aside from the availability of funds, the parallel market is less attractive than the free market to the private firm in several ways. Although the parallel rate in 1979 was .69 L.E. per US$, there are various costs (official and unofficial) incurred throughout the administrative process of receiving approval to use the parallel market. Thus the effective exchange rate on the parallel market may be as high as .80 L.E. per US$, as compared with a free market rate of about .75. In addition, on the parallel market it may take 7 months to 1 year before the receipt of any hard currency, and 1 1/2 to 2 years to complete the transaction. On the free market the transaction is likely to be completed in 6 to 9 months. One further disincentive to using the parallel market results from information leaks. To obtain approval to use the parallel market, substantial information regarding firm operations must be submitted to the authorities. This information, however, has been known to reach the hands of competitors.

3. Law 43 and incentives for foreign investment. The third movement in the direction of liberalization of trade and foreign exchange has been Law 43 of 1974.[1] In the years preceding, there were several legal changes regarding foreign investment. Law 65 of 1971 was aimed at increasing the investment of Arab capital, stipulating some tax exemptions and other incentives for Arab and non-Arab foreign investors. During the 1971 to 1973 period, additional laws permitted foreign investment to participate in public sector companies, gave certain guarantees for investment, made Egypt a cosigner of a large number of international treaties guaranteeing investment, and granted special incentives to investments in tourist projects.

The investment incentive component of the Open Door Policy was officially initiated with Law 43 of 1974. This law, aimed primarily at foreign investors, allowed for 1) tax holidays for 5 years, with possible extensions of up to 15 years, and guaranteed prompt remittance of capital and transfer of profits; 2) a guarantee against expropriation or nationalization; 3) exemption or deferment of payment of customs duties on capital assets, imported construction material and necessary components; 4) tax exemption on salaries; 5) complete freedom from local taxes for projects established in the Free Zones, and 6) freedom of restrictions, duties and taxes for all imports or exports entering or leaving the Free Zone areas. Foreign and Arab capital in specified fields was exempt from requirements of Egyptian participation. According to the law, operations supported by

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[1]For a complete summary of the development of the legal framework regarding foreign investment see Carr, pp. 40-53, and Raafat, pp. 46-52.

foreign investment were to become self-sufficient in foreign exchange immediately.

This aspect of the Open Door Policy became substantially more effective with Law 32 of 1977. This amendment approved the transfer of funds for investment in Egypt on the basis of the highest announced exchange rate (at that time the parallel market rate). Previously capital had to be brought in at the lower, official rate. Law 32 also added some new investment fields which are eligible for the advantages and exemptions of Law 43. Foreign investments which "limit the country's need for imports" are now permitted, thus allowing for projects initially oriented towards the domestic market but with export potential. In addition, the amendment gave Egyptian investors all of the advantages and guarantees given to Arab and foreign investors under the law.

With Law 43, the Egyptian government hoped to encourage agricultural projects (i.e. land reclamation, fruit and vegetable production, animal and poultry feed mills, fisheries development), industrial projects (building materials, food processing, mining, metallurgical, engineering, and electronics), and tourist projects (hotel construction, tourist village and recreation areas development). At first the results of the policy were disappointing. The projects approved in early years were primarily in the service sector, generally in banking and tourism. Recently, projects connected with engineering, chemicals and metallurgical operations have begun operation under the new laws.

II. The Balance of Payments: 1971-1978.

A major motivation for the implementation of the Open Door Policy was the need for improvement in the balance of payments, and the success and continuation of the policy is dependent on the speed and extent to which this occurs. The gradual devaluation of the Egyptian pound during the mid-1970's and accompanying investment incentives could potentially improve Egypt's balance of payments situation in three basic ways: a) an improvement in the balance of trade, b) an increase in the flow of remittances, revenues from tourism, and other services, and c) an increase in the net flow of capital to Egypt.

Basic balance of payments data for Egypt in the 1970's are shown in Table II. The most dramatic change in the balance of payments has been an almost steadily worsening balance of trade, compensated to some extent by an increase in net services. The worsening of the balance of trade has continued in spite of increases in export earnings from petroleum, and can be attributed to greater increases in both quantities and prices of imports compared with exports.

A. The Balance of Trade.

The worsening of the trade balance in terms of Egyptian pounds can be attributed to the initial trade deficit and the small size of the price elasticities of demand and domestic supply.[1] It can be argued that the home import demand elasticity may not only be small, but that the demand for imports may have actually increased with devaluation. Since quantitative restrictions were relaxed as the devaluation took place, the net impact of the policy changes on effective import demand may have been positive. In addition, a substantial share of imports is in the form of basic commodities which are sold at subsidized prices by the government. These imports, at least in the short run, depend largely on population and the degree of urbanization and are insensitive to world price changes.

Both traditional agricultural exports and nontraditional exports are generally thought to have relatively small short run supply elasticities. In the case of cotton, potential increases in export supply motivated by the devaluation were dampened by a decrease in yields per feddan due

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[1]The initial large balance of trade deficit for Egypt only has the impact of increasing the Egyptian pound denominated deficit with devaluation. A modified Marshall-Lerner condition, where domestic supply is not assumed to be perfectly elastic, can be written as

$$\frac{(n_x - 1)}{1 + \frac{n_x}{e_x}} + n_m > 0 \text{ for the trade balance to improve with a de-}$$

valuation, where n_m is the home import demand elasticity, n_x is the foreign demand elasticity for Egyptian exports, e_x is the Egyptian export supply elasticity, and initially trade is assumed to be balanced.

TABLE II

BALANCE OF PAYMENTS SUMMARY
(£. E. million)

	1971	1972	1973	1974	1975	1976	1977	1978
Exports [a]	369.7	353.7	396.3	653.9	612.8	629.7	779.6	773.8
Imports [a]	540.8	559.2	622.3	1252.8	1691.1	1646.2	1766.0	2055.9
Balance of trade	-171.1	-205.5	-226.	-598.9	-1078.3	1016.5	-986.4	-1282.1
Services credits	79.2	134.1	166.4	277.6	422.5	773.4	988.5	1351.4
Insurance and [b] shipping	5.7	5.7	6.0	8.1	23.0	38.0	60.0	50.0
Suez Canal Dues	--	--	--	--	33.2	121.7	167.4	201.0
Interest, Dividends and other revenues	12.6	46.3	47.5	107.9	176.9	323.4	394.9	754.1
Travel and maintenance	60.9	82.1	112.9	161.6	189.4	290.3	376.2	346.3
Service Debits:	119.2	131.1	163.7	211.4	312.8	351.9	505.2	565.2
Insurance and shipping	11.7	8.9	8.0	12.8	37.1	34.6	39.7	33.0
Interest, Dividends [c] and other revenues	63.7	76.4	109.	127.2	194.1	225.4	332.9	374.4
Travel and maintenance	8.1	18.5	24.0	41.1	41.2	48.3	67.2	97.2
Government expenditure	35.7	27.3	22.7	30.3	40.4	41.6	65.4	60.6
Services balance	-40	3.	2.7	66.2	109.7	421.5	493.3	786.2
Transfers	121.3	128.2	253.7	405.2	421.3	278.1	174.2	135.0
Capital transactions	19.8	66.2	85.7	157.7	695.3	346.0	388.0	390.7
Overall balance	-61.3	1.3	116.1	30.2	148.0	31.1	69.1	29.8

SOURCE: Central Bank of Egypt

[a] Including transit trade

[b] Insurance other than on exports and imports.

[c] Includes Films, Other Commercial Payments, and Other Disbursements.

to a degenerated drainage system increasing soil salinity and an increase in domestic demand by the textile industry.[1] The disappointing performance of cotton exports was further exacerbated by a drop in demand due to the closing of bilateral trade agreements with the USSR.

Potential nontraditional exports take time to be developed or adopted to the international market, and thus also tend to respond slowly to devaluation. However, particularly since devaluation for nontraditional exports occured early in this set of policy changes, there is some evidence of increases in non-traditional exports by 1978.

The brightest spot in the export picture is the substantial increase in petroleum exports. These trends in the composition of exports can be seen in Table III.

The changes in the direction of trade are shown in Table IV. The decrease in trade with the USSR (in percentage terms) is very evident, as is the increase in trade with other industrial countries. The structural change and costs required in adjusting Egyptian exports to these new markets is no doubt part of the explanation for the poor export performance of traditional products such as cotton, textiles, and leather products and the slow growth of nontraditional exports breaking into new markets.

B. Balance on Services.

The balance on services has shown a much more promising development throughout the 1970's. According to Table V, Suez Canal dues, tourism, and remittances from Egyptian workers abroad have all shown impressive increases. Estimates of the flow of remittances are notoriously bad, but those for the parallel market alone appear to be more reliable than the general figures. The estimates in Table VI indicate similar trends, although the rates of increase of both remittances and tourism revenues are smaller. Together the tables indicate an increased flow of foreign exchange to the free market relative to the parallel market.

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[1] Central Bank of Egypt, Annual Report, 1978, p. 24.

TABLE III

COMMODITY COMPOSITION OF EXPORTS
(Million L.E.)

	1974	1975	1976	1977	1978
Fuels	50.4	51.8	149.1	161.8	188.6
(% of total)	(8.5)	(9.5)	(25.0)	(24.2)	(27.7)
Crude petroleum	23.9	23.1	109.8	119.1	140.7
Petroleum products	26.5	28.7	39.3	42.7	47.9
Primary Products	360.2	273.5	260.2	288.1	222.9
(% of total)	(60.7)	(49.9)	(43.7)	(43.1)	(32.8)
Raw cotton	279.1	201.0	154.8	182.3	131.5
Rice	39.7	24.2	31.0	23.4	19.9
Onion and garlic	13.2	11.4	10.2	11.8	10.0
Oranges	11.1	18.5	18.9	21.4	20.7
Potatoes	5.9	3.2	17.2	16.4	5.8
Other	11.2	15.2	28.1	32.8	35.0
Semi-Finished Products	85.7	88.8	77.1	90.5	147.5
(% of total)	(14.4)	(16.2)	(12.9)	(13.5)	(21.7)
Cotton yarn and waste	67.9	67.1	62.3	73.9	96.9
Other	17.8	21.7	4.8	16.6	50.6
Finished Products	97.0	133.7	109.0	128.0	120.8
(% of total)	(16.3)	(24.4)	(18.3)	(19.2)	(17.8)
Textiles	43.9	49.6	40.8	47.6	48.9
Sugar	9.3	14.2	10.0	10.2	7.2
Footwear	8.2	14.2	4.3	5.3	5.3
Alcoholic beverages	4.3	7.0	3.5	6.9	3.8
Leather Goods	2.8	5.0	3.0	5.9	3.8
Other	28.5	43.7	47.4	52.1	51.8
TOTAL	593.3	547.8	595.4	668.4	679.8

SOURCE: Central Agency for Public Mobilisation and Statistics.

NOTE: Data are based on customs records and hence differ from the balance of payments figures which are based on exchange control records. Petroleum exports are substantially understated in both customs and exchange control records.

TABLE IV

DIRECTION OF TRADE

	1971	1972	1973	1974	1975	1976	1977	1978
Exports (million US$)	790.0	825.2	1124.7	1516.3	1403.9	1521.7	1708.4	1737.2
To (in %):								
Industrial (excluding centrally planned)	16.9	19.5	25.4	29.8	13.8	30.8	33.9	43.2
Oil Exporting	3.8	3.9	4.3	4.6	6.6	6.3	6.7	6.1
Other LDC's	14.8	11.3	10.2	7.4	4.0	8.5	6.4	10.2
Soviet Bloc & China	58.8	57.7	51.8	52.4	67.6	44.9	40.8	30.0
(USSR)	(39.7)	(35.1)	(32.8)	(32.9)	(43.2)	(24.5)	(23.2)	n.a.
% Change		4.5	36.3	34.8	-7.4	8.4	12.3	1.7
Imports (million US$)	921.1	888.8	908.3	2351.7	3933.6	3807.5	4815.4	6726.7
From (in %):								
Industrial (excluding centrally planned)	37.9	38.7	47.6	52.8	60.1	62.6	64.4	65.0
Oil Exporting	3.0	2.4	1.1	1.2	5.9	3.1	1.9	1.5
Other LDC's	11.8	12.2	10.7	9.8	7.8	10.0	7.6	7.6
Soviet Bloc & China	50.4	53.5	64.1	33.8	24.1	17.9	12.0	8.9
(USSR)	34.0	32.6	40.6	21.2	15.4	9.8	5.6	4.4
% Change		-3.5	2.2	158.9	67.3	-3.2	26.5	39.7

SOURCE: IMF, Direction of Trade (various issues)

TABLE V

FOREIGN EXCHANGE EARNINGS FROM NON-TRADITIONAL SOURCES
(million U.S. $)

	1974	1975	1976	1977	1978
Remittances	217.6	342	559.1	885.2	1,773.2
Petroleum	186.4	315.1	643.3	724.7	880.5
(% of Total Exports)	(11.1)	(20.1)	(40.0)	(36.4)	(44.4)
Tourism	100.5	102.2	208.8	339.6	570.4
Suez Canal	--	84.6	310.3	426.8	512.6
Tourism & Suez Canal as % of Service Credits	(14.2)	(17.3)	(26.3)	(30.0)	(31.4)
Total	504.5	843.9	1,721.5	2,375.8	3,727.8

SOURCE: National Bank of Egypt. Total exports and Service Credits are taken from IMF, International Financial Statistics, Aug. 1979, for 1978, and UNCTAD, Handbook of International Trade and Development Statistics, 1978 for remaining years.

NOTE: Petroleum was exchanged at the official rate throughout the period, and Suez Canal earnings until mid-1978. Tourism and remittances are exchanged at the parallel market rate.

TABLE VI

SOURCES AND USES OF FOREIGN EXCHANGE:
THE PARALLEL MARKET AND OWN EXCHANGE IMPORTS.
(Million L.E.)

	1976 Amount	1976 %	1977 Amount	1977 %	1978 Amount	1978 %
Monetary Transactions:						
Resources:						
Export proceeds	127.9	18.8	248.9	21.9	296.7	19.2
Tourism revenues	263.2	38.6	430.3	37.9	401.7	26.0
Remittances	238.1	34.9	358.2	31.5	661.6	42.7
Other Resources	52.8	7.7	99.2	8.7	187.1	12.1
Sub total	682.0	100.0	1136.6	100.0	1547.1	100.0
Suez Canal Dues	---		---		189.4	
Total	682.0		1136.6		1736.5	
Uses:						
Commodity imports	270.9	65.3	431.1	54.6	710.9	59.4
Pocket Money Allowances	48.7	11.7	91.9	11.6	135.9	11.3
Other	95.3	23.0	266.6	33.8	351.1	29.3
Total	414.9	100.0	789.6	100.0	1197.9	100.0
Balance	267.1		347.0		349.2	
Transactions in Kind:						
Own exchange imports	155.7		265.2		587.2	

SOURCE: National Bank of Egypt, Annual Report, 1978 (in Arabic).

In sum, it appears that petroleum and workers' remittances are rapidly replacing cotton as the major source of revenue on the current account. And, there is some evidence that the revenue is going increasingly to the free market, implying a relative increase in the availability of foreign exchange to the private sector and consumers.

C. The Capital Account and Foreign Aid.

It was hoped that the amended Law 43 would result in substantial inflows of long term capital. Investment expenditures under Law 43 are shown in Table VII. It is evident that the Law did not have much impact until 1978, when substantial amounts of domestic as well as hard currency were invested.[1] In Table VIII both the sectoral allocation and the source of funds are indicated. Of total capital for approved projects, more than half is Egyptian, and about half of the local capital is from the public sector. The tourism sector has been most successful in attracting capital, taking more than one-fifth of the total. Major industrial projects still appear to be a minor part of total approved projects.

Trends in aid flows can be seen in Table IX. It appears that in spite of the dramatic decreases in bilateral aid from OPEC countries, Egypt has not suffered large decreases in overall aid flows due to increases in both bilateral aid from DAC countries and multilateral agencies. Since 1978 the aid picture has probably improved, with a continued increase in assistance from the U.S. and the IMF three-year arrangement for drawings of $600 million beginning in July 1978.[2]

Overall the balance of payments picture is not very promising, although there are a few bright spots. Egypt remains heavily dependent on foreign aid, and there are few signs of substantial increases in export earnings in the near future. However, workers' remittances, petroleum revenues, and direct foreign investment continue to increase, which may substantially

[1]For discussions of problems faced by foreign investors in Egypt see Baker, pp. 146-148; Tinnin, p. 74; and Roy, pp. 22-26.

[2]The IMF drawings are contingent upon the implementation of a specific stabiliation program, described in detail in Waterbury (1976b), pp. 8-11. For descriptions of the current aid picture see Tinnin, p. 73; Arab Economist, Jan. 1980, p. 23; and AID, Economic Trends Report, p. 4.

TABLE VII

INVESTMENT EXPENDITURES UNDER THE OPEN DOOR POLICY. (Law 43 of 1974)
(Million L.E.)

	To end of 1975	1976	1977	1978	To end of 1978
Domestic currency	2.9	56.3	3.2	442.6	505.0
Hard currency	5.0	85.4	121.4	443.2	655.0
Total	7.9	141.7	124.6	885.8	1160.0
Total national investment	1328.0	1580.0	1636.3	2370.1	
% of total	6.0	9.0	7.6	37.3	

NOTE: Annual Report, Investment and Free Zones Authority, 1978, p. 33 (in Arabic).

TABLE VIII

TOTAL CAPITAL IN APPROVED INLAND PROJECTS UNDER LAW 43 OF 1974 UP TO END OF 1978
(Million L.E.)

			As percent of total:					
	Total	Percent	Local	(Public)	U.S.	EEC	Arab	Other
Investment Companies	184.3	11.1	51.0	(35.3)	0.2	3.3	41.8	3.8
Banks and Banking Institutions	130.0	7.8	56.9	(37.7)	9.2	10.0	17.7	6.2
Touristic Projects	366.0	21.9	46.2	(11.5)	0.8	5.5	6.0	41.5
Housing Projects	216.2	13.0	76.8	(38.9)	0.0	3.2	19.9	0.1
Transportation Projects	27.0	1.6	59.3	(7.4)	0.0	3.7	22.2	14.8
Health Projects	35.2	2.1	62.5	(31.3)	17.0	0.6	17.0	2.8
Agricultural Projects	109.0	6.5	68.8	(46.8)	6.4	4.6	11.9	5.5
Contracting Projects	29.0	1.7	62.1	(13.8)	3.4	17.2	3.4	13.8
Education, Training & Services	131.2	7.9	3.0	(0.8)	92.2	1.5	3.0	0.2
Textile Projects	106.5	6.4	62.0	(38.5)	5.2	0.9	9.4	22.5
Food & Beverage Projects	25.2	1.5	71.4	(31.8)	0.8	7.9	15.9	4.0
Chemical Projects	82.0	4.9	53.7	(9.8)	3.7	7.3	19.3	6.1
Wood Products Projects	9.5	0.6	73.7	(21.1)	0.0	3.2	21.1	2.1
Engineering Projects	88.0	5.3	44.3	(33.0)	8.0	27.3	19.3	1.1
Building Materials Projects	76.3	4.6	80.0	(44.6)	0.4	3.9	6.6	9.2
Metallurgical Projects	29.3	1.8	41.0	(6.8)	1.0	6.8	17.8	3.4
Pharmaceutical Projects	10.6	0.6	66.0	(9.4)	18.9	9.4	6.6	3.8
Mining Projects	5.2	0.3	76.9	(38.5)	0.0	0.0	3.8	19.2
Petroleum Projects	3.0	0.2	33.3	(33.3)	0.0	66.7	0.0	0.0
TOTAL	1667.5	100.0	54.3	(26.7)	10.1	6.0	16.2	13.4

SOURCE: Investment and Free Zones Authority

NOTE: Total percentages may not add up to 100 due to rounding errors.

TABLE IX

OFFICIAL DEVELOPMENT ASSISTANCE AND RESOURCE FLOW TO EGYPT
($ million)

	1975	1976	1977	1978
Net Receipts of ODA:				
From Development Assistance Committee (DAC): Bilateral	249.7	428.1	617.0	860.2
From OPEC Countries: Bilateral	2072.7	1022.5	881.7	508.2
From All Sources (excluding centrally planned economies):	2419.5	1798.7	2611.7	2265.9
Flow of Resources[a]:				
Official Flow of Resources from OPEC Countries and Arab/OPEC Multilateral Institutions	2937.7	1554.8	1935.0	1279.7
Total Net Flow of Resources[b]	3414.2	2323.5	3067.5	2799.5

[a]Resource flows include grants from private agencies and transactions at commercial terms.

[b]Excludes grants by private voluntary agencies and flows from centrally planned economies. Bank lending is included only insofar as reported by DAC countries.

SOURCE: OECD, Development Co-Operatión, 1979 Review, Nov. 1979.

decrease the pressure of balance of payments problems in the coming years.

III. The Structure of Imports.

Not only the total availability of foreign exchange, but the share of total foreign exchange allocated to capital and intermediate goods is critical in determining the speed and nature of industrialization in a developing country. In Egypt, the type of commodity imported is partially determined by the allocation of foreign exchange to each of the three markets: the central bank pool (previously the official market), the commercial bank pool (previously the parallel market), and the free market (imports without transfer). Table X gives an indication of the commodity types entering through the parallel and free markets. Although the total amounts seem grossly understated - leaving more than half of total imports to the official market in 1978, the comparisons across sectors may be more useful. As expected, in 1978 larger percentages of foreign exchange for imports without transfer went to transportation (presumably private automobiles), inputs for craftsmen, and machinery and spare parts relative to in the parallel market. Within the funds for imports without transfer, over the three year period shown imports of transportation goods, inputs for craftsmen, and the extractive industry have shown the largest relative gains. In the parallel market the most dramatic increase is seen in the imports of foodstuffs.

Imports without transfer have been growing dramatically relative to imports through the parallel market, at a rate of 390% relative to 42% over the 1976-1978 period. This implies that any constraints on the availability of foreign exchange have been dramatically relaxed for private sector firms during this period, while the public sector firms may still be facing shortages and long waiting periods in the commercial bank pool.[1]

The overall impact of the changes in the allocation of foreign exchange on the commodity composition of imports is shown in Table XI. Imports of fuels and primary commodities have not changed much in value

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[1]For a similar view, see AID, Economic Trends Report, p. 10.

TABLE X

IMPORTS THROUGH THE PARALLEL MARKET AND
IMPORTS WITHOUT TRANSFER
(Million L.E.)

	1976			1977			1978		
	P.M.	I.W.T.	Sum	P.M.	I.W.T.	Sum	P.M.	I.W.T.	Sum
Transportation	27.4	30.6	58.0	31.3	60.0	91.3	39.1	150.4	189.5
(Percent)	(10.1)	(19.7)	(13.6)	(7.3)	(22.6)	(13.1)	(5.5)	(25.6)	(14.6)
Electrical appliances	87.8	14.2	102.0	113.2	18.6	131.8	118.0	43.7	161.7
(Percent)	(32.4)	(9.1)	(23.9)	(26.2)	(7.0)	(17.9)	(16.6)	(7.4)	(12.5)
Inputs for craftsmen	36.3	15.3	51.6	82.5	33.6	116.1	65.6	86.3	151.9
(Percent)	(13.4)	(9.8)	(12.1)	(19.1)	(12.7)	(16.7)	(9.2)	(14.7)	(11.7)
Machinery and spare parts	5.7	28.5	34.2	3.4	52.1	55.5	13.3	87.2	100.5
(Percent)	(2.1)	(18.3)	(8.0)	(0.8)	(19.9)	(8.0)	(1.9)	(14.9)	(7.7)
Foodstuffs	19.1	18.9	38.0	10.9	32.6	43.5	211.8	86.8	298.6
(Percent)	(7.1)	(12.1)	(8.9)	(2.5)	(12.3)	(6.2)	(29.8)	(14.8)	(23.0)
Consumer goods	14.1	25.4	39.5	20.7	18.2	38.9	23.1	24.9	48.0
(Percent)	(5.2)	(16.3)	(9.3)	(4.8)	(6.8)	(5.6)	(3.2)	(4.2)	(3.7)
Semi-processed metallic products	30.3	7.1	37.4	32.7	18.4	51.1	34.9	40.4	75.3
(Percent)	(11.2)	(4.6)	(8.8)	(7.6)	(6.9)	(7.3)	(4.9)	(6.9)	(5.8)
Cosmetics	7.9	0.7	8.5	--	1.1	1.1	3.5	2.0	6.0
(Percent)	(2.9)	(0.4)	(2.0)	--	(0.4)	(0.2)	(0.5)	(0.4)	(0.5)
Textiles	11.8	4.2	16.0	32.6	6.2	38.8	19.1	9.0	28.1
(Percent)	(4.3)	(2.7)	(3.7)	(7.6)	(2.3)	(5.6)	(2.8)	(1.5)	(2.2)
Extractive Industry	0.5	1.3	2.0	19.3	7.9	27.2	13.3	32.0	45.3
(Percent)	(0.3)	(0.8)	(0.5)	(4.5)	(2.9)	(3.9)	(1.9)	(5.5)	(3.5)
Ammunition (Private)	--	--	--	2.9	--	2.9	60.2	--	60.2
(Percent)	--	--	--	(0.7)	--	(0.4)	(8.5)	--	(4.6)
Unspecified	29.8	9.6	39.4	81.6	16.5	98.1	109.0	23.0	133.0
(Percent)	(11.0)	(6.2)	(9.2)	(18.9)	(6.2)	(14.1)	(15.3)	(4.1)	(10.2)
TOTAL	270.9	155.7	426.6	431.1	265.2	696.3	710.9	587.2	1298.1
(PERCENT)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

SOURCE: Annual Report of National Bank of Egypt, 1978 (in Arabic).

TABLE XI

COMMODITY COMPOSITION OF IMPORTS
(Million L.E.)

	1974	1975	1976	1977	1978
Fuels	23.5	104.2	58.5	32.9	28.7
(% of total)	(2.6)	(6.8)	(3.9)	(1.7)	(1.1)
Crude petroleum and petroleum products	10.2	74.9	21.2	5.4	7.7
Coke and coal	13.3	29.3	37.3	27.5	21.0
Primary Commodities	294.5	289.5	240.9	252.2	306.5
(% of total)	(32.0)	(18.8)	(16.2)	(13.4)	(11.6)
Wheat	232.8	213.0	153.6	128.6	169.6
Tobacco	11.3	20.5	--	33.8	46.0
Maize	26.7	27.1	30.8	30.0	38.0
Others	23.7	28.9	56.5	59.8	52.9
Intermediate Commodities	315.8	618.7	444.6	618.4	812.2
(% of total)	(34.3)	(40.2)	(29.8)	(32.8)	(30.9)
Animal fats and vegetable oils	46.3	135.2	37.4	31.6	61.7
Chemicals	61.8	99.3	6.8	8.6	12.8
Iron and steel	46.9	101.8	77.3	78.9	103.5
Paper and products	30.9	54.8	31.5	37.4	45.5
Wood	29.0	49.7	39.2	108.2	109.6
Fertilizers	29.3	37.1	17.4	15.3	22.9
Others	71.6	140.8	235.0	338.4	456.2
Capital Commodities	124.5	260.2	404.8	567.3	858.8
(% of total)	(13.5)	(16.9)	(27.2)	(30.1)	(32.6)
Automobiles	27.2	96.8	66.8	93.1	146.7
Other transportation	27.7	12.8	12.6	25.0	38.0
Textile Machinery	11.8	19.3	9.4	8.1	20.8
Electrical products	11.5	26.0	7.5	11.5	25.3
Earthmoving equiptment	5.9	15.0	2.8	3.0	2.3
Others	40.4	90.3	305.7	426.6	625.7
Consumer Commodities	161.8	266.7	341.0	413.5	626.0
(% of total)	(17.6)	(17.3)	(22.9)	(21.9)	(23.8)
Durables	38.5	49.3	86.2	127.1	173.4
(% of total)	(4.2)	(3.2)	(5.8)	(6.7)	(6.6)
Of Which:					
Automobiles and motorcycles	29.5	30.2	37.4	56.1	76.3
Other	9.0	19.1	48.8	71.0	97.1

TABLE XI Continued

COMMODITY COMPOSITION OF IMPORTS
(Million L.E.)

	1974	1975	1976	1977	1978
Nondurables	123.3	217.4	254.8	286.4	452.6
(% of total)	(13.4)	(14.1)	(17.1)	(15.2)	(17.2)
Of Which:					
Wheat flour	29.1	46.5	36.4	49.4	74.8
Sugar	26.3	41.3	23.8	16.8	40.6
Tea, coffee, and cocoa	8.5	16.5	19.7	31.8	45.7
Meat, fish, and poultry	10.9	22.8	28.1	35.3	57.2
Disinfectants and insecticides	7.3	10.2	14.0	19.4	28.8
Beans and lentils	0.6	2.1	11.5	5.5	4.9
Paper and paper products	3.0	1.7	4.8	6.7	5.8
Other	11.8	12.4	116.5	121.5	194.8
TOTAL	920.1	1539.3	1489.8	1884.3	2632.2
% change		(67.3)	(-3.2)	(26.5)	(39.7)

SOURCE: Central Agency for Public Mobilisation and Statistics.

NOTE: These data are based on customs records, and hence differ from the balance of payments figures which are based on exchange control records. These data substantially under-record imports; on the other hand, exchange control figures do not include "own exchange" imports, which include most consumer durables as well as many other final products. Petroleum imports have been substantially understated in both customs and exchange control records, though in 1975 imports of crude petroleum are accurately reflected in the customs records.

during the 1976 to 1978 period, thus declining as a share of total imports. Intermediate commodities have held a fairly constant share of total imports, averaging abourt 34%, while the largest increases are seen in capital goods and consumer goods, particularly consumer durables. From Table XII it appears that these changes in values reflect a structural change in the commodity composition of imports rather than changes in relative prices, particularly in comparing intermediate with capital goods.

IV. Industrialization in Egypt, 1972 - 1977.

In this section of the paper a preliminary attempt at evaluating the performance of Egyptian manufacturing during the initial years of the Open Door Policy is made. In addition to the overall growth of output and prices, the performance of the private sector relative to the public and structural change in the economy according to both sector and commodity type are considered.

Unfortunately, any analysis of the industrial sector is severely limited by the lack of available data. Both values of output at current prices and quantities produced are rarely reported together, so that it is difficult to examine separately the price and quantity components of the growth of Egyptian industry.[1] The World Bank (1979) does provide estimates for the overall rate of growth of manufacturing for the 1970-76 period, at 5.7%, and the overall rate of inflation for 1970-77 at 7.0%, but no further details are provided. Choucri and Eckaus (1979) suggest that the Egyptian economy has had respectable growth rates over the 1972-76 period, but rely on evidence from the income velocity of money, production data on electricity, and summary evidence on import flows and domestic investment.

Here, data from the Federation of Egyptian Industries annual Yearbooks are used. Both values and quantities of output are reported for a number of industries, generally for a two year period in each yearbook. Although the information and framework of the reports from the industrial chambers differ from year to year, it was possible to get a series of both quantities

[1]For a complete discussion of the problems and attempts at constructing indices of manufacturing production for periods before the Open Door Policy, see Mabro and Radwan, pp. 244-265.

TABLE XII

PRICE AND QUANTITY INDICES FOR IMPORTS
(Selected Commodities)
1970 = 100

		1970 Value (1000 L.E.)	1971	1972	1973	1974	1975	1976	1977
General Index	1	342,012	118.4	114.4	87.4	136.2	227.6	209.4	256.6
	2		120.0	105.4	124.2	213.8	209.8	200.3	208.3
	3		121.0	121.0	111.0	291.0	478.0	420.0	535.0
Fuel	1	28,243	94.4	73.2	21.2	23.8	111.9	50.5	30.8
	2		122.5	117.8	121.0	321.2	427.6	501.3	426.4
	3		115.7	86.2	25.7	73.6	478.8	253.4	131.5
Raw Materials	1	46,275	148.3	137.4	100.1	192.8	226.7	200.8	246.9
	2		107.8	110.1	144.6	385.5	253.3	230.8	222.1
	3		160.0	151.4	151.9	550.5	574.2	463.2	548.2
Intermediate Goods	1	128,609	120.3	119.8	99.0	129.7	207.4	203.6	241.2
	2		90.0	91.1	105.2	199.7	201.3	176.5	182.9
	3		108.0	109.0	104.0	259.0	418.0	360.0	441.0
Investment and Spare Parts (Capital Commodities)	1	89,906	116.1	100.4	86.7	138.5	321.7	307.5	450.4
	2		103.4	109.3	119.4	145.3	143.1	193.9	191.4
	3		120.0	110.0	103.0	201.0	460.0	596.0	862.0
Durable Consumer Goods	1	10,754	145.2	82.9	93.3	171.2	262.4	314.9	387.0
	2		100.9	138.8	147.0	227.1	187.5	236.3	305.3
	3		108.0	115.0	138.0	389.0	492.0	744.0	1182.0
Non-durable Consumer Goods	1	48,225	71.1	117.0	86.8	113.9	230.0	191.2	181.1
	2		115.2	125.2	129.4	142.2	212.0	139.4	196.1
	3		82.0	135.0	112.0	162.0	487.0	266.0	355.0

SOURCE: Ministry of Planning.

NOTE: 1 represents Quantity, 2 represents Price, and 3 represents Value.

and values for 110 individual industries for the years 1972-77. In addition, some information is provided on the percentage of output produced by the private sector in each individual industry, and the percentage of total output exported. As an indication of the effective tariff rate of protection, appropriate values from Table I are assigned to individual industries.

Two simple methods of analysis are used. First, quantity and price indices are constructed for manufacturing as a whole, for the private sector, by sectors of production, and by commodity type. Second, simple regressions are used, with rates of growth of real output of individual industries as the dependent variable.

The indices constructed are shown in Tables XIII and XIV. Table XV shows the relative performance and ranking of various sectors of the economy for several alternative time periods. Summary characteristics of the data are shown in Table XVI, which can be compared with industry data in Table XVII to give an indication of the representativeness of the sample. It should be noted that the gross value of output in 1972 was used in constructing weights for the indices, rather than the more appropriate but unavailable value-added.

The aggregate indices seem in line with the World Bank estimates, with average annual growth rates of manufacturing output and prices for the 1973 through 1977 period estimated at 5.0% and 10.6% respectively. The low growth rate for output in the 1973 through 1975 period can probably be largely attributed to the aftermath of the 1973 war. In general, the trends are encouraging - growth rates of output have increased and inflation has decreased substantially in moving from the 1973-75 to the 1976-77 period.

Comparisons between the private and public sectors are particularly interesting. Output from the private sector has grown at a fairly constant rate, a bit under 5%, throughout the 1973-77 period, while the public sector's growth rate has increased quite dramatically from 1973-75 to 1976-77. Part of this differential might be attributed to the timing of import liberalization under the Open Door Policy. Imports of inputs for the private sector were among the first commodities to be imported through the parallel market and imports without transfer. Thus, a portion of the growth of private sector output in the early period might be attributed to a decrease in excess capacity due to an increase in the availability of intermediate inputs

TABLE XIII

INDICES OF REAL MANUFACTURING OUTPUT
1972 = 100

	1973	1974	1975	1976	1977	Average Annual Growth Rates 1973-1975	1976-1977	1973-1977
Total	105.6	103.9	111.7	115.8	127.0	3.8	6.6	4.9
Private	110.1	110.9	114.4	119.4	125.5	4.6	4.8	4.7
Public	104.1	101.5	110.8	115.6	127.5	3.5	7.3	5.0
Commodity Type:								
Consumer	106.7	107.8	112.1	116.7	123.9	3.9	5.2	4.4
Luxury	115.3	106.1	117.9	129.6	140.2	5.6	9.0	7.0
Durables	84.8	119.3	159.1	160.3	217.9	16.7	17.0	16.9
Intermediate	99.4	96.4	101.9	170.0	116.7	0.6	7.0	3.1
Capital	100.0	97.4	104.3	96.2	103.7	1.4	-0.3	0.7
Sector:								
Food	101.5	95.6	93.5	102.9	110.1	-2.2	8.5	1.9
Tobacco	117.8	107.6	120.5	131.1	140.0	6.4	7.8	7.0
Beverages	93.0	92.7	103.7	116.6	141.6	1.2	16.9	7.2
Oils and By-Products	100.8	112.2	133.5	133.1	141.1	10.1	2.8	7.1
Leather	143.6	150.1	152.9	146.4	153.1	15.2	0.1	8.9
Metallurgical	100.0	97.3	103.8	95.9	103.3	1.3	-0.2	0.7
Woodworking	111.1	108.3	109.8	125.1	132.3	3.2	9.8	5.8
Building Materials	101.7	85.9	99.2	95.2	89.0	-0.3	-5.3	-2.3
Chemical	79.8	84.9	103.6	101.9	114.3	1.2	5.1	2.7
Engineering	86.4	102.0	128.6	135.3	183.6	8.7	19.5	12.9
Spinning and Weaving	100.7	99.3	103.2	108.6	116.5	1.1	6.2	3.1

TABLE XIV

PRICE INDICES
1972 = 100

	1973	1974	1975	1976	1977	Average Annual Growth Rates 1973-1975	Average Annual Growth Rates 1976-1977	Average Annual Growth Rates 1973-1977
Total	104.4	134.6	150.0	144.8	165.7	14.5	5.1	10.6
Private	106.7	143.8	171.7	179.1	208.2	19.7	10.1	15.8
Public	103.6	131.5	142.8	133.2	151.4	12.6	3.0	8.6
Commodity Type:								
Consumer	106.7	128.2	149.5	148.0	164.7	14.3	5.0	10.5
Luxury	94.4	106.3	110.0	114.1	118.4	3.2	3.7	3.4
Durables	105.1	121.4	119.5	128.0	148.6	6.1	11.5	8.2
Intermediate	106.1	170.6	188.9	165.2	212.0	23.6	5.9	16.2
Capital	117.6	134.1	152.4	156.9	160.6	15.1	2.7	9.9
Sector:								
Food	108.7	119.8	130.5	140.3	147.7	9.3	6.4	8.1
Tobacco	93.2	105.0	107.2	109.5	113.0	2.4	2.7	2.5
Beverages	105.0	118.9	134.9	156.0	166.5	10.5	11.1	10.7
Oils and By-Products	101.6	104.4	111.0	112.8	115.0	3.5	1.8	2.8
Leather	98.6	102.8	134.4	220.1	217.0	10.3	27.1	16.8
Mettalurgical	118.0	134.9	153.3	159.4	163.2	15.3	3.2	10.3
Woodworking	102.3	109.0	109.3	140.4	168.6	3.0	24.2	11.0
Building Materials	100.6	104.0	137.7	194.0	261.0	11.2	37.7	21.2
Chemical	104.0	129.8	137.6	142.1	141.8	11.2	1.5	7.2
Engineering	102.0	126.4	139.5	148.1	167.6	11.7	9.6	10.9
Spinning and Weaving[a]	108.9	181.6	208.7	159.3	214.4	27.8	1.4	16.5

[a] Export prices for cotton yarn and textiles used.

TABLE XV

RELATIVE PERFORMANCE OF SECTORS
(Rankings: Real Growth Rate, Inflation Rate)

High Growth Low Inflation		High Growth High Inflation		Low Growth Low Inflation		Low Growth High Inflation	
1973 - 1975							
Tobacco	(4,11)	Metallurgical	(6,2)	Food	(11,8)	Beverages	(7,6)
Oil and By-Products	(2,9)	Engineering	(3,3)			Building Materials	(10,4)
Leather	(1,7)					Chemical	(7,4)
Woodworking	(5,10)					Spinning and Weaving	(9,1)
1976 - 1977							
Tobacco	(5,8)	Food	(4,6)	Oil and By-Products	(8,9)	Leather	(9,2)
Spinning and Weaving	(6,11)	Beverages	(2,4)			Building Materials	(11,1)
		Woodworking	(3,3)	Metallurgical	(10,7)		
		Engineering	(1,5)	Chemical	(7,10)		
1973 - 1977							
Tobacco	(5,11)	Beverages	(3,6)	Food	(7,8)	Building Materials	(11,1)
Oil and By-Products	(4,10)	Leather	(2,2)	Metallurgical	(10,7)	Spinning and Weaving	(8,3)
		Woodworking	(6,4)	Chemical	(9,9)		
		Engineering	(1,5)				

TABLE XVI

SUMMARY OF SAMPLE DATA BY SECTOR AND COMMODITY TYPE

Sector or Commodity Type	1972 Value*	1972 %	1976 Value*	1976 %	% Private	% of Value Exported	Effective Tariff Protection
Total	947,160	100.0	1,159,380	100.0	32.7	6.4	94.7
Food	147,770	15.6	216,240	13.6	48.0	4.6	156.0
Tobacco	198,610	21.0	288,000	18.1	0.0	0.0	156.0
Beverages	22,367	2.4	37,401	2.3	13.6	5.5	191.0
Oil and By-Products	68,787	7.3	101,280	6.4	4.7	0.0	156.0
Leather	54,481	5.8	184,490	11.6	92.7	5.3	161.2
Metallurgical	73,418	7.8	107,150	6.7	18.6	0.0	46.6
Woodworking	18,389	1.9	32,160	2.0	98.1	0.0	51.0
Building Materials	6,862	0.7	11,810	0.7	70.9	0.0	73.0
Chemicals	28,205	3.0	40,976	2.6	11.1	0.8	32.4
Engineering	43,333	4.6	82,002	5.1	5.5	2.4	82.6
Spinning and Weaving	284,940	30.1	492,260	30.9	34.0	15.9	8.0
Consumer Goods	375,780	39.7	668,090	41.9	49.2	5.5	117.3
Luxuries	220,000	23.2	323,790	20.3	1.5	0.2	159.9
Durables	27,606	2.9	55,778	3.5	6.1	3.5	100.1
Intermediate Goods	251,850	26.6	442,500	27.8	37.8	14.2	23.3
Capital Goods	71,916	7.6	103,630	6.5	15.8	0.0	46.4

* 1,000 Egyptian Pounds

TABLE XVII

GROSS VALUE OF INDUSTRIAL PRODUCTION, 1974-1978[a]
(Million L.E.)

	1974	1975	1976	1977	Jan. - Sept. 1977	Jan. - Sept. 1978
Spinning and Weaving	603.3	690.2	755.8	836.5	625.9	759.0
(% Private)	(24.0)	(27.0)	(25.5)	(23.4)	(24.7)	(21.7)
Foodstuffs	608.6	698.0	774.8	845.9	653.7	706.5
(% Private)	(20.9)	(21.4)	(23.6)	(21.1)	(23.0)	(20.5)
Chemicals	195.5	267.4	232.3	279.2	185.9	221.9
(% Private)	(21.5)	(22.6)	(22.3)	(27.5)	(20.9)	(26.5)
Engineering and Metallurgical	319.6	385.5	446.2	541.4	391.6	461.7
(% Private)	(15.2)	(14.9)	(14.6)	(13.0)	(13.8)	(12.0)
Building Materials	72.1	93.4	20.2	26.9	16.4	20.8
(% Private)	(17.8)	(17.8)	(100)	(100)	(100)	(100)
Mining Products (All Public)	5.7	7.0	7.7	8.3	6.0	7.3
Woodworking Products (All Private)	39.8	39.8	60.4	75.0	39.3	41.0
Leather (All Private)	60.2	86.6	162.2	170.5	127.2	128.9
Total	1904.3	2267.9	2459.6	2783.7	2046.0	2347.1
(% Private)	(24.9)	(26.3)	(29.9)	(28.5)	(28.4)	(26.2)

Source: Ministry of Industry and Mining

[a]Covers only industries under the supervision of the Ministry of Industry and Mining.

and raw materials. The public sector, however, did not feel the impact of import liberalization until the later period, and thus the high growth rate in 1976-77 might be attributed to a substantial decrease in excess capacity.

Although the trends in the inflation rates are similar, the price increases for the private sector output are much higher. Most importantly, this indicates the inappropriateness of comparing public and private sector growth rates using current values of production. Although in value terms the private sector has shown impressive growth over the 1973-77 period, it appears that the major share of it can be attributed to price increases. In fact, this data set indicates that the public sector has out-performed the private sector in real terms, in spite of new policies favoring the private sector.[1]

Changes in the structure of Egyptian industry are indicated by looking at both commodity type and sectoral growth rates. Growth rates vary substantially across commodity types: durables lead real growth by a substantial margin, while capital goods show the slowest growth. In relative terms, the growth of production of consumer goods and capital goods has fallen, while intermediate goods have shown a major increase.

Sectoral comparisons can be seen in Table XV. Three leading sectors in early years, in terms of above median growth and below median inflation, have dropped behind. Oils and Oil By-products have dropped from a high to a low growth sector. Leather and Woodworking, both largely private sector, have become high inflation sectors, with Leather also losing ground in terms of growth. The most dramatic improvement is seen in Spinning and Weaving, moving from a low growth, high inflation to a high growth, low inflation sector. Chemicals and Engineering can also be categorized as improving sectors, while worsening sectors include Tobacco and Building Materials.

The price and quantity indices are reasonable indicators of general changes in Egyptian manufacturing, but in the process of aggregation the

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[1]Several other sources suggest that industrial production grew at much higher rates in the private sector than in the public during the 1974-76 period. See Choucri and Eckaus, p. 787; Ministry of Industry, "Industrial Activities of the Private Sector, 1977," p. 9; and Roy, p. 15.

the behavior of individual industries with relatively small output in value terms is essentially lost. Here, several simple regressions are shown to give an indication of the relationship between real growth rates and various explanatory variables. Real growth rates of manufacturing production by individual industry for the three different time periods are used as independent variable: 1973 through 1977, 1973 through 1975, and 1976 through 1977. Growth rates are expressed in annual rates. Since all individual industries are weighted equally, the results are of course dependent on the degree of aggregation already present in the data. Particular caution should be taken in interpreting the coefficients for the effective tariff rate of protection, since only estimates on a very aggregated level were available.

Regressions (1), (4), and (7) shown in Table XVIII in general support the evidence found in the quantity indices. Relative to consumer goods, durables show a significantly higher growth rate overall and for the 1976-77 period. In ranking the growth rates of commodity types, luxury goods are much lower and capital higher compared with ranks from the indices, indicating that the large individual industries have behaved differently from the small. Looking at the individual data, it can be seen that cigarettes account for 73% of the value of output for luxuries in 1972, and that its overall growth rate of over 9% was substantially higher than 6 out of the 7 remaining industries. The reverse relationship holds for the capital goods. The largest 3 out of 16 industries (reinforcing iron, cold rolled or drawn strips and sheets, and non-ferrous metal rolling and drawing) contributed 70% of the value of output in 1972 and displayed unusually low growth rates (.7, -5.3, and -17.4, respectively) as compared with the unweighted average for capital goods of 5.6%. In addition, while on average the private sector output grew more slowly than the public sector, the reverse was true for capital goods. The unweighted average growth rate for 1973-77 was 3.4% for public sector production and 15.0% for the private sector.

Three types of explanatory variables were considered in addition to commodity type in these regressions. First, the fraction of output produced by the private sector was used to allow for the different treatment of the private sector by government regulators both before and during the Open Door Policy. This should primarily pick up any differences in the

TABLE XVIII

REGRESSION RESULTS
Dependent Variable: Average Annual Real Growth Rates of Individual Industries, in Percent.
(Sample Size = 110)

Dependent Variable:	Ave. Annual Real Growth 1973 - 1977			Ave. Annual Real Growth 1973 - 1975			Ave. Annual Real Growth 1976 - 1977		
Regression #:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Independent Variable:									
1) Constant	6.29	8.46	7.99	-4.03	-4.16	-4.35	27.08	30.83	34.13
(Significance Level)	(.08)	(.02)	(.04)	(.21)	(.20)	(.19)	(.00)	(.00)	(.00)
2) Luxury Goods	-9.13	-8.86	-9.70	-4.87	-4.91	-5.38	-16.83	-16.83	-18.75
	(.06)	(.06)	(.04)	(.26)	(.26)	(.21)	(.18)	(.17)	(.13)
3) Durables	10.31	9.39	9.18	.14	.16	.26	30.57	28.54	30.81
	(.00)	(.01)	(.01)	(.97)	(.96)	(.93)	(.00)	(.00)	(.00)
4) Intermediates	-1.47	-1.85	-1.24	-1.24	-1.21	-.14	-3.00	-3.14	-1.73
	(.61)	(.51)	(.66)	(.63)	(.64)	(.96)	(.69)	(.67)	(.81)
5) Capital Goods	-.16	1.00	1.40	.34	.37	-.03	.76	4.04	4.75
	(.97)	(.79)	(.71)	(.92)	(.91)	(.99)	(.94)	(.68)	(.63)
6) Fraction Private	-5.87	-3.89	-4.54	4.79	4.68	1.20	-23.3	-20.53	-19.09
	(.03)	(.15)	(.29)	(.05)	(.06)	(.67)	(.00)	(.00)	(.07)
7) Fraction Exported	-2.21	-.29	-16.65	2.03	2.01	-4.8	-6.40	-2.10	-44.03
	(.78)	(.97)	(.24)	(.78)	(.78)	(.61)	(.76)	(.92)	(.20)
8) Effective Rate of Protection	1.11	.91	1.88	2.72	2.81	3.63	-2.87	-2.51	-7.61
	(.62)	(.68)	(.54)	(.18)	(.18)	(.10)	(.63)	(.66)	(.34)
9) Average Annual Inflation		-.27	-.26		.03	-.15		-.23	-.37
		(.01)	(.13)		(.83)	(.52)		(.03)	(.03)
10) 9 x 6			.04			.97			-.16
			(.89)			(.01)			(.58)
11) 9 x 7			1.15			1.92			1.14
			(.18)			(.30)			(.17)
12) 9 x 8			-.07			-.37			.24
			(.75)			(.21)			(.30)
13) R^2	.18	.23	.25	.08	.08	.15	.24	.27	.30

availability of imported intermediate inputs and raw materials as well as excess capacity in the initial period, since incentives for private sector investment did not really come into being until after the sample period. The second independent variable is the fraction of output exported. Devaluation improves the price competitiveness of Egyptian products, and therefore may result in a higher growth rate of output. Third, the effective tariff rate of protection was used. Before the Open Door Policy, when quantitative rationing schemes were used, the effective rate of tariff protection was not an accurate measure of the actual total effective protection. With the liberalization of imports, the effective tariff rate of protection should become more important in explaining relative growth rates, particularly during the transition period. Of the three, only the fraction of output produced privately is significant in each of the three periods at the 5% level, and the sign on the coefficient is positive for the earlier but negative for the later period.

In the remaining regressions, the rate of change of prices is introduced as an independent variable. This is likely to result in problems of simultaneity, although some arguments for the exogeneity of prices from the industries' perspective might be made. First of all, public sector prices are regulated to a large extent by the government, so that at least in the short run firms must operate within the constraint of the existing price of output. Also, price increases are generally permitted when input prices rise, such as during the devaluation of the mid-70's. Thus for public sector firms price changes tend to be cost determined. Secondly, Egypt can in general be viewed as a small country in the world market, so that the domestic prices of traded goods without non-tariff protection are determined by the world price, exchange rate, and tariff. These variables are generally all exogenous to the firm, and are probably most relevant in determining private sector price behavior.

Looking to regressions (2), (5), and (8), it can be seen that the inflation rate in an industry is not significantly related to output changes in the earlier period, but that there is a significant negative relationship in the later period. One possible explanation is the increased competition in the domestic market due to the liberalization of imports. Those industries with the largest price increases may have been those least able to compete successfully with the influx of foreign commodities.

In regressions (3), (6), and (9), the inflation variable is entered interactively with other independent variables. The relationship between price changes and output growth may differ for the private sector because of the system of price controls and the different degrees of competitiveness. Because of the devaluation, exporters may have been able to successfully increase prices (in terms of Egyptian pounds) while still benefiting from an increase in demand. Last, those with a high effective tariff rate may have been able to increase prices without suffering from increased competition from importers.

In the 1973-75 period the coefficients on the effective tariff rate and the price-private interactive term both have positive coefficients significant at the 10% level. Apparently during this period private sector industries were successful at increasing both prices and output, while on average public sector firms were not. Those with a high effective tariff rate grew more quickly, but not because of higher than average price increases.

In the 1976-77 period the results are somewhat different. The intercept has become significantly larger, as has the dummy variable for durable goods. Now coefficients for the fraction private and the average annual inflation rate are negative and significant at the 10% level. It appears that the protection of the effective tariff rate and price increases by the private sector were only temporary indicators of real growth. In the later period, price increases for both the public and private sector are associated with a lower growth rate, perhaps because of increased import competition, and the private sector shows a significantly lower growth rate.

V. Conclusion.

The Open Door Policy is having its impact on the Egyptian economy. On the positive side, the manufacturing sector has shown higher and quite respectable growth rates in the 1976-77 period, which can probably be at least partially attributed to the new policy. According to the data examined, however, it was the public and not the private sector in manufacturing that was most able to respond to the new economic environment. Accompanying the higher growth has been a decreased inflation rate from the 1973-75 period for both the public and the private sectors. The success of the policy in attracting foreign investment into a wide range of industial sectors is yet to be seen.

The devaluation implicit in the Open Door Policy does not seem to have provided the necessary impetus to increase exports. Instead, it can perhaps claim some of the credit for the dramatic increase in workers' remittances. The long run success of the Open Door Policy may in fact depend upon continued increases in petroleum exports and remittance inflows, rather than a large increase in manufacturing exports. Some improvement in the balance of trade picture will no doubt be necessary. This may occur naturally as Egypt adjusts to its new trading partners, but will probably require further encouragement to traditional exports such as cotton. The future trends in the balance of trade will be influenced largely by the agricultural sector - in terms of direct exports such as cotton, inputs into the manufacturing sector, and import-substituting food production.

The standard problems of exchange rate and import liberalization have occured in the Egyptian case. First, policies in many cases have been ad hoc and at times inconsistent. Law 43 was ineffective for several years after its implementation due largely to lagging foreign exchange policy and its initial discrimination against Egyptian investors.

The co-existence of both the parallel (or now unified) market and the free market for foreign exchange provide another example of inconsistent policy. Presumably the unified market exists to provide funds to primarily the public sector according to a certain set of national priorities. But, the apparent over-valuation of the Egyptian pound in this market has made it increasingly difficult for the commercial bank pool to attract funds, thus resulting in shortages of imports for high priority sectors, and in many cases trading in the commercial bank pool unofficially at the free market rate.

A third policy inconsistency has already been mentioned. The Open Door Policy has done little to encourage the agricultural sector. Traditional exports were the last to receive the incentive of devaluation, and even then, where these commodities are largely exported by the state, export prices are not necessarily reflected in prices earned by the producer. Imported food sold at subsidized prices is likely to result in further decreases in domestic supply unless there is appropriate accompanying domestic policy, thus exacerbating the existing problem of the food import bill.

Last, there is a potential conflict between the existing goals of increasing domestic production and increasing workers' remittances. Although there appears to be an excess supply of urban unskilled and college educated labor in certain area, this does not seem to be the case for skilled labor and some professionals. The current policy encouraging Egyptians to work abroad could result in a significant shortage of certain types of labor in the Egyptian economy.[1]

The amount of structural change required of the Egyptian economy during the transition period and the implied redistribution of income are more difficult aspects of the Open Door Policy to assess.[2] Clearly, looking at the manufacturing sectors, the large differentials in growth rates of both output and prices indicate that change is occuring. Yet the most critical and problematic change, that of allowing relative food prices to adjust to world prices, has as yet been postponed. The ability of the Egyptian government to either continue the subsidies and come up with a source of continued finance, or to remove the subsidies and withstand the major changes implied for the distribution of income will be a major test for the existing regime and its economic policy.[3]

The role of expectations in determining the success of the Open Door Policy is also difficult to ascertain. There does not seem to be a major problem of speculative import purchases; it is generally believed, it

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[1] For further discussion see Birk and Sinclair, and Choucri and Eckaus, pp. 789-790.

[2] For some descriptive evidence on the worsening income distribution, see Tinnin, p. 74; Sakr, p. 12; and Waterbury (1976a), p. 12.

[3] One attempt and the resulting riots are described in Baker, pp. 165-166.

appears, that the Open Door Policy is here to stay. Expectations about the success of the policy are, however, probably unfulfilled in the eyes of the general public. Peace and new policies accompanied by promises of dramatic growth led to expectations of visible increases in the standard of living.[1] Economic growth, while increased since the periods of war, is not rising dramatically. Foreign investment has not miraculously boosted the economy, nor does the evidence show that the Egyptian private sector has "taken off". Instead, the Egyptian people have had to settle for solid growth of industrial production, led by the public sector, with continued balance of payments problems - and attempts at IMF stabilization programs. The impact of the recent increases in investment may be a more promising scenario.[2]

The last typical problem arising during attempts at liberalization is the continued lack of availability of foreign exchange. The trends in the sources of foreign exchange have been discussed in detail in the paper. It is clear that if Egypt is to continue in its attempts to relax quantitative restrictions on foreign exchange and unify the exchange rates, the continued support through aid from abroad will be required.

Perhaps the most important implication of this paper is the need for further investigation into the operation and performance of Egyptian industry. Although knowledge of the economy certainly doesn't guarantee sound, consistent economic policy-making, it is clearly a necessary condition. The lack of available information about the industrial sector in Egypt is distressing. First and foremost, reliable price and quantity indices, disaggregated at least to the level presented in this paper, should be constructed to give an overview of the performance of Egyptian industry. Organizations within the Egyptian government, such as the Ministry of Industry, may have at least some of the required data. If not, perhaps further surveys of the industrial enterprises are required.

More substantive research involves the analysis of the components

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[1]Baker, pp. 144-45 and AID, p. 6.

[2]For a less promising view, see Sakr, p. 16; and Taylor p. 13.

of industrial growth on both a theoretical and empirical level. In the time period examined here, growth was probably largely determined by initial capacity utilization of plants and factories and the availability of inputs, particularly imported inputs. In the longer run, one would expect to see structural change taking place in the Egyptian economy as investment flows respond to the new incentive structure promoted by the Open Door Policy and the new price structure determined by world prices and the existing set of tariffs. During this period, firms are shifting from operating within a system of quantitative rationing of imported inputs and capital goods to a regime of higher priced but more available imports. The new effect on choices of production techniques and factor ratios of labor, capital, and imports, both for the production of a specific commodity and for allocations of production across sectors, are unclear. Both a theoretical framework and empirical analyses are required.

Another open area for research is the comparative behavior of the public and private sectors. The exact role of the public sector envisioned by the creators of the Open Door Policy remains ambiguous. It is to be revitalized and strengthened through competition; to become profitable in a newly market-oriented economy. Yet the exact policies which will encompass the required incentives but still provide some protection during the transition years are still being formulated. As it stands, the public and private sector appear to respond differently to new economic environments. Differences in pricing, investment, employment, financing, and export behavior must be analyzed if any guidance is to be provided in policy-making aimed towards inducing structural change.

Another critical aspect of the Egyptian economy is the large emigration of workers, particularly to Arab states. It has a substantial impact as a source of foreign exchange and savings as well as on the size and composition of the Egyptian labor force. The impact of this migration on the manufacturing sector should thus be studied carefully, taking into consideration the uncertainty of political and economic relations with Egypt's neighbors.

The list could of course go on, but these topics should take first priority if a basic understanding of the industrial sector in Egypt is to be achieved.

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