FEMISE RESEARCH PROGRAMME

Investment, Labor Market and Trade Regulation in Egypt

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Investment Incentives, Marginal Effective Tax Rates, and the Cost of Capital in Egypt

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Abstract

The purpose of this paper is to assess the actual tax burden on capital. The impact of different aspects of the Egyptian tax system (corporate and non-corporate) on the cost of capital and hence on investment efficiency and competitiveness is analyzed. The effects of the statutory tax rates, related tax incentives (depreciation allowances, tax credits, tax deductibility, tax holidays, tax exemptions) and tax administration are considered. Various activity-specific and economy-wide factors interacting with taxes (financial costs, capital structure) are analyzed. To this end, marginal effective tax rates are calculated and compared.

1- Introduction

As globalization and integration of world economies are increasing, competitiveness turns out to be the key for enhancing trade, employment and the standard of living in a given country. A requirement for achieving competitiveness is to reduce costs and further to narrow cost-price margins particularly in the manufacturing sector.

Although capital income taxation is only one of several determinants of investment decisions, economists and policy makers agree that taxation of profits often has an important impact on marginal investment. When a country's tax rate is high to the extent that it reduces profitability, investment is discouraged and competitiveness is eroded. When a country's tax system fails to treat alternative investment opportunities in a neutral way, distortions are introduced in investment decisions. Moreover, in a globalized world characterised by increased capital mobility, a well designed and neutral taxation system has a strong bearing on attracting foreign direct investment (FDI). In fact, the internationalization of business activity has created significant pressures on national corporate tax systems.

This paper aims to investigate the extent to which Egypt's current tax system imposes significant economic costs on business operations, and to assess whether this tax system has a distortionary effect on private investment. To this end the study first attempts to measure the real tax burden on capital investment by using the marginal effective tax rate (METR) as a quantitative indicator. It also examines whether tax incentives or exemptions change these results. Second, the paper investigates the extent to which the estimation of the METRs calculated on the basis of the formal tax system are likely to differ when administrative practices are taken into account. In order to evaluate the impact of the tax system on the cost of capital and hence on competitiveness , the study tries to address the following questions:

- Does the prevailing tax system increase the cost of capital?
- Does this tax system favour any economic activity at the expense of the others?
- Does the tax system favour debt finance over reliance on retained earnings and equity, investment in machinery in relation to buildings and inventories, corporate versus non-corporate firms, and does it favour some locations at the expense of others?
- Do the existing tax arrangements place an unfair tax burden on international investors in comparison to domestic investment?

The statutory tax rates are not accurate indicators of the burden and impact of the tax system on investment decisions or allocation. ⁽¹⁾ Therefore, we will rely on the marginal effective tax rate (METR), which captures the impact of the different aspects of the tax system (rates, incentives and administration) on the cost of capital and hence on investment efficiency⁽²⁾ and competitiveness . It incorporates the effects of both the statutory tax rates and related tax incentives (tax depreciation, tax credit, tax deductibility, tax holidays, etc.), as well as various industry-specific and economy-wide factors interacting with these taxes (financial costs, capital structure, etc.). Due to this comprehensive nature, the effective tax rate can vary by industry or tax jurisdiction under the same tax regime. The difference in the METR across various investors or sectors quantifies the tax bias at the margin and indicates, other things being equal, how tax policy is likely to affect investment decisions. More importantly, when tax administration tends to be weak, a key issue is to determine how METR calculated on the basis of the statutory tax level is likely to differ when administrative practices are taken into account.

The rest of this paper is organized as follows. Section 2 reviews corporate taxation in Egypt and tax-related incentives. Section 3 assesses the statutory tax level, the existing biases, if any, in corporate income tax provisions, and finally, the different aspects of tax compliance. Section 4 quantifies the METR on cost of capital. It differentiates between tax effects on various organizational forms, sources of finance, assets, and activities. Section 5 studies the impact of tax incentives and considers differences in tax treatment of domestic versus foreign investment and

⁽¹⁾ Usually the statutory tax rate differs substantially from the effective tax rate for several reasons, of which: the method used in calculating taxable income, the frequent use of credits and other taxes on investment, and the inflation rate. Besides the statutory tax rate, countries offer various tax exemptions to encourage domestic investment and to attract FDI. In addition, administrative practices and institutional weaknesses impose transaction costs on investors.

⁽²⁾ See Anwar Shah, World Bank, Chapter 7, p 310.

investment in various locations. Section 6 investigates tax compliance in terms of tax administration and evasion, it further considers whether administrative practices are likely to affect the METRs estimates. Section 7 explores the implications of different findings for investment allocation and efficiency, it also concludes and offers policy recommendations.

2- Capital Income Taxation and Related Incentives

This section analyzes the tax system applied in Egypt and the prevailing incentive schemes.

2-1 The Tax System

Egypt imposes a number of direct and indirect taxes. The direct taxes include corporate income taxes, individual income taxes, inheritance taxes, property and payroll taxes. The indirect taxes include sales and excise taxes, stamp taxes and customs duties. Although there is only one law that governs taxation of business and individual income, income taxation in Egypt is complex due to its numerous tax rates, special provisions and exemptions.

Under the Income Tax Law no. 187 issued in 1993- which is an amendment of the Egyptian Tax Code under Law 157 of 1981 - various sources of income are aggregated and then taxed according to a schedule of rates. This law distinguishes between individual income and corporation income.

The Individual Income Tax

This tax applies to Egyptian residents and to foreigners, only on income earned in Egypt.

For taxation of individual income three classifications are used: wages and salaries, unified income (which comprises: commercial and industrial profits, professional income, immovable property income) and movable capital revenue. Each of these three components are subject to different tax schedules. The schedular system results in different tax treatment of various sources of income.

The tax on *wages and salaries* and remunerations paid to directors up to L.E. 5000 per year is withheld at the source. A 20% rate of tax is applied to the first L.E. 50,000, any excess is taxed at the rate of 32%. An additional 2% (the development duty) applies on taxable income in excess of L.E.18,000. Certain allowances, that do not exceed in total L.E.4000 per year are deductible from this income.

The *unified income tax* applies to income from commercial and industrial activities, profession and real estate activities. The types of Egyptian firms subject to this tax include: sole proprietorships, general partnerships and simple limited partnerships. The current tax rate on profits is a progressive rate which starts at 20% for profits up to L.E. 2500 and reaches 40% for profits exceeding L.E. 16,000 yearly. In addition, a development duty of 2% is applied to the unified income tax base if it exceeds L.E.18,000. Personal allowances are the same as those under the wage and salary tax. They may be claimed by the taxpayer under the unified tax, if they are not claimed elsewhere.

The tax on *movable capital revenue* is imposed at the rate of 32%, an additional 2% is levied on movable capital revenue received by directors. Movable capital revenue includes: interest income (if not exempt altogether), foreign dividends (net of foreign taxes) received by Egyptian residents, benefits to non-executive members of corporate boards and to executive members of corporate boards (in excess of L.E. 5000 per year). The movable capital tax is usually withheld at the source on payments to both residents and non-residents.

This differential tax treatment of various income sources and given the deductibility of interest and wages and salaries from corporate and other business income, there may be an incentive to shift income from the business income category to other categories (wages and salaries or movable income). These possibilities are partly circumscribed by including wage and interest income of owners of sole proprietorships and partnerships as part of commercial and industrial profits.

The Corporation Income Tax

Corporate tax is imposed on the net annual profits of joint stock companies, limited liability companies and partnerships limited by shares established according to the Egyptian law (Law 159/1981 and Investment Law 8/1997). It is imposed on private and public sector companies alike and on public authorities engaged in taxable activities. Foreign banks and foreign companies operating in Egypt are subject to this tax with respect to the profits realized from their activities in Egypt.

Taxable income is equal to accrued revenues net of allowable costs. Both revenues and expenditures are calculated on an accrual basis rather than on a cash basis. Revenues include income that results from the main activities of the firm, in addition to any other incomes, revenues or gains such as profits realized from activities accomplished outside Egypt, unless such activities are carried out by an independent enterprise. Gains from the disposal of capital assets are also included, but if the proceeds are fully utilized within two years to purchase new capital assets, the part of the corporate tax related to such capital gains shall be reimbursed or deducted from the corporate tax due for payment.

The *standard rate* for the corporate tax is 40%. Profits from manufacturing and from exporting activities are subject to a reduced rate of 32%, while profits from oil exploration and production are taxed at a higher rate of 40.55%. A complementary tax of 2% (the development of State resources duty) is also levied on the amount of taxable income of companies exceeding L.E.18,000 a year.

Deductions from accrued revenues to arrive at the actual taxable corporate income include:

- Depreciation charges,
- 25% of the cost of new machinery and equipment as initial allowance,
- 90% of interest on bank deposits and dividends earned,
- 10% of paid up capital (only once) if the corporation is registered on the stock market.

The straight line method is used to depreciate fixed assets (except land). Commonly applied rates of yearly depreciation are 2 to 5% for buildings, 6 to 15% for furniture and fixtures, 10 to 20%

for plant and machinery, 12.5 to 20% for office and accounting machines, 20 to 25% for motor vehicles (World Bank, 1994).

In addition to these annual allowances, 25% of the cost of new machinery and equipment may be deducted as an initial allowance. The annual depreciation allowances are calculated after the year when the initial allowance is deducted. The base for assessing the annual depreciation allowance is the original cost of the asset net of the initial allowance.

Corporate tax is applied to 10% of dividend income and of net-of-movable-income-tax interest received.

Other deductions include: interest and royalties provided the schedular tax has been withheld, bad and doubtful debts (with a maximum of 5% of net profits per year), rent, worker participation payments (required by law to be equal to 10% of profits or 100% of annual payroll, whichever is less), pension contributions (with a maximum of 20% of payroll), all other taxes including social insurance contribution to the Egyptian state social insurance schemes, and prior years' corporate losses (so long as they have not been carried forward for more than five years).

Any inventory valuation method for inventory costing is permissible: first -in-first out (FIFO), last-in-first-out (LIFO) or the average cost method. However, the first-in-first-out method or the average cost method is commonly used for inventory valuation, although the last-in-first-out method is more advantageous to the corporation in times of rising prices. There is, in general, no adjustment made for inflation.

Capital gains earned from the sale of fixed assets subject to depreciation are taxed at the usual rate of corporation tax. However, they are not taxable to the extent that the proceeds are reinvested in new fixed assets.

Other taxes include:

Withholding Taxes

In general, there are no Egyptian withholding taxes on income remitted to non-residents apart from schedular taxes on interest and royalties. Foreigners may also have taxes imposed on their wages and salaries although exemptions may be given to projects qualifying for tax incentives - as discussed later.

Egypt signed tax treaties for providing against double taxation with a number of countries such as: Austria, Belgium, Cyprus, France, Germany, India, Italy, Jordan, Lebanon, Sweden, UK, USA and others. Other countries signed tax treaties with Egypt to come to effect soon.

General Sales Tax

This is the main commodity tax in Egypt. It is imposed on the sale of goods and services. Both domestic and imported goods are taxed (the sales tax is applied on the value of imports including customs duties).

The general rate of tax is 10%. However, a zero rate applies to certain food products and export sales. Goods that are taxable at 5% include coffee, deluxe flour, macaroni, soap, fertilizers, detergents, insecticides, gypsum and wood. Certain services, such as tourism, telecommunications, electricity and professional brokers, are taxed at a 5% rate. Goods such as large TV sets, refrigerators and cooling equipment, transmitters, air conditioning units, vehicles with engine capacity exceeding 1600c.c., cosmetics and perfumes, sanitary ware,... are subject to a tax rate of 25%.

The sales tax law allows producers to claim an input tax credit for taxes paid on inputs. However, the Egyptian system provides an input tax credit for goods only. No refunds are permitted for investment goods or services.

Social Insurance Contributions

These contributions are for medical care, old age security, industrial accidents and unemployment insurance. The employees' contributions are withheld by the employer from their wages and salaries.

As a percentage of the gross wage or salary, aggregated for both employers and employees, this tax rate is about 32% for wage income and 28% for variable income (e.g. production incentive bonuses) annually.

Property Tax

Real estate taxes are levied on the assessed net annual rental value of buildings and land. These rates range between 10% for non-residential buildings to 20 to 40% on residential buildings. The net rental value is 80% of gross rental value⁽³⁾ (20% of the gross rental value is deducted for maintenance and expenses). In addition to the basic rate, there is a complementary tax called guards tax (khafar tax) amounting to 20% of the original tax. Additional local taxes and duties are also imposed by the governorates of Egypt (KPMG 2000).

Stamp Duties

The stamp tax requires payment of a specific tax on a wide range of documents: contracts, minutes of companies meetings, commercial papers, various legal documents, cash receipts and the value of certain financial transactions.

⁽³⁾ Gross rental value for biuldings and land are respectively 8% and 5% of the value of the corresponding asset (Interview with tax experts).

Proportional stamp taxes are imposed on the value of certain financial transactions and instruments at prescribed rates, starting from 0.8% on loans, 1% on credits, they may go up to 36% on advertisements.

Customs Duties and Surcharges

Customs tax rates on imports have been reduced to range between 5 and 40%, with few exceptions including means of transportation which are subject to a rate of 135%. There is also an additional surcharge of 3% if the import tax is 30% or less and of 4% if the import tax exceeds 30%.

2-2 Investment Incentive System

Like many other developing countries, investment incentives are permanent features of the Egyptian tax policy, where the preferred form of tax incentive is the tax holiday. Egypt has heavily used tax incentives to encourage new industry to locate outside Cairo and Alexandria.

The Egyptian Income Tax Code (Law 157/1981 and the more recent Law 187/1993) contains specific *tax incentives provisions for investment and reinvestment*. The main tax benefits provided are as follows:

Income tax deferral for reinvestment. The code exempts the proceeds from the sale of a capital asset from income tax if they are reinvested in a similar type of asset. This is a significant tax incentive provision for reinvestment.

Tax deduction for investment in industrial assets. Deduction from the basis of corporate tax is allowed for the acquisition of assets used in industrial production activities. The amount of this deduction is equal to 25% of the cost of the assets. Although depreciation allowances must be computed on the reduced basis of the assets, the deduction can result in significant tax savings.

Five-year income tax exemption for new factories. A five year tax exemption from the corporate tax for new factories employing at least 50 persons is provided. The exemption starts the first year following the beginning of production operations.

Special exemption for paid-in capital. Companies listed on the Egyptian Stock Exchange have the benefit of a special income tax exemption equal to the product of paid-in capital times an interest rate set by the Central Bank. The amount of this exemption is thus equal to the alternative return that investors could have earned by investing in bank deposits. Hence, publicly listed companies are subject to the corporate tax only on the amount of profits beyond the alternative return on paid-in capital.

Other incentives for targeted investments. Among them are the following: up to ten-year exemption from tax on commercial and industrial net profits or from corporate tax for projects

engaged in land reclamation and cultivation, poultry, cattle, fishery, bee-breeding (no limit), tourism (5 years).

Other tax incentives that are especially important to foreign investments are provided under Law no. 8 of 1997 for Investment Guarantees and Incentives. This law has replaced Egypt's former Investment Law 230 of 1989 which itself had replaced Law 43 of 1974 on "Arab and Foreign Investment". A major feature of Law 8 is that *no minimum investment nor approval process is required. However, it is a targeted investment law. The law specifies sixteen activities* that qualify for the benefit of the law. They range from reclamation of desert land to industry and mining, air transportation, the tourism industry⁽⁴⁾. Other activities may be added by decree. This law provides incentives to inland investment as well as to offshore investment in free zones.

Law 8 provides the following kinds of incentives: to inland investments.

Investment guarantees

These guarantees cover in particular: nationalization, administrative seizure or sequestration, pricing interference and determination of profits, rescission of licenses, land ownerships rights, the right to import directly - without the need to be registered on the importation registry- or through intermediaries, raw materials and equipment. Similarly the right to export directly without being registered on the exportation registry is guaranteed. The law also includes exemptions from certain corporate law and labour law requirements.

Tax incentives

Law 8 provides several tax benefits, mainly:

Income Tax Exemption. Profits are exempted from taxes for a period of five years, starting the first year following the beginning of production. This exemption benefits corporations as well as individuals. It is extended to 10 years for investments implemented in specific remote areas (new urban communities, new industrial zones) or new projects financed by the Social Fund for Development.. A 20 years exemption is granted to investments outside the Old Nile Valley.

Exemption from the Stamp Tax and notarization/registration fees for three years starting from the date of registration with the Registry of Commerce. This tax is generally nominal but is a nuisance in business transactions.

Special Income Tax Exemption. Companies listed on the Egyptian Stock Exchange have the benefit of a special income tax exemption for an amount equal to the product of their paid in

⁽⁴⁾ Specifically the sixteen activities are: 1) reclamation and cultivation of barren and desert lands, 2) animal, poultry and fish production, 3) industry and mining, 4) hotels, motels,..., tourist resorts and tourist transportation, 5) transportation of goods in cooling vans, cold storage..., industrial products, food, containers and silos for grain, 6) air transport and directly related services, 7) external sea transportation of goods and passengers, 8) oil exploration services and delivery of gas, 9) residential housing projects, 10) infrastructure projects, 11) hospitals and certain medical centers, 12) finance leases, 13) guarantee of subscription in securities, 14) risk capital, 15) production of computer programs and systems, 16) projects financed by the Social Fund for Development

capital times an interest rate set by the Central Bank of Egypt. This exemption is identical to that provided by the Income Tax Law discussed earlier .

Exemption from the Tax on Interest Income. Income from registered bonds and other finance instruments issued by publicly listed companies is exempt from the tax on movable income which applies at the rate of 32% on interest-type income.

Reorganizations resulting from mergers, split-offs, or changes in legal status of companies operating under Law 8 are exempt from tax. Reorganizations will also not end prematurely the tax incentive benefits, they will not however, extend these tax benefits beyond the period originally granted.

Capital gains. An income tax exemption is provided on capital gains realized on the transfer of assets to a new legal entity as a capital contribution.

Customs Duties, apply at a flat rate of 5% for all machinery and equipment imported for investment projects under Law 8. These tariffs nominally apply at various rates ranging from 5% to 40% with some exceptions.

Land Allocations

State-owned land may be allocated free of charge or for a nominal rent for investments in designated areas. If the project is not implemented or production started within a certain time-period, the land is repossessed by the State.

Exemptions from Labour Law and Social Security Law Requirements

Law 8 companies are exempt from certain labour law requirement. In particular, they can freely hire Egyptian staff and are exempt from the provisions under the Companies Law 159 of 1981 requiring employees' participation in the companies' management. However, they are still subject to the general requirement that 10% of the distributed profits be allocated to employees. Law 8 companies are also free to organize their own social security schemes, provided that such schemes offer greater than or at least equal benefits to the general scheme.

Incentives to *offshore investments* in free zones.

Free zones are specified areas administered by a special government body according to preset administrative regulations. Special incentives are provided for investments in these zones. The main incentive is that activities within the free zones are permanently exempted from taxes, duties or customs procedures. This exemption applies to raw materials imported to be processed within these zones and to equipment, machinery and means of transport, except for passenger cars. However, goods processed within the free zones and sold in Egypt are subject to customs duties. A requirement set for admission in these zones is that at least 50% of the production must be exported.

Another important incentive in the free zones is that profits are not subject to Egypt's tax except for a 1% annual duty on the value of the goods stored or processed within the zone or a 1% duty on gross revenue in the case of services projects to be paid to the Investment Authority.

Various exemptions from certain corporate law and labour law requirements are also granted to investments in free zones.

It may thus be concluded that the current investment incentive scheme is based on tax holidays offered indiscriminately to a vast array of activities in the economy. The question remains whether tax holidays or import facilities are decisive factors in the decision to invest. *It appears that tax holidays are important for some companies to offset the inflated costs of doing business in Egypt*- such as high import duties, sales tax, costly and time consuming procedures through ports and customs, duty drawbacks,... Reducing these and similar inefficiences may be a more effective means of lowering the costs and attracting investments than tax holidays.

3- Critical Overview of Capital Income Taxation in Egypt

Before attempting to calculate the marginal effective tax rate, this section tries to provide an analytical evaluation of different aspects of the tax system in Egypt. To achieve this aim, three main questions will be addressed: Is the statutory tax level high or does the nominal tax level burden investors? Do the tax and incentives provisions have a distortionary effect on investment? Does the tax administration impose high costs on investors?

3-1 Corporate Income Tax in Figures Does the Corporate Tax Level Burden Investors?

Generally there are two approaches in designing tax policy: either to apply a uniform tax provisions to all activities combined with low tax rates, or to tax various activities differently in order to achieve specific economic goals such as export promotion, employment generation, or development of remote areas. The latter is usually accompanied with generous incentives and also results in a relatively high tax rate in some sectors. Evidence shows that Egypt opted for the second alternative. In what follows we examine the impact of this choice on the tax level, while the effects of the incentives schemes adopted will be studied in the next section.

Judging whether the current statutory tax rate is at the appropriate level or not, is a difficult task. In this regard the literature on optimal tax theory provides little practical guidance on the choice of the overall level of taxation (Vito Tanzi, 2000). Nevertheless, we will attempt to detect whether the actual corporate tax level is high and overburdens investors. Table (3-1) explores different revenues sources and reveals that taxes on individual and corporate income are an important source of public revenues. Their average shares in total revenues and total tax revenues are 22.% and 35% respectively, over the period 1994/95- 1998/99, of which corporate tax revenues represent 19 % of total revenue and 30% of tax revenues for the same period.

Comparison with other MENA countries in 1995 confirms this fact. The shares of corporate income taxes to both total tax revenues and GDP in Egypt are nearly 23% and

5% higher than the average of around 9% (with the exception of Iran) and 2% in MENA countries (see Table (3-2)).⁽⁵⁾

But why do corporate income tax (CIT)revenues seem to be high in Egypt? Besides many possible theoretical explanations for the high level of CIT, such as a large tax base, efficient tax administration, high level of investment - which are not the case in Egypt- two

Table (3-1)Revenues Collected as a Percent of Total Government and Tax Revenue
(Average for 1994/95-1998/99)

	% of Total	% of Tax
	Revenue	Revenue
Total Revenue	100	
Central government current revenue	89	
Tax revenue	64	100
Taxes on net income and profits	22	34
Corporate tax	19	30
Individual tax	3	4
Taxes on property	0	0
Taxes on goods and services	18	29
Taxes on international trade	13	21
Other taxes	10	16

Source: Central Bank of Egypt, Economic Bulletin, several issues.

Table (3-2)Corporate Tax Revenue: Cross Country Comparison,1995

(Percent)

Country	Corporate tax /total tax revenue	Corporate tax/GDP	Individual tax/GDP
Egypt	23	5	1
Morocco	8	2	3
Tunisia	7	2	2
Syria	0	0	0
Turkey	10	1	4
Iran	27	2	0
Jordan	9	2	1
Israel	9	3	11

Source: IMF, Government Finance Statistics, 1998 and International Financial Statistics, March 2000

⁽⁵⁾ If we take into consideration that Corporate Income Tax accounts for almost 88% of total tax revenues (Table 3-1), this would reflect that most direct income taxes burden falls on the corporate entities in Egypt, while in other comparable countries the burden is more felt by the individuals.

factors can help explaining the high level of corporate taxes in Egypt compared with other countries in the region: the level of statutory tax rates, and the composition of corporate tax revenues. Table (3-3) shows that statutory tax rates are relatively high in Egypt compared with other selected countries. In addition, the high corporate tax revenues is explained by the large participation of the oil sector, the Suez Canal, and the Central Bank of Egypt. Nearly 60% of the corporate tax yield is attributable to these economic authorities.

Country	Corporate Tax Rate
Argentina	35
Brazil	37
Chile	15
Egypt	32-40
Hong Kong	16
Indonesia	30
Jordan	15
Korea	31
Mexico	35
Morocco	35
Peru	30
Philippines	35
Singapore	26
Thailand	30
Tunisia	35
Turkey	33

Table (3-3) Corporate Income Tax Rates in Selected Countries

Source: KPMG (2000), ,KPMG Corporate Tax Rate Survey

As for the evolution of CIT, corporate tax revenues did not exhibit a significant upward trend during the 1990s. The question is why corporate tax revenues did not follow the same growth pattern as investment? If we take into account that the tax rate did not change over this period, this could be explained by: the generous incentive schemes in Egypt, the low levels of profits which reflect low productivity and efficiency levels and finally high tax evasion.

To sum up one may say that corporate income taxation seems to increase the cost of capital in Egypt. On the one hand, the statutory tax rate is higher than many other comparable countries. On the other hand, due to inefficient tax collection mechanisms, the government depends on many indirect taxes such as the sales tax, tariff duties, and many other surcharges and duties for

revenue purposes, which impose additional costs on investment. Thus, the share of corporate tax in total tax revenue understates the tax burden imposed on businesses.

3-2 The Taxation of Capital Income: Tax Rates and Incentives Do the Prevailing Tax and Incentive Schemes Distort Investment Decisions?

This section investigates whether Egypt's prevailing corporate income tax legislation and investment incentive laws contain any sources of distortion. It is worth mentioning that the analysis does not intend to critically assess the tax system and related incentives, but rather to explore the existing biases, if any, that may negatively affect investment decisions and allocations

In what follows we highlight the biases in the Egyptian taxation of capital across the different legal and organizational forms of business, sectors, domestic vs. exporting activities, sources of finance, assets, size of firms, and regions. The analysis is based on the statutory tax provisions and the current incentive systems.

Corporate firms receive more incentive

Concerning the level of tax, it is hard to compare the tax burden imposed on non-corporate and corporate enterprises While the former face progressive rates ranging from 20% to 40 %, corporate firms are subject to a flat tax of 40 %, in both cases there is an additional burden of 2 % development duty on taxable profits exceeding LE 18000. Moreover, corporate profits are not uniformly taxed in two respects: first manufacturing and export activities are taxed at a reduced rate, second joint stock companies listed in the Egyptian Stock Exchange are treated differently, as will be elaborated below.

Investment incentives ,however, seem to favour corporate firms. The tax law provides a tax holiday for five years for corporate firms engaged in industrial activity and employing more than fifty workers. Corporate firms are allowed to deduct from their gross taxable profit an amount equal to the dividends received by the company from their shareholdings in another Egyptian joint stock company, on condition that the company acquired the shares of the other company on its foundation. Moreover, machines and equipment imported by corporate firms are subject to a reduced tariff rate of 5%. Other legal forms of enterprises (mainly partnerships and foreign branches) do not enjoy this advantage unless they come under the Investment Incentives Law no.8.

On the other hand, corporate firms face the disadvantage that they can only carry their losses forward up to 5 years, while partnerships and sole proprietors can offset any losses incurred against other sources of income under the unified income tax.

Contrasting the legal profile of establishments in Egypt with the preceding analysis reveals that most firms in Egypt will not benefit from these advantages since non-corporate firms represent about 95 % of total establishment (CAPMAS).

Joint stock companies are particularly favoured

Joint stock companies are treated favourably in comparison with other corporate and non-corporate forms of business.

A joint stock company listed on the Egyptian Stock Exchange is entitled to claim an annual paidup equity capital deduction equal to the product of its paid-up equity capital and the interest rate payable on government treasury bills. This gives rise to differential taxation of corporate profits by nature of stock ownership : closely or publicly traded. Furthermore, a joint stock company which employs at least 90 % of its investment capital in securities, is allowed to deduct from its gross taxable profit an amount equal to the income from its owned shares and debentures, on condition that this allowance does not exceed the amount of profit distributed by the investment company to its shareholders.

Due to this preferential treatment, private joint stock companies account for nearly 84% of total corporate establishments and 64 % of total investment in the manufacturing sector (CAPMAS).

Manufacturing activities are favoured

Firms engaging in manufacturing receive special tax treatment. Corporate investments in manufacturing are subject to a 32 % tax rate (exclusive of the 2% development duty), while firms working in non-manufacturing or services are subject to a 40% tax rate (exclusive the 2% development duty). In addition, corporations engaged in manufacturing, and employing fifty or more workers are eligible for tax holidays for a period of five years. As for non-corporate engaged in manufacturing, the first LE 8000 of taxable profits are totally subject to taxes and then only 80% of the remaining profits are subject to taxes.

Despite this favourable treatment, the average share of manufacturing to GDP was only 16.6% for the period 1991/92-1998/99. It seems that tax incentives are not very effective in encouraging manufacturing growth, which calls for an evaluation of the cost and benefits of the tax and related incentives offered to this sector. Furthermore, if we take into consideration that a significant number of manufacturing firms (public and private) are employing less than fifty workers (% of the total number of establishments), the implication is that the benefits of such incentives will be confined to a limited part of this activity.

Investment in banks and insurance companies is also promoted over investment in the nonfinancial sectors.

Export activities are favoured but

The income tax law grants special treatment for enterprises engaging in export activities. Corporate firms are offered a concessional tax rate of 34% inclusive of the development duty.

Regarding the tax treatment of non-corporate engaged in exporting, the first LE8000 of profits is totally subject to taxes, then only 70% of the remaining profits are taxed.

Despite this favourable direct taxation treatment, indirect taxation does not work in favour of export promotion. On the one hand import tariffs impose a tax on exports, the equivalent economy wide anti-export bias of the tariff level was estimated to be in the range of 19.7% in 1997(see the study on Trade and Foreign Excharge Regime in Egypt). On the other hand, the non-deductibility of sales tax imposed on imported capital further increases cost and puts exports at a disadvantage. Added to this, the high tax rate on services (40% plus a development duty of 2%) limits the possibility of increasing exports. This may explain the low level of merchandise export performance in Egypt which accounts for only 5% of GDP compared with an average of 41% for some developing countries(World Bank 1999)

Debt is favoured over other sources of finance

Because bank interest income is not taxable, and interest on bank loans is deductible from the tax base, investors are more inclined to rely on debt in financing their investment rather than equity, retained earnings or any other financial institutions. This practice raises the average equity/debt ratio in Egypt to a level ranging between 1:3 and 1:4. which is too high compared to Egypt's comparative advantage, and undermines the financial viability of firms. In addition, this induces investors to get engaged in round tripping, obtaining a bank loan and then redepositing the proceeds with the lending bank. Such a financial transaction reduces the borrower's tax base by an amount equal to the interest paid on loans. (Barents, p.17)

Investment Incentives favour non-depreciable and short term assets

The extensive use of tax holidays discriminates against depreciable assets, hence investment in land is favoured over inventories and machinery. Added to this, the predominance of short tax holidays favours the use of short-lived assets over the use of longer termed assets. In this case investment in inventories will be preferred over investment in machinery. However, the use of FIFO rather than LIFO for the valuation of inventories results in higher burden on investors(Barents)

Investment in machinery and equipment is disfavoured by tax incentives . Although the tax law provides a 25% initial allowances for capital equipment, tax holidays discriminate against investments in depreciable assets. Furthermore, the sales tax applied on the value of imported equipment and machinery (inclusive of the tariff rate) erodes the advantage of high allowances. The failure to allow input crediting under the sales tax for purchases of capital goods creates an additional bias against investment in capital-intensive activities.

Medium and large firms are favoured

The income tax law exempts any industrial company employing fifty or more workers from the corporate tax for a period of five years. The tax law did not grant similar exemption to industrial partnerships or enterprises who are subject to the unified tax even if they employ fifty or more workers. This is an unjustified discrimination in tax treatment against small firms which account for more than 90% of the number of total establishments. Moreover, small firms are discriminated against because only corporate organizations qualify for free zones incentives. The result is that an unduly heavy burden is placed on small industries, craftsmen and workshops, and may partially explain why small firms choose to be informal, since even if they are formal they will not enjoy such incentives. This is not matching with the size distribution of establishments in Egypt, which reveals that the number of manufacturing firms employing less than fifty workers reaches around 77% of the total number of manufacturing firms(CAPMAS).

Investment located in free zones and outside the old valley are favoured

Commercial and industrial activities and joint stock companies profits are exempted from taxes for a period of five years starting from the first year of activities. This applies to enterprises operating in any activity covered by Law no.8/1997. For enterprises located in new industrial zones, new urban communities as well as remote areas, tax exemption is extended to 10 years. The exemption period increases to 20 years for activities located outside the Old Valley. As for companies operating in free zones, they are exempt from all Egyptian income taxes for an unlimited period. They are only subject to a duty of 1 % of the value of goods entering or leaving the free zone, or to an annual duty of 1% of the annual value added to the project.

Foreign and Egyptian investors are equally treated

Despite the fact that the enactment of Law 8 is considered a step forward in granting equal treatment for domestic and foreign enterprises, yet the general regime maintains some restrictions to foreign direct investment (FDI). Companies registering under Law 159 face limitations concerning ownership and management. According to this law, corporations must initially publicly offer shares of at least 49% to the company's equity, over the period of one month, to Egyptians, and only, in the case of lack of subscription by Egyptians may foreigners own the majority of shares. In addition, the company law states that the majority of directors must be Egyptian. The Insurance Law 91 of 1995 limits foreign firms' participation in Egyptian insurance companies to 49% (UNCTAD).

The corporate income taxation does not encourage R&D activities

Information and technology activities have been recently eligible for incentives offered by the Law No 8 of 1997. However, the latter does not grant these activities any special treatment compared to the 16 activities listed in this law. In contrast, governments in many developed countries use tax incentives to stimulate $R\&D^{(6)}$. In Egypt, expenditures on R&D are a

⁽⁶⁾ Canada used two types of tax incentives. First, the cost of R&D capital is reduced by allowing immediate expensing of R&D expenditure. This is equivalent of 100% capital consumption allowance. Second, current and

relatively low percentage of GDP estimated at 0.2% compared to the corresponding level in Turkey which is in the range of 0.7% of GDP. This is more apparent if we look at the percentage of R&D expenditures to GDP at the firm level which is 0.04% of GDP in Egypt and 0.5% of GDP in Turkey(UNCTAD,p20).

In view of this heavy reliance on tax incentives, Egypt's poor investment performance seems paradoxical. Egypt's investment ratio to GDP was on average around 18%. This is below the average of 27% for middle-income countries (World Bank, 1999). This implies that even with heavy reliance on incentives, the Egyptian taxation of capital is too high, and the current design of taxation of capital in Egypt is not effective in inducing investment. Furthermore, it seems that the multiplicity of incentives introduced in Egypt over time have led to complex tax administration procedures and opaque tax accounting, resulting in distorted pattern of investment, large incidence of tax evasion, and little revenue. This issue is considered later.

It seems that the relatively high tax rates and different tax treatment coupled with a multiplicity of incentive schemes have led to a distorted and non-uniform treatment of different investments. How would these distortions affect the real tax burden and the efficient allocation of investment ? Based on the METR index, the next section will provide a quantitative answer to this question

4- Assessment of the Effect of the Tax System on Investment Decisions

4-1 Methodology

Effective tax rates on capital are calculated to determine, in addition to the effect of statutory tax rates on corporate and non-corporate investment income and return, the impact of other aspects of the tax system such as capital allowances and tax incentives on the actual amount of tax paid and on investment profitability. Effective tax rates also consider the way personal taxes affect the return of investment to the individual savers.

Taxes on business income (corporate and non-corporate), in general, raise the pre-tax rate of return required to yield a given post-tax rate of return. Hence a firm (corporation, proprietorship, partnership) has to earn a higher pre-tax rate of return on its investment in order to obtain, after paying taxes, a post-tax rate of return, at least as high as could be obtained by a bank deposit or government bonds of equal value. Taxes on personal income from the corporate sector reduce further the income to savers compared to the gross amount they receive. The difference between the pre-tax rate of return earned by firms and the post-tax receipts an individual gets is a measure of the total distortion (total tax "wedge") caused by taxes.

capital R&D expenditure is eligible for a tax credit that varies by size of business and location of activity. Empirical evidence has shown that R&D tax credits had a significant positive effect on R&D investment in Canada, and that for every dollar of revenue foregone by the national treasury, \$1,80 worth of additional R&D investment was undertaken (Anwar Shah, 617).

Three rates of return are useful to focus on when discussing the effects of the tax system on investment decisions:

p = the real pre-corporate tax rate of return to projects,

r = the real interest rate (= return on government bonds or bank deposits before payment of personal taxes),

s = the real post-personal tax rate of return received by the savers (the ultimate financiers of the investment),

p-s = tax wedge.

The precise methodology used to calculate effective tax rates on marginal investments is based on an approach developed by King and Fullerton (1984). This methodology has further been applied by OECD (1991) and the World Bank. Dunn and Pellechio (1990) from the World Bank developed the METR model for their survey work on the taxation of business income in developing countries. This is a very useful and valuable tool to calculate effective tax rates for a variety of tax policies, types of investments and tax incentives. The METR (Marginal Effective Tax Rate) model is based on assuming a hypothetical project with a particular internal before taxes rate of return. METR generates a cash flow for the project. Given the appropriate information on tax policy, the model applies this information to the cash flow and derives the internal rate of return for the after tax cash flow. The effective tax rate is the difference between the before and after tax rates (ETR) of return expressed as a percentage of the before tax rate of return.

$$ETR = \frac{p-s}{p} \times 100 = \frac{BTROR - ATROR}{BTROR} \times 100$$

Calculation of these rates of return is based on the specification of the before tax cash flow (BTCF) and the after tax cash flow (ATCF). The cash flows are generated by following basic accounting principles and straightforward application of the tax code. Thus:

 $BTCF_t = InvInc_t - InvExp_t - EconDep_t - Int_t - Princ_t + NetSalesofAssets_t$

where :

- $InvInc_t$ is investment income. It is equal to the revenue from the investment project net of wages and costs of intermediate goods and services.

- $InvExp_t$ denotes the sums used (equity or debt or any combination of the two) to finance investment in year t.

- EconDep_t is economic depreciation in year t. It is assumed to be equal to replacement cost such that the real value of the original investment remains constant all through the life of the project.⁽⁷⁾

- Int_t and $Princ_t$ are respectively interest payment and principal repayment in year t. They only appear when the project resorts to debt financing.

- NetSalesofAssets_t denotes the net sales proceeds of the assets in year t. These proceeds are calculated as $I_o (1 + \pi)^t$ where I_o is the initial investment, π the expected annual inflation rate and t is time. For t = 0,1,..., T-1, $I_o (1 + \pi)^t = 0$ whereas it is $I_o (1 + \pi)^T$ in the terminal year considered for the investment project, so long as investment in each period t= 1,2,... equals the economic depreciation

 $ATCF_t = BTCF_t - (t_c + d) (InvInc_t + InvCred_t - Dep_t - IntDed_t - Carryover_t + Capgain_t + Inventgains) - Proptax.$

where:

- t_c denotes the corporate tax rate and d is the complementary tax called the "development of state resources" duty whenever applicable.

- $InvInc_t$ is, as defined previously, income that results from the main activities of the firm, or investment income.

- InvCred_t is investment credit in year t.

- Dep_t denotes depreciation allowances which include initial allowances granted in the first year of the depreciation schedule, annual allowances granted each year and possible adjustments when the assets are sold in the final year.

- IntDed_t denotes deductions of interest on bank deposits and dividends earned, allowed by law 159/1981

-Carryovert is prior years' corporate losses cumulated over at most five years before year t.

- Capgain_s refers to capital gains earned from the sale of depreciable fixed assets in year t, if the proceeds are not reinvested in new fixed assets.

- Inventgains is nominal gains on goods held in inventory in year t.

⁽⁷⁾ Assuming α_i to be the share of asset i in initial total investment I_o and δ_i the rate of economic depreciation for this asset, the rate of economic depreciation of these assets in year t may be estimated as : EconDept = $(\alpha_1\delta_1 + \alpha_2\delta_2 + \alpha_3\delta_3 + \alpha_4\delta_4)$ I_o $(1+\pi)^t$ - where π is the expected rate of inflation. It is assumed in the calculation to remain constant over time, and 1 to 4 refer successively to investment in land, buildings, machinery and equipment, and vehicles. Economic depreciation is equal to investment replacement necessary to preserve the real value of investment constant.

- Proptax denotes real estate tax paid by the firm on property.

The after-tax corporate cash flow thus equals the before- tax cash flow minus taxes paid on taxable income and other taxes, before distribution of dividends, plus tax credits. Taxable income in Egypt equals investment credits minus depreciation allowances, investment deductions and interest deductions. Taxable income is further reduced by losses which may be carried forward for five years. Capital gains (or losses) are also included in taxable income. Distributed corporate dividends are, according to the Egyptian tax code, exempt from movable income tax.

4-2 Parameters of the Model

Application of the model requires the specification of several parameters related to the project under study and to the tax policy.

4-2-1 The Project. The project includes physical investment, the terms of operation of the project and its financing.

Physical investment includes three depreciable assets and one nondepreciable (land). The shares of each asset in total physical investment have been derived from the 1996/97 Economic Census.⁽⁸⁾ They have been set in the base case, for corporate business in manufacturing as : 4.75% for land, 25.16% for buildings, 64.68% for machinery and equipment and 5.41% for vehicles. For corporate business in services the respective figures for the assets structure are 18.28%, 37.82%, 29.87% and 14.03% for land, buildings, machinery and equipment, and vehicles respectively. Services considered include: trade , hotels and restaurants, financial mediation, education, health and other social and personal services. Transport and communications have been excluded as their highly machinery intensive asset structure distorted the results of the METR calculations⁽⁹⁾ Electricity and construction are also excluded because, according to the Ministry of Planning they are considered as commodity producing sectors.

Real economic depreciation, as specified in Dunn and Pellechio (1990) is assumed to be 3.6%, 12.25% and 30% for buildings, machinery and equipment, and vehicles successively.

Terms of operation. The project is assumed to incur all of its investment costs in the year 0 before it starts generating income. In subsequent years, the project generates a stream of before tax cash flow that remains constant in real terms from year 1 till the end of the operating period T = 10 years. The initial level of operating income is chosen so that the project generates a real BTROR assumed to equal 20% of equity invested ⁽¹⁰⁾. Finally, capital is sold at the end of its

⁽⁸⁾ CAPMAS: Economic Census

⁽⁹⁾ The high share of machinery and equipment in the asset structure of the transport and communication activities together with the 25% initial depreciation allowance granted to this asset uneralistically reduce the METR on services when this activity is included in the sector. ⁽¹⁰⁾ This assumption of fixed pre-tax rate of return conforms to what King and Fullertion call the fixed p-calculation

⁽¹⁰⁾ This assumption of fixed pre-tax rate of return conforms to what King and Fullertion call the fixed p-calculation which is said to be a better guide to the schedule of tax rates levied on different kinds of projects and determines the welfare losses resulting from the distortionary effect of taxation on capital income.

operating period (10 years) at its real initial value I_o , that is at a nominal value of $I_o (1+\pi)^{10}$, where π is the expected inflation rate. The annual inflation rate (April 1999/ April 2000) of 2.9% is used as a deflator (CBE July 2000). Egyptian taxation system is a non-indexed system.

Terms of Financing. Several sources of finance are available to corporate business in Egypt principally direct financing by investors through sale of equity or previously retained earnings or through borrowing - mainly borrowing from banks. The usual debt/equity ratio in Egypt has been estimated by accountants at 2:1. It may go up to 5:1 or sometimes higher. Retained earnings are assumed to equal 5% of profits for corporate firms (legal reserve) and 0% for non-corporate firms⁽¹¹⁾ Two cases have been considered: all equity financing and partial financing through debt with debt/equity ratio estimated at 2:1.

The loan duration, i.e. the period over which amortization of the loan is achieved, is assumed to be equal to the operating period.

The interest rate on retained earnings and on capital investments is assumed to be equal to 9.25%, the average interest rate on bank deposits.

4-2-2 Taxes on Income

The corporate income tax is the main tax considered. Its basic rate is 40%, however to encourage manufacturing and exports, this rate is reduced to 32% for income generated by such activities. In all cases, an additional 2% is imposed as a duty for the development of state resources, whenever taxable income exceeds L.E.18 thousand per year.

The corporate income tax base is revenue less expenses. Revenue includes annual income, capital gains and interest earned on retained earnings. Deductions from this revenue may include, in addition to current operating expenses (wages and cost of intermediates), depreciation, interest paid on debt, principal repayments, carried over losses up to five years, paid - up capital deductions⁽¹²⁾, import and property taxes.

Straight line depreciation is applied in Egyptian accounting practices for tax purposes. For buildings, applied rates of yearly depreciation are 2% in services and 3% in industry. For vehicles and machinery the rates are 20% and 10% respectively. New machines and equipment used by firms in productive activities (mostly interpreted as manufacturing activities) are granted an initial allowance of 25% and the remaining 75% is depreciated over a 10 years period.

⁽¹¹⁾ Another element that reduces the return to capital in corporate firms, besides the legal obligation to retain 5% of profits, is the employees' profit sharing of 10% of total distributions

⁽¹²⁾ This deduction is equal to the paid - up capital multiplied by the interest rate and is only applicable to joint stock companies listed on the stock market. The interest rate applied to joint stock companies under law 157/1981 is the prevailing interest rate on time deposits at banks in Egypt for one year (9.25%) whereas the rate applied to joint stock companies under law 8/1997 is the Central Bank of Egypt lending or discount rate (12.0% as of the end of 1998) (KPMG,1999).

Distributed dividends enjoy an exemption from movable income tax. Thus, the effective tax rate to the shareholders or the partners in limited liabilities companies is the same as that imposed on the firm. Retained earnings are also exempt from other taxes, as they have already been subjected to corporate tax on investment income.

Personal income taxes. In the case of sole proprietorships and general partnerships, no income tax is imposed at the firm level. But personal income tax is levied on the share of the proprietor's or the partner's net income derived from the firm. *Non- corporate entities are deprived from some deductions allowed to corporate business,* the most important is paid up capital deductions. Property tax is imposed at the firm level and is deductible from taxable income accruing to the owners. Capital gains and distributed profits, as part of individual owners' income are taxed at the following rates: 20% for profits less than L.E.2500, 27% for less than L.E. 7000, 35% for less than L.E. 16,000, 40% for amounts exceeding L.E. 16,000. For taxable incomes in excess of L.E. 18,000, an additional 2% duty for state resources development is also imposed.

Manufacturing and exporting activities are granted respectively 20% and 30% deductions from non-corporate profits exceeding L.E. 8000, before imposition of the income tax.

Retained earnings are assumed to be zero for non-corporate firms.

4-3 Effective Tax Rates on Capital in Egypt

This section discusses the impact of the Egyptian tax system based on the METRs computation for private investment projects. Differentiation between tax treatment according to organizational forms of business, sectors of activity, sources of finance and asset types are considered. The assessment of the impact of the main tax incentives on the METR are also presented. We particularly emphasize the following aspects of the tax system:

- 1) the impact of the effective tax compared to the statutory tax,
- 2) the impact on various organizational forms,
- 3) the choice of sources of finance,
- 4) the impact on manufacturing and services activities,
- 5) the effect on exporting,
- 6) the effect on asset structure.

4-3-1 Effective Burden of Taxation

METR estimates in Table (4-1) reveal that the Egyptian tax system imposes a burden on capital different from that reflected by the ststutory tax rates on profit. The table provides two sets of METR estimates: the first illustrates the impact of direct taxation only, while the second incorporates both direct and indirect taxation. It is worth noting that the effective tax rates based on direct taxation differ from the statutory tax rates on profits. Sources of divergence are mainly the special tax allowances such as those granted to joint stock companies and to non-corporate firms engaged in manufacturing and exporting, property taxes and the non-indexed tax system in Egypt. Special allowances work on reducing METRs, while property taxes increase METRs and

finally non-indexed depreciation and capital gains raise METRs. Indirect taxation in the form of tariffs and surcharges, sales tax and stamp duties impose an additional cost on capital as reflected by the second set of METRs estimates.

			(Percent)
Activity and Legal	Tax Rates on	METRs: Direct	METRs: Direct and
Form	Profits	Taxation	Indirect Taxation
Manufacturing			
Joint Stock	32	22.9	41.6
Other Corporate	32	36.8	54.5
Non-Corporate	20-40	31.2	53.6
Services			
Joint Stock	40	29.6	47.2
Other Corporate	40	46.6	63.2
Non-Corporate	20-40	39.2	58.4
Exports			
Joint Stock		22.9	41.6
Other Corporate		36.8	54.5
Non-Corporate		28.3	50.9

Table (4-1)Tax Rates on Profits and METRs in Egypt

Source: Own Calculations

This applies to all firms regardless of their legal forms or activities.

4-3-2 Impact on Organizational Forms and Activities

Table (4-1) also shows that due to the tax deduction of the imputed cost of paid-up capital granted to joint stock companies⁽¹³⁾, listed on the stock market and financed by equity, they bear the least METR followed by non-corporate firms and finally by other corporate firms (limited liability companies and partnerships limited by shares). This result holds for the two sets of estimates, as well as across economic activities. It appears further that due to the tax deduction enjoyed by joint stock companies listed on the stock market, METR associated with direct taxation on capital is lower than the statutory tax rate on corporate profit.

METR figures in Table (4-1) also reflect the 1997 revision of the unified personal income tax schedule (which entailed the simplification of the schedule from six to four categories and a reduction of its upper limit from 48 to 40%). This revision has had the effect of correcting an obvious bias against non-corporate firms in the past (World Bank,1995). The results point to a more favourable treatment for non-corporate firms compared to corporate firms other than joint

⁽¹³⁾ Joint stock companies are assumed to be listed on the stock market and are thus eligible for the paid-up capital allowance.

stock. The gap between corporate and non-corporate firms of course declines as non-corporate firms realize higher profits and thus face higher average tax rates.

In all cases, *manufacturing is favoured* by the tax system compared to services as indicated in Table (4-1). In the manufacturing sector, for example, METR estimates based on direct and indirect taxation show that joint stock companies face the least METR estimated at 41.6% compared with 53.6% for non-corporate firms and 54.5% for corporate firms other than joint stock. The corresponding rates in services are 47.2%, 58.4% and 63.2% successively.

Exports receive the same tax treatment as manufacturing in corporate taxation while they are favoured in non-corporate firms, as will be shown later.

4-3-3 Sources of Finance

Generally speaking, METRs tend to fall when the initial investment is partially financed by debt and the tax system allows for the deductibility of non-indexed interest payments. METRs estimates in Table (4-2) are consistent with this predication for all legal forms other than joint stock companies.

				(Percer	
		Effective Tax Rates			
		Joint Stock	Other Corporate	Non-Corporate	
Manufacturing					
All equity		22.9	36.8	31.2	
Debt/Equity finance	2:1	27.0	34.65	28.6	
Services					
All equity		29.6	46.6	39.2	
Debt/Equity finance	2:1	34.35	45.6	34.7	

Table (4-2)				
Effective Tax Rates on Capital According to Sources of Finance				

Source: Calculated

For corporate firms other than joint stock, METR in manufacturing falls from 36.8% to 34.7% when the firm relies on a 2:1 debt/equity ratio compared to 100% equity finance. A similar conclusion holds for non-corporate firms. It is noteworthy that METRs decline further as the debt/equity ratio increases. However, excessive decreases in the project leverage negatively impacts its profitability and sustainability due to heavy principal repayment requirements.

Conversely for joint stock companies, METR in manufacturing activities, increases from 22.9% in the case of all equity finance to 27.0% in the case of 2:1 debt/equity finance. The main reason behind this anomaly is the lost benefit of the paid-up capital allowance granted to joint stock companies.

The same observations apply to the services activities, although the marginal effective tax rates are consistently higher in these activities relatively to manufacturing.

In conclusion, resorting to debt financing considerably alleviates the effective tax burden on projects other than joint stock companies, hence providing an additional incentive to borrow for financing new investments. This channel, however, is not easily accessible to non-corporate businesses, particularly if they are small or even medium in size and are unable to provide the necessary collaterals for bank borrowing. Hence, they are more likely to be faced with a heavier burden of taxation.

4-3-4 Impact on Exports

The corporate income tax and the personal unified tax clearly affect the cost of capital engaged in exporting activities. *The same corporate tax treatment provided to manufacturing is given to export activities.* However, as previously noted, the unified personal tax code offers added incentives to exporters by allowing a 30% profit deduction from the tax base if profits from exporting exceed L.E. 8000 annually. These deductions decrease METRs on manufacturing from 53.6% in case of all equity financing to 50.9% exporting as shown in Table (4-1). This is a very modest incentive with respect to the costs and efforts exporters have to incur to accede to external markets.

4-3-5 Impact on Asset Structure

Capital income taxation in Egypt discriminates against depreciable assets such as vehicles and machinery, and favours land (Table (4-3)). METR calculations (inclusive of indirect taxation) indicate that vehicles are the most taxed (ranging between 95.1 and 113.3%), followed by machinery and equipment (ranging between 43.6 and 64.0%), buildings (ranging between 26.4 and 48.8%), and finally land (ranging between 24.6 and 46.0%). This pattern holds across different organizational forms and across all activities. For example, in the case of joint stock companies operating in manufacturing, vehicles are taxed at 95.1 %, while land is taxed at 24.6 %.

The relatively high METR on vehicles and machinery is due to the high tariff rates and the fact that sales tax is imposed on the value of imported goods inclusive of tariffs. At the same time there is no input credit for the sales tax to reduce the bias against investment in vehicles and machinery. These conclusions become clear when we compare the figures reported in Table (4-3) with METR estimates exclusive of indirect taxation (shown in Table A.1 in the Appendix).

	- ·			(1)
	Land	Buildings	Machinery &	Vehicles
			Equipment	
Corporate Firms				
Manufacturing & Exporting				
Joint - Stock Companies	24.6	26.4	43.6	95.1
Other Corporate	38.3	40.1	56.1	105.9
Services				
Joint - Stock Companies	28.9	31.8	48.4	98.5
Other Corporate	46.0	48.8	64.0	113.3
Non-Corporate Firms				

Table (4-3) Asset Specific METRs: Impact of Direct and Indirect Taxation

(Percent)

Services 38.5 41.5 63.1 107.9	Manufacturing	32.6	34.6	57.2	102.2
	Services	38.5	41.5	63.1	107.9

Source: Calculated

Based on the above analysis, one may conclude that the taxation regime in Egypt relatively increases the cost of capital. It also indicates that the regime favours joint stock companies listed in the stock exchange, manufacturing, exporting firms, debt financing, and land. The question is: how would these results differ if tax holidays and transaction costs related to tax compliance are taken into account?

5- Impact of Tax Incentives

Besides direct and indirect taxation, tax exemptions affect the cost of capital. The main concern in this section is to examine how these incentives affect METRs calculated in the base case. Do they significantly reduce the tax burden on investors? Do they deepen the existing biases or do they reverse them?

According to the Investment Incentives and Guarantees Law (Law No. 8 for 1997), companies falling under this law, regardless of their legal form, are exempted from taxes for a period a five years starting from the first year of activity. For enterprises located in new industrial zones, new urban communities, or remote areas, tax exemption is extended to 10 years. The exemption period increases to 20 years for activities located outside the Old Valley. As for companies operating in free zones, they are exempt from all direct and indirect taxes for an unlimited period. They are only subject to an annual duty of 1% of the value of goods manufactured or of total annual revenues for services projects.

The impact of tax holidays granted under Law 8/1997 to inland projects and of lifetime tax and duty exemptions granted to projects located in free zones has been assessed. As tax holidays vary in length, the analysis was carried out for 5 years holiday, also METRs were estimated for projects enjoying 10 and 20 years tax exemptions⁽¹⁴⁾. Tables (4-4) and (4-5) show that inland projects enjoying a 5 years tax holiday face lower METRs across all legal forms, economic activities, and all types of assets than in the case of no incentives. Estimated METR for manufacturing, for example, declines by 10.8 percentage points for joint stock companies, 18.3 for other corporate entities and 20.6 for non-corporate projects. Virtually more than half of the real burden on projects operating under Law 8 can be attributed to indirect taxation. Law no. 8 for what concerns inland projects, cuts down the burden of direct taxation, namely the impact of profits tax, but touches very lightly on indirect taxation. In the case of free zone projects, because the law deals effectively with direct as well as indirect taxation, METRs are very low.

Table (4-4) also shows that tax holidays mitigate the effect of the preferential tax treatment granted under corporate income tax law to joint stock companies and manufacturing activities. Differences in METRs across legal forms become less pronounced, and the bias in favour of joint stock companies (in the base case) is reduced due to the partial erosion of the paid-up capital allowance incentive as a result of tax holidays. METR estimates also show that the favourable treatment of manufacturing over services is less apparent in case of inland projects and even

⁽¹⁴⁾ The simulations for 10 and 20 years tax holidays are presented in Table A.2 in the Appendix.

slightly reversed for free zone investments. The 0.1% bias against manufacturing in the free zone is due to the higher share of depreciable assets in the capital structure of manufacturing compared to services (95% for manufacturing compared to 82% for services).

L.		(Percent)
	Manufacturin	Services
	g	
No Incentive Case		
Joint Stock	41.6	47.2
Other Corporate	54.5	63.2
Non-Corporate	53.6	58.4
Tax Holidays Inland		
Joint Stock	30.8	32.0
Other Corporate	36.2	38.9
Non-Corporate	33.0	35.5
Tax Exemptions in Free Zones)		
Corporate	3.8	3.7
Non corporate	1.5	1.5

Table (4-4)METRs under Various Incentives Schemes:Impact of Direct and Indirect Taxation

Source: Authors' calculations

However, as revealed from Table (4-5), METR variations by assets persist under Law No. 8 for inland projects. This is largely because inland tax holidays deal only with direct taxation, and do not affect indirect taxation which is responsible for high and different METRs across assets. As regards sources of finance, equity turns out to be a more favourable option to investment finance compared to debt for all legal forms. Inland projects resorting to debt are deprived of interest deductibility during the tax holiday while other factors, such as the non-indexed capital gains and depreciation and lower rights for investors in case of debt finance, pushing METRs upwards persist (see Table A.3 in the Appendix).

The main conclusion is that Law No. 8 reduces the cost of capital for inland projects across all legal forms, economic activities, and assets. As for the impact of tax holidays on differential tax treatment, the analysis illustrates that while it reduces the biases across legal forms and activities, it maintains the biases between assets. In free zones, METRs decline more drastically relative to inland companies.

On the question of effectiveness of tax incentives in free zones, there is clearly a revenue loss for the government. More importantly, some studies show that nearly 77% of the shipments from the free zones go to Egypt and only 23% go to foreign markets (Marks et al.,1999). To the extent that these numbers are accurate, they indicate that free zones incentives are mainly directed to importing operations rather than exporting activities, as was supposed to be the real raison-d'etre of these zones.

Table (4-5)Asset Specific METRs under Various Incentives Schemes:Impact of Direct and Indirect Taxation

			(Pe	rcent)
	Land	Buildings	Machinery &	Vehicles
			Equipment	
No Incentive Case				
Corporate Firms				
Manufacturing				
Joint Stock Companies	24.6	26.4	43.6	95.1
Other Corporate	38.3	40.1	56.1	105.9
Services				
Joint Stock Companies	28.9	31.8	48.4	98.5
Other Corporate	46.0	48.8	64.0	113.3
Non-Corporate Firms				
Manufacturing	32.6	34.6	57.2	102.2
Services	38.5	41.5	63.1	107.9
Inland investment				
Corporate Firms				
Manufacturing		_		
Joint Stock Companies	12.6	14.2	33.0	84.4
Other Corporate	17.7	19.4	38.3	91.1
Services				
Joint Stock Companies	13.8	15.3	33.4	86.4
Other Corporate	20.3	21.9	40.0	95.0
Non-Corporate Firms				
Manufacturing	13.8	15.75	35.2	89.2
Services	16.2	17.9	36.6	92.6
Free zone				
Corporate	3.3	3.5	3.9	4.7
Non-corporate	1.0	1.2	1.6	2.5

Source: Authors' calculated

6- The Impact of Tax Compliance

Besides tax rates and incentives, tax compliance may affect investment decisions through either increasing the tax burden or creating some distortions, or both. It is well recognized that tax compliance in general is a function of economic incentives imbedded in the tax rate from one side and of the effectiveness of tax administration in detecting and penalizing non-compliance, on the other (Chen and Reinikka, 1999). In what follows we try to examine key features of taxpayer compliance in Egypt, namely related transaction costs and tax evasion.

Tax administration and transactions costs

Despite the growing consensus that there have been favourable and progressive changes in the business environment recently, several private investment surveys registered taxes as the most impeding constraint for business operations. Investors do not complain about the level of taxes as much as the complicated tax administration itself. The latter, in their opinion, is inefficient, costly and time consuming. This raises transaction costs and affects negatively their efficiency. In terms of specific problems related to tax administration, the private sector complains most about the lack of trust between tax collectors and tax payers, inefficiency of the dispute settlement system and arbitrary estimation of taxable profits, in that order. Investors report that they do not know how much taxes they actually have to pay. The main problem is that the criteria for tax officers and taxpayers to extreme initial bargaining positions. In many instances, it leads to underreporting of taxable income or tax evasion and often leads to disputes that take years to resolve in court. Moreover, taxpayers complain that tax collectors tend to overestimate taxes due to the collection targets which act as incentives to tax officers (World Bank, 1992 and 1994, Hassan, 1996, Galal (1996), Fawzy (1998)⁽¹⁵⁾).

There is no rough estimation of tax administration –related transaction costs in terms of additional cost or in terms of foregone time. However, the 250,000 pending tax cases in Egyptian courts could give an idea about this issue.

Inefficient tax administration was perceived as inflicting time-consuming compliance costs. In Egypt we do not have specific estimates for transaction costs attributed to tax administration. However we have a general estimation of transaction costs due to bureaucracy in general. Investors say that the time consumed in compliance with the bureaucracy is in the range of 16 days per year on average (World Bank survey1999). A World Bank study estimates that inefficient sea-port service raises CIF cost for imports by over 10% (World Bank, 1997) If we take into consideration, that several business environment surveys pointed out that tax systems are the most impeding constraint, then we may be able to say that transaction costs due to cumbersome tax administration procedures are not negligible.

⁽¹⁵⁾ Other problems that face private sector firms include low productivity, inefficient banking sector, and lack of adequate support services, in addition to other institutional constraints

Tax administration and Tax evasion

Theoretically, people evade taxes when at the margin the expected benefits(lower taxes) are rather higher than the expected costs(penalties). In Egypt, it seems that the benefits from tax evasion exceed the costs. On the one hand, the statutory rates are high, and tax administration is cumbersome, on the other hand, both financial and criminal penalties are not sufficiently deterring. The magnitude of the financial penalties is relatively low and criminal penalty is seldom imposed⁽¹⁶⁾.

Estimates for tax evasion vary widely, some sources indicate that the estimated cost of tax evasion on the Treasury reached almost L.E. 14 billion per year, of which L.E 6 billion are evasion from income tax (Atta, 1999). While official figures announced in El-Ahram newspaper is 17.6 LE billion (April 2000). Another proxy or indicator of tax evasion is the large size of the informal sector which evades taxes altogether. EFG-Hermes estimates the size of the informal sector to amount to nearly 40% of the total Egyptian economy.(EFG-Hermes). Firms that do comply to the tax system ackowledge difficulty with informal practices of their competitors As for tax evasion associated with complicated tax administration, some firms said that they keep nearly 20% to 24% of the value of their total sales off the books. (World Bank, Business Environment survey in 1999)

While the magnitude of tax evasion seems to be high this is not out of line with international experience Tax evasion is reported to be similar to that of other developing countries such as Korea and Indonesia, and generally lower than its corresponding level in some countries like the Philippines and Brazil.

But how does tax evasion affect investment? As there is no accurate estimate of transaction costs related to tax compliane, and of the magnitude of tax evasion in Egypt, METR calculations could not capture this phenomenon. By being informal , productive units are deprived from many services available in the formal sector such as financial support.. It is important to note that as the magnitude of transaction costs and tax evasion differ from one firm to another, tax compliance is expected to affect tax payers differently. Those who adhere to the tax regulations are in an unfair competition situation compared with those who succeeded in non-complying to the tax system.

7- Conclusion and Policy Implications

Although taxation is not the most important determinant of investment, it has a major impact on its competitiveness and its net profitability through affecting the cost of capital and the expected net revenue from a given investment. Moreover, different tax burdens distort investment allocation. Recognizing the importance of these effects, tax reform has been under consideration for some time within the Egyptian policy-making circles. This study tries to identify the tax induced distortions associated with the current system of taxation and to consider their likely

⁽¹⁶⁾ Financial penalty is equal to 10% of tax due with a maximum of 1000 pounds, Criminal penalties are vague, citing "punishment by imprisonment " as a possible penalty for failing to register with a tax authority , or submitting inaccurate records to hide taxable income. (Sahar Tohamy 1998)

impact on investment profitability. To this end, we have attempted to estimate effective tax rates under various business circumstances. This last section begins with a brief summary of the main findings, then concludes with some policy recommendations based on the results of the study.

Corporate income taxation in Egypt is **complex**. Tax rates are relatively **high** and **non-uniform**. The actual tax burden imposed on firms varies according to legal form, economic activity, market orientation (domestic vs export), means of financing, type of assets and location. The tax system favours joint stock companies, manufacturing, large firms, debt financing and investment in land.

The statutory tax rate is high. Noncorporate firms, depending on their income level, face four tax rates ranging, from 20% to 40% plus an additional 2% development duty for annual incomes exceeding L.E.18,000. Corporations, are taxed on their net profits at a normal rate of 40% (exclusive of the development duty) or, if engaged in manufacturing or exporting, at a concessional rate of 32% (exclusive of the development duty). To alleviate the heavy tax burden associated with these high rates, the government of Egypt (GOE) uses generous tax deductions (e.g. 25% of the value of machinery as initial depreciation allowance) to calculate the tax base subject to the usual corporate tax rates. The GOE recurs further to generous and untargeted incentive schemes (tax holidays, tax credits) to reduce the tax burden on projects subject to the Investment Incentives and Guarantees Law operating inland or in free zones. Although tax holidays reduce marginal effective tax rates on capital, they often do not provide significant cuts compared to the normal tax treatment.

Foregone government revenues due to heavy reliance on these incentives seem to be unjustified in terms of the resulting modest investment growth and distortion in investment allocation. Whatever are the benefits of these incentives, it seems that their costs surpass their gains, thus suggesting low cost effectiveness. The multiplicity of these tax incentives and exemptions results in an opaque system that is further complicated by tax administration procedures.

The implication of non-uniformity of income tax generous incentives schemes is that tax administration is burdened with too many tax provisions and a wide range of exemptions and incentives. The result is detrimental to both investors and the government itself. Investors complain from high taxation and complicated tax procedures and the government suffers from high incidence of tax evasion.

Assessment of indirect taxation (including sales taxes and import duties) on marginal effective tax rates on capital indicates that its burden on the investor is even higher than that of income taxes. Furthermore, tax incentives do not offset the burden of sales taxes and import tariffs on inland projects which remain highly constrained by such taxation.

If Egypt is to simultaneously promote investment and growth, it cannot avoid a reform of its tax system with respect to the treatment of capital. The reform involves both the reduction of tax

rates and unification of tax treatment of various investments to address the major sources of distortions revealed by the analysis. In what follows, are some policy suggestions and recommendations for consideration:

- A clear policy implication arising from the experience of other countries is that a lower and uniform tax rate with limited recourse to incentives is more effective in stimulating investment and, at the same time, results in minimal distortions. Accordingly serious consideration should be given to reducing the corporate income tax rate to no more than 30% to all activities and corporate firms and to eliminate all other surcharges such as the development of state resources duty. A study of the elasticity of tax proceeds with respect to tax rates may well indicate a positive response of these proceeds to reductions in tax rates especially when viewed in a dynamic perspective. Reduction in tax rates may stimulate further expansion of productive activities hence enlarging the tax base.

- Reduction of the maximum tax rate on commercial and industrial profits applied on net revenues of non-corporate firms to 30% is also warranted. Revision of the minimum income exempt from the unified income tax from its current level of L.E. 3000 to at least L.E.10,000 annually - as a means to support low income groups and to promote micro and small enterprises which often avoid taxation by remaining in the informal sector - should be considered.

- Broadening the corporate tax base by eliminating the interest expense deduction and thus granting equal tax treatment to debt and equity as a means of corporate finance.

- Eliminating the paid-up capital deduction granted to joint stock companies.

- The 20% tax deduction from the rental value of buildings to cover expenses and maintenance costs, for the purpose of calculating the property tax base, is unrealistic and is no longer sufficient to fulfill its target, particularly for old buildings. Upward revision of this figure to 40% or even 50% may be warranted.

- Reforming the depreciation schemes of physical assets instead of heavy reliance on tax holidays should be considered. The analysis showed that under the current schemes, tax holidays are largely offset by the loss of the advantage of the 25% initial depreciation allowance deducted from the value of machinery and equipment. Revision of the depreciation schemes for all projects to include higher depreciation rates than the actual physical lives of the underlying assets or using the declining- balance method of depreciation rather than the straight- line method should be considered.

- Tax holidays should be reduced to the minimum and should be targeted to projects fulfilling preset requirements such as achieving certain export targets or generating specified employment levels or other positive regional externalities.

- Reconsideration of the whole system of indirect taxation in Egypt is required. The tariff structure - although largely improved - should further be reduced. Its dispersion also needs further

reduction. Refund of import tariffs on capital goods used by firms in production should also be allowed.

Deduction of the sales tax on capital for all projects - or even better its complete removal -should be allowed in the form of deduction from the total sales tax collected on the sales of their product.

The proportional stamp tax on credit and loans involve double taxation, to eliminate this double taxation it is advisable to restrict it to a stamp tax on loans.

The specific stamp duty, although nominal, is a nuisance in transactions. Including it into the fees paid for various government services may be considered.

- Efforts to restructure tax administration may not be overemphasized. These efforts require regular dialogue with the private sector in order to build mutual trust. It further requires increasing awareness, and achieving tax education and training for both tax collectors and taxpayers.

- Raising and reinforcing the financial penalty structure for noncompliance is necessary. The current financial penalty is too low and the imprisonment penalty is excessive and is seldom applied.

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Appendix

	Land	Buildings	Machinery & Equipment	Vehicles
Corporate Firms			• •	
Manufacturing				
Joint Stock Companies	24.6	26.4	21.6	24.3
Other Corporate	38.3	40.1	35.3	37.9
Services				
Joint Stock Companies	28.9	31.8	27.3	29.5
Other Corporate	46.0	48.8	44.3	46.3
-				
Non-Corporate Firms				
Manufacturing	32.6	34.6	29.7	32.7
Services	38.5	41.5	36.8	39.1

Table A.1. Asset Specific METRs Exclusive of Indirect Taxation

Source: Authors' calculations

Table A.2. METR for Inland Investments under Different Durations for Tax Holidays

	METR: Impact of Tax	METR: Impact of Direct and Indirect Taxation					
	Duration of Tax	x Holiday (years)					
	10	20*					
Manufacturing							
Joint Stock Companies	28.7	22.5					
Other Corporate	29.7	22.5					
Non-corporate	25.7	19.9					
Services							
Joint Stock Companies	31.6	23.0					
Other Corporate	32.6	23.0					
Non-corporate	28.3	20.5					

* Operation period for investment is 20 years

Source: Authors' calculations

Table A.3. METRs by Source of Finance under Law 8

		Joint Stock	Other Corporate	Non-Corporate
Manufacturing		10.0	16.0	12.1
All equity		10.9	16.0	12.1
Debt/Equity finance	2:1	18.55	22.15	18.05
Services				
All equity		12.8	19.3	15.15
Debt/Equity finance	2:1	22.55	27.15	22.25

Source: Authors' calculations

LABOR MARKET COMPETITIVENESS AND FLEXIBILITY IN EGYPT

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1- Introduction

As liberalization, globalization and integration of world economies are increasing in the nineties "competitiveness" turns out to be the key for increasing trade, employment and the standard of living of the citizens in the MENA region, including Egypt. Although the term "competitiveness" is vague and has various meanings, most of its definitions assert that a country, to stay competitive, should try to enhance its labor productivity and restrain its labor cost in order to hold down its unit labor cost. Thus, the role of a competitive and flexible labor market is crucial in the process of adjustment to a more market forces oriented economy and to a more open economic environment.

In Egypt, the labor market has witnessed major changes since the mid- seventies and in the last 15 years real wages have deteriorated remarkably. This downward real wage flexibility has gone hand in hand with declining productivity and mounting unemployment of new entrants into the labor force.

In the light of the foregoing, the purpose of this paper is to analyze the structure and performance of the labor market in Egypt, to identify the economic, regulatory and institutional factors and mechanisms that determine its competitiveness with respect to both labor productivity and labor cost. The paper will also consider, in particular, issues related to labor market flexibility and labor market reforms.

Besides the introduction, the paper consists of four sections. Section 2 analyzes the structure and performance of the labor market from the mid- seventies till the mid- nineties. Issues of employment, unemployment and informal sector will be addressed and trends of real wages will be analyzed. As to section 3, it focuses on different labor market regulations and institutions in order to assess their impact on market flexibility and unemployment. Section 4 of the paper compares wages with productivity in order to assess unit labor cost in the manufacturing sector. Section 5 concludes.

2- Structure and Performance of the Egyptian Labor Market (1976-1996)

In this section, we highlight the different aspects of the Egyptian labor market in the mid-nineties. The underlying objective is to identify the structure and performance of this market, along with the transformations of the market characteristics since the mid-seventies. This would help determine the level of competitiveness of this market and the degree of flexibility or rigidity that characterizes it.

2-1 Employment and Unemployment

The performance of the labor market is generally determined by two factors. The first is the GDP growth rate, and its composition, i.e. whether growth creates jobs and uses labor-intensive techniques. The second factor is the degree of flexibility of the labor market, i.e. the adjustment of labor supply to labor demand, through the flexibility of nominal and real wages, and also

through the freedom of labor-absorbing sectors, particularly the private sector, for changing the employment and wage levels in accordance with demand conditions, and finally, through labor mobility.

Developments of employment and unemployment conditions in Egypt during the last four decades can be broken-down into 3 consecutive periods namely:⁽¹⁾

1) 1960-1972: A period of high GDP growth rate, that reached an average annual level of 6% during the first 5-years plan with the intensive industrialization efforts. Then, the rate decreased to 3% during the period 1965-1972, but demand for labor remained high as a result of public investment. The major labor-absorbing mechanisms during that period were represented by expansion of government, public sector and military employment.

The period was also characterized by a government pledge to employ graduates of universities and higher institutes, maintaining nominal wages and inflation at low levels hence, ensuring a quasi-stable level of real wages. Furthermore the period was characterized by full employment (the unemployment rate was 2.2% only), and by low levels of productivity.

2) 1973-1985: This period was characterized by unprecedented growth rates, reaching an annual average of 8%, due to substantial flows of foreign exchange . However, the composition of growth was obviously weak. The major sectors that absorbed employment during that period were non-tradable sectors that failed to provide sufficient job opportunities. On the other hand, the employment capacity of the agricultural sector declined and the proportion of workers in the manufacturing sector deteriorated due to the adoption of capital-intensive techniques. In addition, the labor market was highly segmented and the occupational mobility was relatively rigid. Thus, and despite the role assumed by the informal sector as a new labor-absorbing mechanism, open unemployment emerged, and –according to the 1976 Census - reached 4.3%. This was associated with shortages of certain categories of labor. It is also worth noting that the Egyptian economy started to experience an acute economic crisis since the early eighties due to shortage of foreign exchange resources. The government, however, embarked on expansionary financial and monetary policies that helped maintain a high GDP growth rate which averaged 6-7% annually throughout the mid-eighties. This – in turn – helped maintain a high level of employment.

3) 1986-1996: This is a period of severe economic crisis in the Egyptian economy. Accordingly the government had to proceed, first, with some piecemeal reform measures, followed by a comprehensive economic reform and structural adjustment program (ERSAP) since 1991. This overall period can be broken-down into two sub-periods; the first extending from 1986 to 1992, when the rate of economic growth slowed down and

 ⁽¹⁾ See : -EI-Ehwany, N. (1993), "The Impact of ERSAP on Unemployment in Egypt", paper presented to an Expert Meeting on Unemployment in ESCWA Countries, ESCWA, Amman, Jordan, 26-29 July 1993. - Radwan, S. (August 1997), "Towards a Strategy and Programmes for Creating New Jobs and Alleviating Poverty in Egypt", UNDP and ILO, Geneva.

ranged from negative values to 2.5% per annum. The second sub-period (1993-1996) was characterized by a shift in the performance of growth, although the rate of growth remained at a low average of 4.3% per annum. Also, this period witnessed the elimination of many external and internal imbalances, while savings and investments declined, as a percentage of GDP. The slowdown of the growth rate, along with its concentration in public investment in infrastructure, and the return of expatriate Egyptians led to an increase in the unemployment rate, as it reached 11.1%, according to the 1986 Census, and 9% according to the following Census of 1996. Furthermore real wages declined in all sectors of the national economy, as illustrated later.

Based on the above analysis, the data available on the labor market (as compiled and calculated from the population censuses during the period from mid-seventies to mid-nineties) can be interpreted as follows:

2-1-1 Labor Force and Employment

The Egyptian labor force (15 years and over), amounted to 17.2 million persons in 1996, against 12.8 millions and 9.6 millions in 1986 and 1976, respectively. This implies that the growth of labor force was constant across the inter-census periods. The average growth rate was 2.9% per annum. Such constancy, however, masks major differences in the geographic-based and the gender-based growth. The growth of rural labor force exceeded the corresponding growth in urban areas during the period 1986-1996. This, in turn, raised the share of rural areas in the total labor force, reaching 54%, a matter that reflected the rapid growth of population in rural Egypt. In addition, growth of female labor force exceeded the corresponding rate of males during the intercensus periods. Thus, females share increased to over 15% of the total labor force in 1996 which represents double the share that prevailed in the mid-seventies. Such a gender-based shift in the labor force structure, is due to higher rates of employment of females holding secondary and above intermediate education certificates. It is also attributed to more employment of married females in the age bracket 30 years and more. As for males, the higher school enrollment has reduced the rate of males from the labor market in the age of 50 and above⁽²⁾.

Between 1986 and 1996, employment grew at a rate of 3.2% to reach 15.6 millions. The growth of employment during this period was triple the corresponding growth during the period 1976-1986 (1.2% on average per annum), a low rate that reflected the low labor-content in the higher growth of GDP that took place during that period.

The structure of employment, by type of sector of ownership (as reflected in Table (1)), reveals significant facts which contradict the macro economic policies since the adoption of the opendoor policy in the early seventies. In contrast with expectations, the private sector did not play the desired and expected role in creating job opportunities in the Egyptian economy, whereas the government administration played a major role in this

⁽²⁾ Assaad, R. (Nov.29-30,1999), "The Transformation of the Egyptian Labor Market 1988-1998", Paper prepared for the conference on Labor Market and Human Resource Development in Egypt, EPIC, Cairo, pp.9-13.

regard. Despite the fact that the private sector is the major source of employment yet, the average rate of its employment growth was almost stagnant during the period 1976-1986 (0.2%), and tended to be low during the period 1986-1996 (3.2%). This led to a decline of the private sector's employment absorption capacity-from slightly less than 75% of the total employment in the mid-seventies to about two-thirds in the two Censuses of 1986 and 1996. This is due to the fact that agriculture remains the main provider of job opportunities in the private sector, while the capacity of agricultural activities to create jobs has deteriorated since the mid-seventies due to workers migration either to Gulf oil states, or to urban areas, or alternatively, to the construction sector. Another major factor was the prevalence of mechanization. Outside agriculture, the other major private sectors are tourism, real estate and construction. These are not-by nature- among the labor-intensive activities. Furthermore, the private manufacturing sector did not generate sufficient job opportunities, due to the fact that this sector employs capital - intensive techniques, and produces product mixes that are also capital -intensive, e.g. capital and durable goods.

In contrast, government employment experienced an average annual growth of 3.6% during the period 1976-1986, which increased to 5.6% during the period 1986-1996, despite the adoption of the reform program and the call for downsizing government employment. The result was a higher relative employment share of this sector. It is observed that a major part of this increase is due to the appointment of large numbers of teachers and clerical workers. In the public sector, the employment rate declined during the period from the mid-eighties to the mid-nineties, hence leading to a decline of the relative share of this sector. To conclude, the state is still the major sector in generating non-agricultural employment, particularly in government service activities. The contribution of the informal sector to employment is addressed in a separate sub-section because this sector is not appropriately represented in Table (1). Also, data on this sector require special methods of calculation and analysis.

Related to the above is the distribution of employment by branches of economic activity, as shown on Table (2) in the Appendix. The developments of this structure reveal major distortions represented by a decrease in the relative share of workers in the commodity sectors, against an increase in the employment-generating capacity of the services and distribution sectors. This is evident from the fact that- in 1996- the commodity sectors accounted for only 54.6% of the total employment, against 64% in 1976. The underlying cause of such a decline is the decrease of employment growth rate in agriculture to less than 1% between 1976 and 1996, hence, the decrease of the relative share of agricultural employment. In addition, employment in the manufacturing sector tended to slow-down during the period concerned, resulting in an almost constant relative share of employment growth among other commodity sectors during the period 1976-1986. Employment in this sector grew at 7.5% annually, though it tended to decline during the period 1986-1996 (reaching 4.1%).

On the other hand, the finance, real estate and business services experienced the highest rates of employment growth during the two periods alike (11% on average). Accordingly, the relative share of employment in these sectors increased. The share of employment in the social services sectors increased from 20% in the mid-seventies to about 25% in 1996.

In accordance with the above mentioned distribution, employment by occupation (Table (3)) shows that the only group with above average growth rate is the group of professionals and managers. Thereby, their relative share in employment has more than tripled during the period concerned, and they ranked second after agricultural employment.

As for the structure of employment by working status, the detailed data of the three censuses show that the majority of workers are cash-wage-earners (on average -68.6%). The ratio of employers, on the other hand, was higher in the mid- nineties, as compared to the mid-eighties. The relative share of the self-employed has decreased during the same period, while unpaid workers have substantially increased in number during the period elapsing between the last two censuses, with an average growth rate amounting to 79% over the period. This is particularly evident in the number of female workers in the rural households, who are non-wage-earners.

Another peculiar attribute of Egypt's labor force is its educational status. In spite of improvements in the levels of education, the 2 groups of; "illiterates" and "just read and write" accounted for slightly over 50% in 1996. In contrast, holders of intermediate certificates, above intermediate, and university graduates, increased substantially and together their relative share in employment almost doubled during the period 1976-1996, to reach 39% of the total.

2-1-2 Unemployment

After a period of full-employment during the sixties, open unemployment started to emerge in the mid-seventies. However, the unemployment rate remained at a low level not exceeding 4.3%, based on the data of the 1976 Census. After a decade of jobless high growth of GDP and also, with the severity of the economic crisis that started in the early eighties, the problem of unemployment became more pronounced, and the unemployment rate reached 11.1%, according to the 1986 Census. Given the slow-down of the economic growth rate during the decade 1986-1996, along with the decline of investments, the problem of unemployment remained unresolved, and the unemployment rate, as recorded by the latest census, amounted to 9%. The 1997 Labor Force Sample Survey shows that the rate of unemployment amounted to 8.4%, against 8.8% in 1992 (as recorded by the 1992 Survey).⁽³⁾

⁽³⁾ It is worth mentioning that the declining trend of the Unemployment rate during the nineties is hardly convincing in the light of the performance of the Egyptian Economy. For a detailed assessment of the Unemployment problem see: Fergany, N. (December 1999), An Assessment of the Unemployment Situation in Egypt, **Al Mishkat, Research Notes,** no.13, pp4-10.

The seriousness of the problem lies also in the structure and the characteristics of the unemployed and the developments of this structure since the mid-seventies. Such developments reveal a steady trend of increasing unemployment among youth who have no previous work experience. Almost 95% of the unemployed in 1996 were new entrants to the market. About 90% of this category belong to the 15-29 age group and 70% of these are in the 20-29 age group. It is worth noting that the numbers of new entrants unemployed in the age group 25-34 have almost doubled between 1986 and 1996.

The distribution of the unemployed shows continuity of the pattern that prevailed in the mideighties, with the majority represented by holders of intermediate certificates, increasing from 67% in 1986 to about 75% in 1996. The illiterates, as well as those who just read and write, accounted for a marginal ratio in both decades of the eighties and the nineties. In contrast, new university graduates experience high unemployment. From a gender perspective, female unemployment - as sub - category of the Unemployed educated youth- is higher than that of males. Furthermore, the number of the unemployed remained relatively constant in the urban areas between the mid - eighties and the mid - nineties, whereas the corresponding numbers in the rural areas grew at an average rate of 4.4% per annum.

Finally, it has to be noted that the number of workers who became "out of work" is decreasing between the last two censuses. This could be explained by the ineffectiveness of the unemployment insurance schemes hence, the tendency of workers to seek jobs either in the informal sector, or through self-employment.

These facts underline the seriousness of the unemployment problem in Egypt during the nineties. These facts also show that education has a negative social return, indicating wasteful investments in the field of human resources. Also, there exists a bias against female employment. It is important to note that open unemployment is not the sole phenomenon that indicates misuse of human resources in Egypt. Rather, it is accompanied by disguised unemployment. The latter is found in the government departments, public authorities and in the informal sector, and is associated with low productivity and low wage levels.

2-2 The Informal Sector

The informal sector plays an important role in the Egyptian economy, as it is absorbing large and increasing numbers of workers since the mid-seventies.⁽⁴⁾

Employment in the informal sector was estimated at 2.4 million workers in 1976, against only 170 thousands in the formal private sector. This implies that employment in the informal sector represents 93% of the total non-agricultural private sector ⁽⁵⁾. The number of workers in the informal sector was found to be 2.4 million and 2.9 million in 1980 and

⁽⁴⁾ Several criteria are used to define the informal sector and to estimate its employment. Among these is the one based on a comparaison between the total employment in the non-agricultural private sector, and the magnitude of employment in the non-agricultural private sector establishments using more than 10 workers. The residual is the estimate of employment in the informal sector.

⁽⁵⁾ Kamel, S.R. (1991), "The Structure and Operation of the Informal Sector in Egypt", in Handoussa & Potter (edits), Employment and Structural Adjustment- Egypt in the 1990s, ILO, WEP, Chapter.6

1985, respectively, against less than one million persons during the sixties $^{(6)}$. In addition, and based on a comparative assessment of the 1976 and 1986 Censuses, the preliminary results indicate that the informal sector – particularly the employers and the self-employed – accounted for the overwhelming majority of job opportunities outside the agricultural and the public sectors, especially in rural Egypt $^{(7)}$.

In the nineties the labor market has witnessed a substantially high growth of the informal private sector, a matter that resulted in a doubling of the total number of workers during one decade. Table (4) in the Appendix shows that the number of workers in the informal private sector-excluding agriculture- amounted to 5.2 million in 1996. This is the residual after subtracting workers in the non-agricultural formal private sector who were estimated at only 474 thousands out of the total workers in the non-agricultural private sector, amounting to 5.6 millions. This entails that the informal sector employment accounts for 91.6% of the total non-agricultural private sector to create jobs.

Employment in the informal private sector can be also estimated using a different method. This method is based on the assumption that the employment size is represented by all workers in the private sector outside the establishments, in addition to all workers in the private establishments employing less than 5 workers. Agriculture is excluded in both cases. ⁽⁸⁾ The underlying reason for taking this segment into account is the fact that we agree with many analysts on the argument that the number "10 workers" is unrealistic. For example, an establishment could be employing 9 workers but, in the meantime, it could be registered, formal and operating in the modern sector. Using the data showed on Table (5) the number of workers in the informal private sectorexcluding agriculture-amounts to 4.8 million, approximately, distributed between: workers outside the establishments (2.3 million, i.e 48.5%) and workers inside the establishments employing less than 5 workers (2.5 million, i.e. 51.5%). This entails that workers in this sector represent 31% of the total number of workers in the Egyptian economy, 46.9% of the private sector workers, and 85.9% of the private sector workers after exclusion of agriculture, fishing and hunting. According to the 1986 Census⁽⁹⁾ the total non-agricultural informal sector workers amounted to 2.6 million, distributed between: workers outside the establishments (42.3%) and workers inside establishments employing less than 5 workers (57.7%). These represent 33% of the private sector workers and 76% of the non-agricultural private sector workers. This confirms the doubling of the informal employment throughout one decade with an average annual growth of 8.7%. During that period also, the relative share of workers outside the establishments grew at 7%, while the corresponding share of workers inside the establishments declined.

This analysis indicates the importance, along with the growing role of the informal sector in Egypt, with respect to the absorption of employment and the generation of incomes for

(7)Handoussa, H. (1991), "Crisis and Challenge: Prospects for the 1990s", in Handoussa & Potter, Ibid, pp 16-18.

(9) **Ibid**, p.11

⁽⁶⁾ Fergany, N. (1991), "A Characterization of the Employment Problem in Egypt", in Handoussa&Potter, Ibid. pp. 35-36

⁽⁸⁾ This method of estimation has been used in : Kamel, S.R. (December 1999), Education and Labor Market in Egypt, Research Papers Series, Faculty of Economics and Political Science, Cairo University, No.6, pp.11-12.

a remarkably high percentage of workers during the nineties. Being widespread in both rural and urban areas, the informal sector is capable of absorbing females, males and minors. They are all engaged in meaningful, rather than marginal, activities. They do not conform with the stipulations of the labor and insurance laws, nor with the other controls that govern the other sectors of the economy.

2-3 Wage Determination Mechanisms and Wage Behavior during the Nineties

The structure of wages in the Egyptian economy is characterized by a high level of dualism. While certain sectors have flexible wage systems that duly reflect the market supply and demand forces yet, others demonstrate rigid systems that are subject to institutional constraints in the first place. In addition, there are differences between the local enterprises and the joint ventures, with respect to the wage determination systems. Furthermore, wage differentials between the skilled and the unskilled workers, and between males and females, do not essentially reflect corresponding differentials in productivity, or in performance efficiency.

In this context, we examine the mechanisms of wage determination in different segments of the national economy, along with the behavior of nominal and real wages during the nineties.

2-3-1 Wage Determination Mechanisms

The labor market in Egypt is broken down into two major segments. The first is subject to government regulations and includes: the government administration units, the public enterprises and the formal private sector. The second segment is only subject to limited work regulations and includes the agricultural sector and the informal private sector. We focus in the following on the wage determination mechanisms in the different sectors, with emphasis on the respective levels of flexibility or responsiveness.

1) Government Administration and Public Enterprises

Wages in the government administration and in public enterprises are determined in accordance with the state legislation. This legislation is not only concerned with the determination of minimum wages and the cost of living allowance, but also extends to include identification of the different job categories, the fields of specialization and qualifications required for each category, and the corresponding wage ranges. This is known as: "Certificates Pricing" system, according to which employees and laborers are classified, based on their educational certificates. Furthermore, the state sets the systems of promotion, incentives, wage increases, fringe benefits and cost-of living allowances. Thus, this highly centralized wage system is rigid by nature.

In 1978, public enterprises were granted a certain degree of independence with regard to the conditions of employment and the wage levels. Scarce qualifications, with high educational and technical skills, have become differentiable from those demonstrating excess supply in the labor market. In addition, the system of appointing new graduates in these enterprises was put to an end. Bases and standards have also been set for wages in the public enterprises sector, to match

them with those applied in the private sector. It should be noted that the public sector incentive systems are more effective in stimulating higher productivity, as compared to the government sector.

Both the government and the public enterprises sectors had recourse – on a large scale - to temporary hiring as a mean for avoiding the controls of hiring and the rigidity of wages. In the context of this practice in the public sector, the employing unit has the freedom to set the wage levels, according to its budget constraints⁽¹⁰⁾. Thus, more flexibility is attained due to this practice, but job security is not ensured in the public sector.

2) Formal Private Sector

Wages in the formal private sector are determined in accordance with the market forces. The government role in this regard is confined to the drawing-up of legislation and the formulation of the general rules required for sound labor relationships, such as: job security, social insurance, minimum wage in the private sector, special wage increases, cost-of-living allowances, and amendments to the relevant regulations.

In practice, employers evade – to a large extent – the social insurance regulations – as illustrated in section 3. Furthermore, the minimum wage rules are not reinforced outside the public sector, except in the big establishments. The same applies to the cost- of-living allowances and the special increases applied since the mid-seventies. Given the weak role of labor unions in Egypt – in general – along with the small membership base of private sector workers in those unions, wages in the private sector are determined according to individual employment contracts that – in turn – are guided by the field of specialization, the level of expertise and the forces of market supply and demand on different types of skills. Hence, wages are relatively flexible in the formal private sector.

3) The Agricultural Sector

The agricultural labor market is highly competitive and reflects the interaction of the supply and demand forces. Thus, agricultural wages are substantially flexible and capable of clearing the agricultural labor market during the high activity seasons. Some seasonal unemployment, however, exists during the rest of the year, despite the availability of other non-agricultural types of work ⁽¹¹⁾. During the seventies and the early eighties, both the nominal and real agricultural wages increased and reached unprecedented levels. This was due to a host of factors that resulted in lower levels of agricultural manpower supply. Predominant among these factors is labor migration. It stimulated – in the meantime – workers remittances which, in turn, contributed to the generation of more rural, non agricultural job opportunities. Added to these were the government sector jobs in the rural areas.

⁽¹⁰⁾ Zaytoun, M (1991) "Earnings and the cost of Living: An Analysis of recent developments in the Egyptian Economy", in Handoussa & Potter, op.cit, p.229.

⁽¹¹⁾ Richards, A. (1991), "Agricultural Employment, Wages and Government Policy During and After the Oil Boom", in Handoussa & Potter, **op.cit**, p80.

growing to livestock-related activities. Real wages demonstrated an upward response during this period. They also responded in the opposite direction, when adverse economic conditions emerged in the mid-eighties, and in 1988 they went down to about 70% of the peak levels.

4) Informal Private Sector

Wages in the informal sector are substantially flexible and reflect the relative scarcity in some fields. Such a flexibility also demonstrates the absence of employer-employee contractual relationships, along with the non-existence of controls on the hire and fire practices, and on the adherence to the social insurance or health regulations. Therefore, this market is characterized by a high degree of freedom in wage determination. However, labor mobility between the informal private sector, agricultural employment, the casual workers, the self-employed and the government- and public-enterprise employment results in more flexibility of the wage-based labor supply in the informal sector and thereby, lead to a relative stability of wages ⁽¹²⁾.

2-3-2 Wages Behavior During the Nineties

During the decade between the mid-seventies and the mid-eighties, real wages increased significantly due to the growth of the national economy, with major variances existing between different branches of economic activity. Similar variances also existed between the public and the private sectors. The major increases in real wages occured in the sectors of: agriculture, building and construction, manufacturing, and – to a lesser extent – in services. Real wages have increased significantly in the private sector till the mid-eighties. On the other hand, the public enterprises experienced lower levels of increase, while the increases witnessed by the government sector were substantially lower. Real wages in government started to experience a decrease since 1982. This was due to the economic crisis, associated with the government inability to sustain the heavy cost burden of redundant workers in the government administration.

Since the mid-eighties, and with the exacerbation of the economic crisis, real wages in the different economic sectors declined and this trend continued till the mid-nineties. By 1994/95, real wages had declined to two-thirds of their 1985/86 levels.⁽¹³⁾

The steady downward, steep trend of real wages in all economic activities- and in both public and private sectors - during the nineties is highlighted in Table (6) in the Appendix. The data show the average nominal and real weekly wages, taking 1986 as a base year. It appears that, while total nominal wages increased by 160% during the period 1987-1996, total real wages decreased by about 25%. The decrease was more pronounced in the private sector, as opposed to the public sector. The largest decrease was experienced in: commerce and hotels, manufacturing, building and construction and agriculture.

⁽¹²⁾ Kamel, S.R. (1989), "Labor Flexibility and Unemployment.. the Case of Egypt", paper presented to a conference on Unemployment in Egypt, Faculty of Economics and Political Science, Cairo University, p 306.

⁽¹³⁾ Radwan, S (December 1997), Towards Full Employment: Egypt into the 21st Century, ECES, Distinguished Lecture Series 10, p.13.

Within the economic activity branches, the decrease in real wages have substantially varied between the public and the private sectors. The decrease was most acute in the private enterprises engaged in: building and construction, manufacturing, finance, and business services. The average decrease in these sectors was double that in the corresponding public sector enterprises. In agriculture, real wages remained stable in the private sector, while those of the mining and electricity sectors increased. In contrast, the deterioration of real wages of the social services public sector workers was substantial and higher than the corresponding decrease in the private sector.

As there were public-private variations in the decrease in real wages within the different branches of economic activity, there were also gender-related differences, particularly when the public - private differentiation is simultaneously considered. Table (7) in the Appendix indicates a prevalent pattern in the Egyptian labor market namely, the payment of lower wages to female workers (on average, a female receives 83% of a male wage). This differential, however, disguises public-private, gender- related differentials. While government and public-sector employment contributed to the narrowing of the male-female wage differentials (about 93%), the underpayment to females is conspicuous in the private sector, where , on average, a female is being paid slightly over two-thirds of a male's wage. Within the economic activity branches, gender-related wage differences are highest in the sectors of: manufacturing, community, personal and social services.

Table (7) shows also that, while nominal wages paid to males and females during the period 1990-1996 have increased, real wages have decreased. In the sectors of agriculture, gas and electricity, the decrease in females real wages was higher than that of the male workers. The same observation applies to the finance and business services sector. However, real wages of females in the personal and social services sectors increased, while those of males in the same sectors declined.

From this analysis it is evident that the Egyptian labor market experienced an acute deterioration of real wages during the period between the mid-eighties and the mid-nineties. This phenomenon applied- with no exceptions - to all sectors and economic activity branches.

3- Labor Market Regulations and Institutions

This section studies the main features of the regulations and institutions of the Egyptian labor market, and analyzes their impact on its degree of flexibility and on the evolution of unemployment.

3-1 The Legal and Institutional Framework

3-1-1 Social Insurance Systems

The social insurance systems have represented a major pillar of the social policy since the 1950s. They are governmental in the first place, and are based on the principle of contributions. Four

laws govern social insurance in Egypt⁽¹⁴⁾. Each of these laws is concerned with specific strata of the society, as categorized according to the status of the employer. In addition, special insurance schemes for specific professions, called "Alternative Social Security Schemes", are in effect and include 8 private funds, established by companies or banks. Furthermore, there are 580 special insurance funds, with assets amounting to LE 8 billion. ⁽¹⁵⁾

Governmental social insurance is widespread in Egypt, covering 16.9 million persons, as of June 30, 1997. This number accounts for 86% of the Labor force in Egypt – a high percentage that matches the corresponding percentages in the industrial countries. Government, public and private sector employees represent together 55% of the total number of the insured, and 49% of the total number of pensioners. These are followed by casual workers, who represent 34.5% and 43.5%, respectively. Self - employed and the like represent only 10% and 7.4%, respectively. It is noteworthy that all government and public sector employees are covered by social insurance, whereas - despite the mandatory nature of such a coverage - substantial percentages of the private formal and the informal sector workers are not covered. This is due either to the tendency of employers to evade insurance, or to the workers ignorance of their entitlements, together with the modest levels of the insurance and the complexities of the administrative procedures related to obtaining such entitlements. These facts, combined with the non-wage benefits of the government, rather than private sector employment.

Determination of contributions differs according to the law governing social insurance.⁽¹⁶⁾ The rate of contributions are relatively high, averaging 36% of the basic salary and 31% of the variable salary. Employers contributions are higher than those of the employees and the public Treasury (1%), respectively. It is worth noting, that the employee's contribution is the same, irrespective of the sector (14% against the basic salary and 11% against the variable salary). Employees pay one third of the total contributions, whereas employers incur the higher burden. This is in contrast with the systems applied in the Western countries. Also, the rates of contributions in Egypt are relatively high, when compared with other countries. Nevertheless, pensions are low and do not meet the basic living requirements.

High rates of contributions result in insurance-evasion on the part of employers. About 30% do not pay their assessed contributions , and about 40% of the self-employed declare levels of income below LE 60 per month. On the other hand, the system of inspection is rather weak and fails to efficiently assess the extent of insurance evasion.

⁽¹⁴⁾ For more details see: El Ehwany, H.(1995), **Principles of Social Insurance Law**, Dar Abou El Magd, Cairo.

 ⁽¹⁵⁾ Osman, M.O, Egyptian Social Insurance Systems, current status and Potential for Development, INP, Unpublished.
⁽¹⁶⁾ For more details see: El Sayed, H. (January-April 1998), "Social Insurance Systems and the Standard of Living in Egypt", L'Egypte Contemporaine, No. 449-450, year-89, Cairo, pp 72-74.

Law 79/1975 for employees of the government, the public and the private sectors provides for different insurance benefits of which old age, disability and death payments are the most significant. Together, they represent 97.7% of the total benefits. At the retirement age, the pension amounts to 80% of the wage. This indicates that the maximum pension of the government and the business sector employees is LE 800 per month and the minimum pension payment is LE 40 per month. The average retirement pension payments per month are LE 356. LE 325, and LE 143 for the government sector employees, the public sector workers and the private sector workers, respectively. The corresponding averages for the self-employed and the casual workers are LE 63 and LE 43, respectively. Law 79 also provides for unemployment insurance, the burden of which is borne by the employers at 2% of the total salaries of their respective employees. It is worth highlighting that unemployment insurance applies only to the workers of the public and the formal private sectors and excludes the government sector employees. In practice, however, the law stipulates six conditions for entitlement to the unemployment payments. These are very stringent conditions and, together with the modest payments implied, they render this benefit ineffective.⁽¹⁷⁾

As of June 30,1997, the total number of pensioners and predecessors amounted to 6.2 million persons. In 1995/96, the total amount of pensions and compensations paid against basic and variable salaries reached LE 7291 million. About 91.7% of the total pension and compensation payments accrued to the individuals subject to Law 79, while 7.7% accrued to self-employed and the like.⁽¹⁸⁾

Despite the steady increase in the value of pensions during the last two decades, there are large discrepancies between the respective levels of pension payments to the different categories of pensioners. Government sector pensioners come in the top rank, while the casual workers are ranked lowest. In addition, geographic disparities indicate that Cairo and the urban governorates benefit most. On the other hand, inflation had an adverse impact on the real value of pensions for all categories of pensioners, a matter that acts as an obstacle to attaining a decent standard of living for these groups of the population.

3-1-2 Health Care

Insurance against illness applies to employees of the government, public and private sectors who are subject to Law 79/1975. This type of insurance is financed via employees' and employers' contributions. It is different from the insurance against work-related injuries, which is financed exclusively via employers', rather than employees', contributions. For employees of the government and the public sector, the contribution amounts to 4% of the monthly salary (3% by the employer and 1% by the employee). Contributions by the private sector amount to 5% of the monthly salaries of the insured persons (4% by the employer and 1% by the

⁽¹⁷⁾ El Sayad, M.H (30-31 March 1998), "The Current status of Social Insurance in Egypt", Paper presented to a seminar on Social Insurance in Egypt, the Ministry of Social Affairs, Cairo, pp 4-10. ⁽¹⁸⁾ El Sayed, H., **op.cit**, pp 80-82

employee)⁽¹⁹⁾. In all cases, contributions are very modest, particularly if compared to the corresponding levels in the developed countries, where contributions reach 14% of income.⁽²⁰⁾

It should be noted that a new draft law for health insurance is currently under review. The law aims at extending the health care insurance to cover the disadvantaged groups. It aims also at enhancing the standards of the medical care services provided to the insured persons.

3-1-3 Labor Laws

The labor regulations play a dual role, albeit minor, in exacerbating the rigidity of the labor market. To illustrate, the current Labor Law (137/1981), that superseded Law 91/1959, prohibits employers from terminating the work contracts of their employees after the elapse of the probation period. It also limits their ability to hire workers directly. Given the low levels of workers productivity in the different economic sectors, in general, these constraints represent inconveniences for the employers and restrict the provision of new job opportunities.

On the other hand, the employees themselves suffer from the repercussions of the weak enforcement of the current law. It tends to overlook the workers' rights in many instances and does not protect workers in the micro enterprises, where the employers hire workers without contracts. Furthermore, employers always find leeway to overcome the obstacles imposed by the current law. Amongst these is the practice of forcing employees to sign a non-dated resignation prior to signing the employment contract. Also, the workers are denied the right to strike in cases when they face deteriorating work conditions. They are also prohibited from engaging in collective bargaining and their representatives in the trade unions are not capable of negotiating efficiently for protecting the workers rights. All of these obstacles result in a tendency towards avoiding private sector jobs and an associated preference for government employment despite the low levels of real wages in the latter, hence increasing the rigidity of the labor market. The underlying reason is the guarantee offered against work contract termination in the government and public sectors, the benefits of pensions and other forms of insurance, the fewer number of working hours and, the possibility of having more than one job (moonlighting).

In an aim to reformulate work relations, as an aspect of the institutional reform – on the one hand – and to create a more competitive and flexible labor market – on the other – a new labor law was drafted and awaiting submission to the People's Assembly. This draft law, however, is facing severe opposition, due to the perceived impact on the social security. Therefore, submission of the draft law to the People's Assembly was postponed several times, despite the fact that the drafting process started as early as 1993. Many amendments were introduced to the draft law, the latest of which was in February 1997.

 ⁽¹⁹⁾ El Ehwany, H, **op.cit**, pp. 294-303
⁽²⁰⁾ Scheben, T, editor. (Sept,1994), Conference on "systems of social security-Egyptian and German experiences", Konrad Adenauer Stiftung, Cairo, pp.36 and 102.

The draft law covers all enterprises in the business sector, with the exclusion of the selfemployed. Article (4) of the draft law states that the law provisions are not applicable to the employees of the government administrative units, the local government entities, the public authorities, domestic servants, and the like. It also excludes the family workers who are actually dependents of the employer. The new draft law comprises 270 articles, grouped under 6 sections, the most important of which are: "Individual Work Relations" and "Collective Work Relations". A scrutiny of the major articles of these sections reveals that the draft law introduces new privileges for the workers which are not provided under the current law. Examples are: entitling workers to a periodic wage increase, to more leaves and to strikes.⁽²¹⁾

Nevertheless, the review and analysis of other articles of the draft law show that other provisions are in favor of the employers and the government, rather than the workers. Numerous examples can be cited, such as granting employers more freedom in direct hiring, termination of employment contracts after a maximum period of 5 years, firing, partial or full shut-down of establishment, and laying off.⁽²²⁾ On the other hand, the law limits workers right to strike and lowers their representation in the consultation and cooperation, and narrows their collective bargaining particularly in view of the weaknesses of labor unions⁽²³⁾. Moreover, some provisions contain ambiguous and uncertain Language that carry the risk of abuse and adversely affect the workers rights⁽²⁴⁾.

It can be argued that should the Draft Labor Law be adopted it would result in a more flexible labor market. However, it should be taken into consideration that the Draft Law would cause unease in Labor relations, a matter that would adversely affect growth and efficiency. Also, the Labor market flexibility, coupled with the widespread unemployment, poverty, lack of unemployment insurance and of an efficient social insurance network, would aggravate the social and economic problems. In addition, labor market flexibility would render government employment more attractive due to the non-wage benefits.

3-1-4 Minimum Wage and Work Hours

In the private sector, Law 119/1981 sets total minimum wage at LE 25 per month for workers in the age brackets of 18 years and over. The minimum wages for workers in the ages of 16 and 14 are: LE 22 and LE 19, respectively. For free-zone enterprises, employers are obliged to pay wages, salaries and bonuses in foreign currencies, with a condition that the minimum wage amounts to the equivalent of LE 45 per month (article 102 of Law 32/1977). It is worth noting that, effective 1975 (Law 40), cost of living allowances have become obligatory in the private sector. This has increased the total minimum wage to reach over LE 25 (ranging from LE 27.5 for single to LE 29.3 for the married workers having dependents, as of 1981).

As for government and public sectors, the Law issued in 1984 sets the minimum wage at L.E 35, and according to the systems of cost of Living allowances, the minimum total wage of an

⁽²¹⁾ For more details see: Draft Labor Law (January 1996), Proposed Amendments to the Law Provisions (24/2/1997), Articles 4, 7,9 and 193. (22) See articles 14, 104,69,110 and 203 of the Draft Law.

⁽²²⁾ See articles 14, 104,09,110 and 205 of the Draft Law. (23) See articles 194, 195, 196 and Chapter of Collective Relations.

⁽²⁴⁾ See articles 194, 195, 196 ar (24) See articles 41 and 197.

unmarried employee is LE 37 monthly. For the married worker having two or more children, the minimum monthly wage is LE 41.

As for the monthly minimum and maximum wage levels, the legislation of 1984 set them at LE 35 and LE 217, respectively, compared to LE 5 and LE 150, in 1964. This entails a tendency towards narrowing the gap between the minimum and maximum wages, as reflected by a higher percentage increase of the minimum wage, compared to the maximum.⁽²⁵⁾

Concerning the Hours of work, The current Labor Law (article 133) states that "a worker shall not be obliged to effectively work for more than 8 hours per day, or for more than 48 hours per week. These periods shall be exclusive of the time allotted for breaks and meals". However, the Court of Cassation gave employers the right to organize the daily work schedule with less number of hours, e.g. 4-6 hours. The law also entitles the Minister of Manpower to decrease the daily work period to 7 hours for certain groups of workers or for certain industries or activities.

On the other hand, the law permits decrease in the weekly work hours, to reach 42 hours, in certain industrial establishments, as identified by a decree issued by the Minister of Industry. The underlying objective of such a decrease is to address the problem of unemployment, by means of obliging the management of industrial establishments to hire more workers for performing the same volume of work. This policy resulted in higher costs of production. The law also allows employers not to abide by the maximum daily or weekly time of work in specific cases. An overtime payment shall be made against the extra work hours.

With respect to leaves and holidays, the law entitles workers to weekly days-off, in addition to the eligibility of having 6 types of paid leaves. ⁽²⁶⁾

3-1-5 Labor Unions

All union affairs are governed by Law 12/1995. Currently, membership of all workers syndicates is about 4.5 million, i.e., about 25% of the labor force. The majority of members are workers of services sectors and government agencies, while 25% are workers in public manufacturing sector enterprises. Only 25% of the members are private sector workers, despite the large base of employment in the private activities in tourism, agriculture and transport. Despite the generally low level of syndicate membership in Egypt, this level is deemed higher than the corresponding representation in other Arab countries with similar economic conditions, such as: Morocco, Tunisia and Jordan. Syndicates membership in these countries does not exceed 10% of the total labor force.⁽²⁷⁾

⁽²⁵⁾ Soliman, S and others. (1992), The Right to Work in the Egyptian Economy, Dar El Nahda, Cairo.

⁽²⁶⁾ **Ibid.**

⁽²⁷⁾ El-Mikawy, N. and Posusney, M. (March 2000), "Labor Representation in the Age of Globalisation: Trends and Issues in Non-oil Based Arab Economies", paper presented to the third MDF, Cairo, p.27.

In effect, workers syndicates in Egypt did not play a significant role in protecting workers rights, nor in setting the wage levels. The underlying reason is the lack of sufficient independence. This – in turn – is due to several factors, including: the centralized hierarchial structure of syndicates, as well as the government intervention and tendency to control syndicates' leaders to ensure political stability and to achieve strict control of the labor market. In addition, the government tended to attract and contain syndicates leaders, by means of granting several privileges, involving them in boards of directors of the holding companies, with signals for having official positions. In the meantime, the government prohibited strikes and demonstrations, as per the current Labor Law. The government also continued to use its right to exclude persons at its discretion, in accordance with the syndicates law of 1976, till the Constitutional Court stopped such a practice in 1993.⁽²⁸⁾

With the government's adoption of the open door policy and the trend towards privatization, the political authorities succeeded in getting the support of the general Federation of Labor Union for Law 203/1991 concerning the Public Enterprises. In contrast with the standpoint of the workers leaders, members of the syndicates protested against privatization, restructuring of the companies, dismissal of permanent workers, reductions in incentives and bonuses granted to casual workers, and also against forcing workers to sign new employment contracts with lower basic salaries and more penalties. The last years have also witnessed an increasing number of actual strikes. But generaly speaking, the role of the workers' syndicates in Egypt has been always weak. It is not anticipated that this role will become stronger with the proposed Draft Labor Law in the light of the actual structural, political and institutional factors. This indicates that the legislative reform will not be conducive alone to a more flexible and competitive labor market.

3-2 Flexibility of the Labor Market and its Relevance to Unemployment

Flexibility of the labor market refers to the extent of adjustment of the labor supply to demand conditions and the ability of the market to eliminate all types of rigidities that might hinder adjustment. If the economic growth rate declines and the effective demand drops to levels that are not sufficient to secure full employment, then involuntary unemployment emerges. In such a situation, if the labor market is rigid and constrained, distortion and disequilibrium will continue and unemployment will become more pronounced. On the contrary, if the market is free and flexible, its mechanisms will lead to absorption of the excess supply and to the curtailnment of unemployment.

(28) Ibid, p.9

The flexiblity of labor market manifests itself in many forms. The first is the flexibility of real wages, so that wages freely decrease to their "equilibrium" level. The second is the flexibility of employment, i.e. the adjustment of employment level to the conditions of the demand on products. This entails the possibility of changing the number of work hours with no restrictions, and increasing the occupational and geographical mobility of workers. This situation would require short-term employment contracts on a large scale-on the one hand- and a general and technical training of manpower- on the other hand. In addition, there would be a possibility of freeing enterprises of part of their social and tax obligations, as well as removing other restrictions imposed by the state. The third form of flexibility is structural; a large portion of labor would be absorbed in the informal sector.

In the Egyptian case, unemployment rates have sharply increased during the last two decades as previously mentioned. It is often claimed that the labor market is rigid and responsible for aggravating unemployment. In fact, evidence does not confirm that the labor market in Egypt is so rigid, or that rigid rules and restrictions are detrimental - alone- for employment and competitiveness.

On the one hand, the study shows a high degree of real wages flexibility, as these wages remarkably declined in all sectors during the last decade. On the other hand, the analysis points out to the importance and the growing role of the informal sector. The co-existence of this sector and the agricultural sector provides evidence of the labor market flexibility, as they are sectors of flexible working conditions.

As for the regulations that control the labor market, the review and analysis of these controls show that the intervention of the legislator has taken several forms that contributed to restricting labor mobility and fostered demand for government jobs. In addition, these constraints burdened the private sector, particularly the small and medium scale enterprises, with several laws that limited the growth of these enterprises due to the adverse environment that discouraged investment and job creation. Furthermore, labor flexibility in Egypt is limited by noticeable market segmentation. In fact, the market has different types of segmentation (rural/urban, public/private, formal/informal, education-based, gender-based). Currently, the labor market is governed by four labor laws governing civil servants, private sector workers, share holding companies, and public enterprise workers.

However, it cannot be argued that the growing unemployment in Egypt is due to excess controls and rigid labor rules which raise the cost of employment. A scrutiny of the labor market in the last three decades shows, on the one hand, the absence of compliance with the employment related controls in the private sector and the marginal impact of such controls on employers (e.g, minimum wages, insurance, hours of work...). As a matter of fact, there is a host of other obstacles that hinder the private sector's strive to achieve the high levels of profitability that are essential for increasing investments and job creation. Amongst the most significant of these obstacles are the high tax rates, the high financing cost, the stagnation of demand and the instability of prices. On the other hand, such a scrutiny indicates that the unemployment problem in Egypt is a structural problem that can be attributed to the slow or distorted growth of GDP, along with the shortage of effective demand, as well as the adopted macro-economic and investment policies.

4- Competitiveness and Unit Labor Cost

The term "Competitiveness" is widely used in the business and economic literature with various meanings. The diamond theory provides a useful concept which stresses that competitiveness involves more than just macroeconomic issues-deficit, stability and so forth. Addressing these is necessary, but not sufficient. Countries must start to improve conditions at the micro–level of the economy⁽²⁹⁾.

Competitiveness should be measured by productivity .It relates to measures that firms, industries and regions adopt to foster, maintain and increase productivity on a sustainable basis. It depends on the continuous upgrading of human, capital and natural resources. But some economists indicated that these elements are related to comparative advantage which is different from competitive advantage . Countries that have low labor cost may have a comparative advantage. But many of these countries are caught in a cycle of poverty and slow development, and that does not necessarily mean that they are Competitive.⁽³⁰⁾ The emphasis should be on how to build competitive industries. So the comparative advantage can be considered the basis on which competitive advantage can be built.

This section examines whether current labor productivity and cost of labor give Egypt a competitive edge over its neighbors in the region .With this in mind, the section analyzes developments in nominal productivity amd nominal wages, real productivity and real wage, as well as unit labor cost in the manufacturing sector. In addition, real wages and productivity in dynamic industries will be studiesd. The emphasis will be on the manufacturing sector due to its prospects for growth and its potential for increasing exports and job opportunities.

A-Nominal Productivity and Nominal Wages

Egypt's manufacturing sector has consistently been at the center of the country's growth strategy. The growth rate achieved by the sector has averaged 7 % from 1981/1982 to 1997/1998, and the sector's contribution to GDP has increased from 15.6 % in 1981/1982 to 19.6% in 1997/1998. The share of the manufacturing sector in total employment and fixed investment has been stable at 13.4 % and 21.6 % respectively⁽³¹⁾.

Egypt's manufacturing sector has achieved significant progress in labor productivity . Over the 1980 to 1989 period, overall labor productivity rose by 13.8 %, from \$ 2585 to \$ 9406, while the nominal wage per worker increased by 8.5 % as shown in Table (8) in the Appendix.

⁽²⁹⁾ Porter, M.(1999), "Building Competitive Advantage : Lessons from Other Countries", Internet, p.2.

The increase in labor productivity in manufacturing during this period can be explained by:

1)The increased share of manufacturing in fixed investment from 20.2% in 1980/1981 to 23.5% in 1989/1990. The growth rate of real industrial output (in 1990 prices) reached 6.8% during the period 1981-1989⁽³²⁾.

2) The increased share of value added in industrial output from 25.3% in 1980 to 32% in 1989. The growth rate of real value added reached 5%, on average, during 1980-1989 and has exceeded the growth rate of employment, so the productivity of labor showed an increasing trend during the eighties .

3) The increase in productivity of labor during the eighties coupled with a low growth rate of employment which reached 1.9% during this period. This low rate of growth was due to a combination of factors including a change in the government hiring policies in the large public sector companies and relative scarcities of different categories of labor due to migration⁽³³⁾. The slowdown in the average number employed may be an indication that the industrial firms favored mechanized production processes. The growth rate of the ratio of fixed capital to employment has reached 10%, on average, during the eighties⁽³⁴⁾.

During the period 1990-1995, labor productivity increased by 1.2 %, implying that the growth in labor productivity through the first half of the nineties is lower than that achieved during the eighties. The decreasing trend of labor productivity growth during the period 1990-1995 may be explained by the negative growth rate of the value added. In fact, the growth rate of real value added decreased from 5% during 1980-1989 to (-7.3%) during 1990-1995. Important factors behind this trend are the various measures adopted within the Economic Reform and Structural Adjustment Program (ERSAP). The measures which are likely to have most affected value added are⁽³⁵⁾:

(1) Trade Liberalization

Trade liberalization involves two elements: elimination of direct trade controls or non-tariff barriers such as permits, quotas; and reduction of the mean tariff rate and tariff dispersion (i.e.reducing the difference between maximum and minimum tariff rates). In effect, trade Liberalization under ERSAP means opening up the domestic market and hence exposing local producers to strong competition from imports. This leads to an accumulation of stocks of finished products. Since the companies adjust production to sales, they cannot expand output in the presence of stocks. Accordingly production declines and the idle capacities increase.

⁽³⁰⁾ Khemani, S.(1999), "Fostering Competitiveness", Internet ,p.1.

⁽³¹⁾ Calculated from National Bank of Egypt, Economic Bulletin , 1998.

⁽³²⁾ Calculated from National Bank of Egypt, Economic Bulletin , 1992.

(2) Sales Tax

The sales tax imposed on inputs has led to an increase in the cost of production. At the same time sales tax on finished products resulted in higher prices for buyers. This is the familiar "excise tax" effect which, ceteris paribus, may result in lower sales .Also, ERSAP has a deflationary component which tends to reduce demand in the domestic market. This is particularly so because of the cut-down in the rate of public investment under ERSAP.

As for the nominal wage per worker, it has decreased by an average of 1.3% through 1990-1995.

B- Real Wages and Real Productivity

If the real value of wages and productivity is considered, the growth rates will be different compared to the growth rates of the nominal values, as shown in Tables (8) and (9).

While real productivity grew at an average rate of 2.7 % during the period 1980-1989, it decreased by 8.4 % during the period 1990-1995. On the other hand, real wages declined all through the period 1980-1995, by average rates of 5.8% during 1980-1989 and 11.4 % during 1990-1995.

To conclude, during the years 1990-1995 real wages and real productivity in the manufacturing sector were decreasing ,but the rate of decline of wages was higher, resulting in a widening gap between real wages and real productivity which positively affected unit labor cost.

C- The Cost of Labor in Manufacturing

Competitiveness is determined by relative prices, for given products, between countries. If the U.S prices are lower than those of Japan, South Korea, Taiwan, Germany and others, when measured in common currency units, then U.S is competitive compared to the other countries.

To compare labor prices, unit labor cost is a useful measure. It is calculated as the wage rate times the reciprocal of labor productivity⁽³⁶⁾. The formula uses the wage rate as a proxy for labor renumeration. The second element is the reciprocal of labor productivity.

⁽³³⁾ UNIDO(1994), Egypt : An Enabling Environment for Investment, Industrial Development Review Series , p.24. (34) Calculated from UNIDO , Industrial Statistics Database ,1998.

⁽³⁵⁾ Abdel-Khalek, G. (1996), Structural Adjustment and Industrialization in Egypt ,The Microeconomic Effects of ERSAP: The Aluminum and Iron and Steel Industry, prepared for Fondazione Eni Enrico Mattei ,April, p.4.

⁽³⁶⁾ Klein, L.R. (1988), "Component of Competitiveness", Science, V. 241, p. 309.

Reciprocal of labor productivity provides a measure of unit labor cost which, in turn, is an important efficiency measure. If labor productivity rises and wage rates are constant, unit labor cost will decrease. If wage rates also decline, the decrease in unit labor cost will be bigger. To become competitive, a country should try to hold down its unit labor cost and may do so, either through wage restraint or through productivity enhancement, or through a combination of both⁽³⁷⁾.

Table (8) shows the decreasing trend of unit labor cost in Egypt in manufacturing during 1980-1995. Unit labor cost decreased from \$ 0.56 in 1980 to \$ 0.31 in 1995. Consequently, Egypt hasan obvious and significant cost advantage to business operating in Egypt in comparison withother countries such as Malaysia, the Philippines and Thailand. These Countries haveachieved high rates of growth in productivity. This is noted from Table (10).

By using the real values of wages and productivity, as indicated in Table (9), the absolute value of unit labor cost decreased from \$ 0.82 in 1980 to \$ 0.36 in 1990 and to \$ 0.29 in 1995. So the trend of unit labor cost is decreasing during 1980-1995.

According to Tables (8) and (9), the competitiveness of Egyptian labor in manufacturing increased because its unit labor cost decreased. But these tables reveal that the decline in unit labor cost is not just an outcome of real wage decrease only, but it is also a result of

labor productivity decline. This means that Egyptian workers are still lagging behind some of their international competitors in terms of productivity as shown in Table (11).Studies of the determinants of labor productivity reveal that it depends on a number of factors including capital formation ,education and training, technological change and infrastructure . The experience of other countries such as Turkey shows how important it is to increase labor productivity to be competitive as it succeeded in raising productivity in the manufacturing sector at an annual rate of 3.4% in 1995⁽³⁸⁾.Hence,Turkey's competitiveness increased over the period 1980-1986 against Korea,Taiwan and Spain.

D- Real Wages and Productivity in Dynamic Industries

In what follows, the productivity and unit labor cost in some manufacturing activities such as, textiles, food products, chemical products, metal products, iron products and non- metallic mineral products⁽³⁹⁾ will be analysed They are considered dynamic industries in Egypt because they have high shares in employment and high contribution in value added. Also, they have high potentials for growth due to their competitive advantages. During the period 1980-1995, their contributions to value added, on average, have been calculated as : 25.7% for chemical products, 20% for food products, 18.3% for textiles, 16.2% for metal products, (8.1%) for non

⁽³⁷⁾ **Ibid.**

⁽³⁸⁾ ERF(1998), Indicators : Trends in the MENA Region, p. 89.

- metallic mineral products and 7% for iron products. Also, their shares in employment, on average, are represented by the following values: textiles (31.3%), food products (21%), metal products (15.5%), chemical products (13.5%), non- metallic mineral products (7%) and iron products (7.1%)⁽⁴⁰⁾.

In analyzing the degree of competitiveness of different branches or activities in the manufacturing sector, two indicators are used: labor productivity and unit labor cost, over two periods: 1980-1989 (pre ERSAP) and 1990-1995 (post ERSAP). Each indicator is calculated on two levels .The first is the traditional one ,that is the average labor productivity in each activity. As to the second level ,it is based on a ranking system for the indicator. The rankings depend on the ratio of the values of the indicator in the activity to that of the average value for all activities.⁽⁴¹⁾ For example , in Table (14), the value of 2.06 for chemical products in the period 1990-1995 , refers to the ratio of the average labor productivity in these years in that activity to the average labor productivity in the same years in all manufacturing activities. Table (14) indicates that chemical products activity has the highest labor productivity using this method, followed by metal products and equipment, iron products and food products. The textiles products activity is ranking last from the labor productivity perspective with a ratio of 0.36.

When the unit labor cost indicator is considered ,on the two levels, the same trend is found. Chemical products had the lowest unit labor cost in 1990-1995, while textiles products had the highest one, as indicated in Table(11).

The table also reveals a declining trend in unit labor cost in the years 1990-1995 as compared to the years 1980-1989 for all activities, particularly in the iron products activity.

From the above analysis we can draw an important conclusion namely, that the structure of the manufacturing sector has witnessed a major shift away from the traditional activities, such as textiles, and towards higher value added activities, such as chemical products, iron products and equipments. The shift entails more usage of capital-intensive techniques and hence creates relatively less job opportunities.

5- Concluding Remarks

The main findings of this study can be summarized as follows. The labor market in Egypt has been increasingly suffering from many distortions and disequilibria during the last two decades, namely, the slow rate and distorted structure of employment growth; the segmentation along several divides; the mounting rate of unemployment between the educated youth with

⁽³⁹⁾ The definition of each activity will be found in the Appendix.

⁽⁴⁰⁾ Calculated from UNIDO (1998), Industrial Statistics Database.

⁽⁴¹⁾ DEPRA, pp. 17-18.

increasing trends of "feminization" and "ruralization" of unemployment; the growing role of the informal sector during the nineties; and the sharp decline in real wages in all sectors of the national economy. In addition, the study indicates that regardless of the existence of many legislative and institutional rules that control the labor market, their collective impact on the e private sector profitability and hence on job creation is minor. Also, the analysis shows that the increasing "competitiveness" of Egyptian labor in manufacturing during 1980-1995 is an outcome of a decrease in real wages and of a decline in labor productivity. When the structure of the manufacturing industries is analysed, a remarkable shift appears entailing more usage of capital-intensive techniques and less job opportunities.

These findings confirm the fact that the problems of the labor market in Egypt, which affect its competitiveness, are a natural outcome of the complete divorce between the macro-economic policies and the employment policies. In fact, Egypt never had a systematic strategy for the labor market. This has been obvious in drawing and implementing the policies of ERSAP during the nineties, where no job creation strategy or policies have been included at all.

It appears, therefore, that the main challenge facing the decision makers in both medium and long terms lies in the creation of sufficient, productive and permanent jobs to reduce unemployment, and in enhancing labor competitiveness. This challenge can only be met through adopting a comprehensive strategy and designing precise and detailed policies and programs for employment, rather than by merely introducing a legal reform and attenuation of rigid labor regulations, claimed responsible for increasing labor cost and unemployment.

The proposed employment strategy will be complementary to and integrated with the macroeconomic policies. The main objective of both is to achieve a high labor-intensive rate of economic growth, hand in hand with raising labor productivity and competitiveness. In this regard four areas of reform can be perceived.

The first area is related to the macro-economic policies necessary to ensure sustained and high rate of growth. This would require macro-economic stability, increasing domestic and foreign investments, and encouraging the private sector to increase its role relative to that of the State through reducing the obstacles that hinder private investment.

The second area of the employment strategy is to maximize the employment content of growth. This should take place on two fronts: accelerating the rate of job creation in the formal sector, and improving work conditions and solving the problems of the informal sector. As for the first front, the labor-intensive activities in the manufacturing and services sectors should be targeted, particularly in the small and medium-size enterprises, for both local and foreign markets. This will go hand in hand with creating job opportunities on a broad scale in the New Development

Projects launched by the government. In view of the growing role of the informal sector in absorbing employment and generating incomes, more attention and help should be given to the activities that have potential for growth, through solving the problems of credit, marketing and production techniques. Expanding protection and improving work conditions in the informal sector is necessary to reduce poverty. As for the third area of the employment strategy, that is training, the study already reveals the low and decreasing trend of real labor productivity in manufacturing since the mid-eighties. The low level of labor productivity in the Egyptian economy, in general, has contributed to push up the relative price of labor vis-a-vis capital and hence, lowered the labor intensity in the manufacturing activities. Therefore, the upgrading of the skills of the labor force requires sound and coherent policies for reforming the current training and retraining systems, expanding its scope to include labor intensive sectors other than manufacturing, and linking training with skills required in the labor market. The private sector should be involved in the training programs.

Finally, and clearly related to training, the upgrading of skills in order to raise productivity depends heavily on increasing human development. Investment in human capital entails increasing spending on health, nutrition, housing and education, along with reforming the educational system and improving its quality.

It is worth noting that the four above-mentioned areas of the Employment Strategy will not be efficient without reforming the legal and institutional framework of the labor market, civil service reform, and providing effective social safety net.

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Statistical Appendix

Sectors	1976		1986		199	6	Av.rate of growth %		
	No.s	%	No.s	%	No.s	%	1976-86	1986-96	
Government	1,786,064	17.67	2,545,315	22.36	4,374,613	28.02	3.61	5.56	
Public Enterprises	964,583	9.54	1,287,719	11.31	876,729	5.62	2.93	-3.77	
Private Enterprises	7,355,770	72.78	7,537,285	66.20	10,336,689	66.21	0.24	3.21	
Foreign Enterprises	0	-	10,842	0.10	23,911	0.15	-	8.23	
Unclassified	0	-	4,565	0.04	39	0.00	-	-37.89	
Total	10,106,417	100.00	11,385,72	100.00	15,611,981	100.00	1.20	3.21	
			6						
Urban	n.a	-	5,446,613	47.84	7,214,167	46.21	-	2.85	
Rural	n.a	-	5,939,113	52.16	8,397,814	53.79	-	3.52	
Male	n.a	-	10,343,84	90.85	13,526,684	86.64	-	2.72	
			4						
Female	n.a	-	1,041,882	9.15	2,085,297	13.36	-	7.19	

Table (1)Distribution of Employed Persons by Sectors
(15 years and more)

Source: Calculated from CAPMAS, General Population Censuses, 1976,1986 and 1996.

Table (2)Distribution of Employed Persons by Branches of Economic Activity
(15 years and more)

Branch of	197	76	198	6	199	6	Av.rate of		
Economic							growth %		
Activity									
	No.s	%	No.s	%	No.s	%	1976-86	1986-96	
Agriculture&Fisheries	4,089,25	44.26	4,347,447	38.18	4,872,806	31.21	0.61	1.15	
	2								
Mining&Quarrying	32.474	0.35	42,430	0.37	63,090	0.40	2.71	4.05	
Manufacturing	1,297,34	14.04	1,489,152	13.08	2,168,257	13.89	1.39	3.83	
	2								
Electricity,Gas&Wate	61,487	0.67	95,946	0.84	159,170	1.02	4.56	5.19	
r									
Construction	408,878	4.43	842,300	7.40	1,260,052	8.07	7.49	4.11	
Trade,Hotels&	821,678	8.89	846,752	7.44	1,627,284	10.42	0.30	6.75	
Restaurants									
Transport,Storage&	472,794	5.12	653,052	5.74	909,313	5.82	3.28	3.37	
Communications									
Finance,Insurance&	87,117	0.94	236,508	2.08	706,254	4.52	10.50	11.56	
Business Services									
Community&Social	1,816,15	19.66	2,615,721	22.97	3,758,685	24.08	3.72	3.69	
Services	1								
Unclassified	151,210	1.64	216,418	1.90	87,070	0.56	3.65	-8.70	
Total	9,238,38	100.00	11,385,72	100.00	15,611,98	100.00	2.11	3.21	
	3		6		1				
Urban	n.a	-	5,446,613	47.84	7,214,167	46.21	-	2.85	
Rural	n.a	-	5,939,113	52.16	8,397,814	53.79	-	3.52	
Male	8,644,52	93.57	10,343,84	90.85	13,526,68	86.64	1.81	2.72	
	2		4		4				
Female	593,861	6.43	1,041,882	9.15	2,085,297	13.36	5.78	7.19	

Source: Calculated from CAPMAS, General Population Censuses, 1976,1986 and 1996.

Table (3)Distribution of Employed Persons by Occupation
(15 years and more)

Occupation	1976		198	36	199	6	Av.rate of growth %		
ſ	No.s	%	No.s	%	No.s	%	1976-86	1986-96	
Professionals,Scientists&	826,848	8.60	1,588,053	13.95	4,370,197	28.00	6.74	10.65	
Managers	, I	ļ	1 1	1 !	1	1 '	(P	1	
Clerical Workers& Like	700,950	7.29	998,992	8.77	1,123,399	7.20	3.61	1.18	
Sales& Services Workers	1,442,913	15.01	1,428,312	12.54	1,456,208	9.33	-0.10	0.19	
Workers in Agriculture &	4,033,281	41.95	4,302,166	37.79	4,676,481	30.00	0.65	0.84	
Fisheries	, I	ļ	1 1	1 !	1	1 '	(P		
Production Workers&Like	2,052,506	21.35	2,769,172	24.32	3,860,486	24.73	3.04	3.38	
Unclassified	557,271	5.80	299,031	2.63	125,210	0.80	-6.04	-8.34	
Total	9,613,769	100.00	11,385,726	100.00	15,611,981	100.00	1.71	3.21	
Urban	n.a	-	5,446,613	47.84	7,214,167	46.21	- !	2.85	
Rural	n.a	-	5,939,113	52.16	8,397,814	53.79		3.52	
Male	8,915,529	92.74	10,343,844	90.85	13,526,684	86.64	1.50	2.72	
Female	698,240	7.26	1,041,882	9.15	2,085,297	13.36	4.08	7.19	

Source: Calculated from CAPMAS, General Population Censuses, 1976,1986 and 1996.

Table (4)Employment in Non-Agricultural InformalPrivate Sector by Economic Activity,1996(Method I)

Economic Activities	Total non- Agricultural Private Sector (1)	Non- Agricultural Formal Private Sector	Non-Agricultural Informal Private Sector (3)=(1)-(2)	%of Informal Sector (4)=(3) (1)	
		(2)			
Mining and Quarrying	26,022	8,094	17,928	68.9	
Manufacturing	1,512,545	300,032	1,212,513	80.2	
Electricity, Gas &Water	11,595	523	11,072	95.5	
Construction	1,110,591	8,467	1,102,124	99.2	
Trade	1,324,568	34,913	1,289,655	97.4	
Hotels& Restaurants	190,388	29,167	161,221	84.7	
Transport,Storage&Com.	565,392	13,336	552,056	97.6	
Finance&Insurance	43,254	19,149	24,105	55.7	
Real Estates&Bus. Serv.	449,014	12,745	436,269	97.2	
Education	87,561	26,926	60,635	69.2	
Health&Social Work	51,124	12,007	39,117	76.5	
Community,Soc.&Pers. Serv.	143,796	7,983	135,813	94.4	
Services to Households	43,401	112	43,289	99.7	
Unclassified Activities	78,204	-	78,204	100.0	
Total	5,637,455	473,454	5,164,001	91.6	

Sources: - (1) Calculated from: CAPMAS, General Population Census 1996, Final Results, Table 25, pp163-170.

(2) Workers in the establishments employing 10 workers and more. Calculated from CAPMAS, Employment, Wages and Hours of work (EWHW), October 1996, Table (1), pp.21-51

Table (5) **Employment in Non-Agricultural Informal** Private Sector by Economic Activity,1996 (Method II)

Economic Activities	Employment in	Out of	Total	% to Total
	Establishments	Establishments	Employment	(4)
	using less than	Employment	(3)	
	5 Workers (1)	(2)		
Mining and Quarrying	312	12,523	12,835	0.3
Manufacturing	484,890	244,242	729,132	15.1
Electricity, Gas& Water	159	4,672	4,831	0.1
Construction	16,466	943,137	959,603	19.8
Trade	1,468,904	504,993	1,973,897	40.8
Hotels& Restaurants	150,683	34,988	185,671	3.8
Transport,Storage&Com.	52,174	469,571	521,745	10.8
Finance&Insurance	810	5,718	6,528	0.1
Real Estates&Bus. Serv.	94,609	28,462	123,071	2.5
Education	7,702	14,676	22,378	0.5
Health&Social work	90,484	6,694	97,178	2.0
Community,Soc.&Pers.	125,516	50,263	175,779	3.6
Serv.				
Services to Households	-	13,929	13,929	0.3
Int. Organizations	78	-	78	0.0
Unclassified Activities	1,257	14,893	16,150	0.3
Total	2,494,044	2,348,761	4,842,805	100.0
% to Total	51.5	48.5	100.0	
		Rural 1,021,491		
		Urban 1,327,270		

Sources: - (1) Calculated from: CAPMAS, General Population Census, Detailed results of Establishments, 1996, Table 12, pp 179-207.
(2) Calculated from: CAPMAS, General Population Census, 1996, Final results, Table 25 - 162 170

Table 25, pp163-170

Table (6) Trends in Average Nominal and Real Wages by Sectors and Economic Activity, 1987-1996

(Nominal : L.E per week)

(Real: 1986= 100)

Economic Activities	Sectors	1	987	1990		19	1991 1994		94	1995		1996		%of change 1987-1996	
neuvines		Ν	R	Ν	R	Ν	R	Ν	R	Ν	R	Ν	R	N	R
Agriculture	Pu	27	25.1	35	19.6	42	19.6	56	17.8	59	17.8	74	19.8	174,1	-21.1
and															
Fisheries	Pr	17	15.8	32	17.9	30	14.0	51	16.3	58	17.5	59	15.8	247,1	0.0
	Т	25	23.3	34	19.0	39	18.2	54	17.2	59	17.8	64	17.1	156,0	-26.6
Mining and	Pu	49	45.6	92	51.4	80	37.3	109	34.7	128	38.6	129	34.5	163,3	-24.3
Quarrying	Pr	64	59.6	172	96.1	189	88.2	249	79.3	205	61.8	278	74.3	334,4	24.6
	Т	59	54.9	114	63.7	127	59.3	165	52.6	160	48.2	181	48.4	206,8	-11.8
Manufacturing	Pu	38	35.4	56	31.3	56	26.1	79	25.2	90	27.1	102	27.3	168,4	-22.9
	Pr	37	34.5	49	27.4	54	25.2	72	22.9	73	22.0	76	20.3	105,4	-41.2
	Т	38	35.4	54	30.2	55	25.7	77	24.5	84	25.3	93	24.9	144,7	-29.7
Electricity,	Pu	30	27.9	40	22.3	57	26.6	64	20.4	70	21.1	88	23.5	193,3	-15.8
Gas and Water	Pr	33	30.7	-	-	96	44.8	95	30.3	46	13.9	119	31.8	260,6	3.6
	Т	30	27.9	40	22.3	57	26.6	65	20.7	70	21.1	88	23.5	193,3	-15.8
Construction	Pu	40	37.2	53	29.6	60	28.0	85	27.1	89	26.8	100	26.7	150,0	-28.2
	Pr	46	42.8	75	41.9	64	29.9	144	45.9	127	38.3	93	24.9	102,2	-41.8
	Т	40	37.2	55	30.7	61	28.5	88	28.0	91	27.4	100	26.7	150,0	-28.2
Trade and	Pu	34	31.7	49	27.4	57	26.6	84	26.8	90	27.1	106	28.3	211,8	-10.7
Hotels	Pr	36	33.5	51	28.5	61	28.5	66	21.0	77	23.2	82	21.9	127,8	-34.6
	Т	34	31.7	49	27.4	58	27.1	77	24.5	85	25.6	83	22.2	144,1	-30.0
Transport	Pu	34	31.7	49	27.4	54	25.2	83	26.5	88	26.5	111	29.7	226,5	-6.3
and Storage	Pr	49	45.6	72	40.2	70	32.7	123	39.2	118	35.6	119	31.8	142,9	-30.2
	Т	36	33.5	53	29.6	57	26.6	88	28.0	92	27.7	112	29.9	211,1	-10.7
Finance,	Pu	38	35.4	66	36.9	68	31.7	95	30.3	100	30.1	107	28.6	181,6	-19.2
Insurance and	Pr	112	104.3	118	65.9	151	70.5	210	66.9	233	70.2	230	61.5	105,4	-41.0
Bus. Serv.	Т	49	45.6	76	42.5	85	39.7	120	38.2	131	39.5	170	45.4	246,9	-0.4
Soc. and	Pu	39	36.3	61	34.1	47	21.9	62	19.8	61	18.4	73	19.5	87,2	-46.3
Pers. Serv.	Pr	31	28.9	42	23.5	47	21.9	63	20.1	81	24.4	88	23.5	183,9	-18.7
	Т	33	30.7	46	25.7	47	21.9	63	20.1	79	23.8	94	25.1	184,8	-18.2
All	Pu	37	34.5	55	30.7	57	26.6	81	25.8	88	26.5	103	27.5	178,4	-20.3
Activities	Pr	42	39.1	57	31.8	64	29.6	84	26.8	88	26.5	91	24.3	116,7	-37.9
	Т	38	35.4	55	30.7	59	27.5	82	26.1	88	26.5	99	26.5	160,5	-25.1

Notes: (1) Pu = Public, Pr = Private, T = Total, N = Nominal, R = Real.

(2) Real wages are calculated using Urban CPI for year 1986 = 100; National Bank, Economic Bulletin, vol.51, No.3,1998

(3) Public Sector includes Public Enterprises.

(4) Private Sector : Establishments using 10 workers or more.

(5) In 1996 the classification of Economic Activities is different in CAPMAS data from previous years. In that year the data are more detailed for Agriculture, Trade, Finance, Social and Personal Services. For the purpose of accurate comparison, we calculated the average nominal wage in each of the four activities as an average of the sub-activities in that year.

Source: - Nominal wages: CAPMAS, Employment, Wages and Hours of Work (EWHW), Several issues - Real wages: calculated.
Table (7)

Trends in Average Nominal and Real Wages by Economic Activity and Gender, 1990-1996

(Nominal : L.E per week)

(Real: 1986= 100)

Economic Activities	Gender	19	90	19	91	19	94	19	95	19	96	%of 1990	change)-1996
		Ν	R	Ν	R	Ν	R	Ν	R	Ν	R	Ν	R
Agriculture	М	34	19,0	40	18,7	55	17,5	59	17,8	65	17,4	91,2	-8,4
and	Б	22	17.0	20	10.2	C1	16.2	67	17.0	C 4	14.4	(0.0	10.0
Fisheries	F E/M	32	17,9	39	18,2	51	16,3	5/	17,2	54	14,4 92	68,8	-19,6
Mining and	Г/IVI M	114	637	127	593	166	52 9	159	179	182	.05	59.6	73_7
Ouarrying	F	105	58 7	127	57.4	162	51.6	186	56.0	169	45.2	61.0	-23,0
2	F/M	0.	92	0	.97	0	.98	100	17	0	.93	01,0	
Manufacturing	М	56	31,3	57	26,6	80	25,5	87	26,2	97	25,9	73.2	-17,3
_	F	38	21,2	41	19,1	57	18,2	64	19,3	67	17,9	76,3	-15,6
	F/M	0.	68	0.	.72	0.	.71	0.	.74	0.	.69		
Electricity,	М	39	21,8	57	26,6	65	20,7	69	20,8	88	23,5	125,6	7,8
Gas and Water	Б	10	25.7	5.4	25.2	(1	10.4	70	21.7	00	24.1	05.7	()
and water	F F/M	40	25,7	54	25,2	01	19,4	1/2	21,7	90	24,1	95,7	-0,2
Construction	M	55	30.7	61	28.5	88	28.0	01	27 /		26.5	80.0	-13.7
construction	F	50	27.9	59	20,5	86	20,0	96	28.9	108	28,9	116.0	3.6
	F/M	0.	91	0	.97	0.	.98	1	.05	1.00	.09	110,0	
Trade and	М	51	28,5	59	27,5	78	24,9	87	26,2	84	22,5	64,7	-21,1
Hotels	F	42	23,5	53	24,7	72	22,9	78	23,5	76	20,3	81,0	-13,6
	F/M	0.	82	0.	.90	0.	.92	0.	.90	0.	.90		
Transport	М	53	29,6	56	26,1	85	27,1	89	26,8	111	29,7	109,4	0,3
and Storage	F	55	30,7	71	33,1	112	35,7	121	36,5	117	31,3	112,7	2,0
г.	F/M	1.	04	1	.27	1.	.32	1.	.36	1.	.05	100.0	-
Finance,	M	75	41,9	84	39,2	119	37,9	129	38,9	1/4	46,5	132,0	11,0
Bus Serv	F E/M	85	4/,5	89	41,5	125	39,8	140	42,2	149	39,8	/5,5	-16,2
Soc. and Pers	M	55	30.7	58	27.1	73	233	96	28.0	90	26.5	80.0	_13.7
Serv.	F	34	19.0	37	17.3	53	16.9	59	17.8	100	26,5	194.1	40.5
	F/M	0.	62	0	.64	0	73	0	.61	1.	.01	171,1	-
All	М	57	31,8	61	28,5	83	26,4	90	27,1	103	27,5	80,7	-13,5
Activities	F	46	25,7	50	23,3	69	22,0	77	23,2	83	22,2	80,4	-13,6
	F/M	0.	81	0	.82	0.	.83	0.	.86	0.	.81		-
All Activities													
Public	F/M	0.	89	0	.91	0.	.95	0.	.96	0.	.92		
Private	F/M	0.	69	0.	.66	0.	.67	0.	.73	0.	.68		

Notes: (1) M = Male, F= Female, N= Nominal, R= Real.

(2) Real wages are calculated using urban CPI for year 1986= 100; National Bank, Economic Bulletin, volume 51, No. 3, 1998

(3) For Classification of Economic activities see note (5) in Table 13.

Source: - Nominal wages: CAPMAS, (EWHW), Several issues

- Real wages: calculated.

Table (8) Nominal Wages, Nominal Productivity and Nominal Unit Labor Cost in Manufacturing Sector

Years	Wage per worker \$	Growth Rate %	Productivity \$ per worker	Growth Rate %	Unit labor cost (\$)
1980	1473		2585		0.56
1981	1932		3029		0.63
<i>1982</i>	2078		3501		0.59
<i>1983</i>	2554		4211		0.60
<i>1984</i>	3014		5130		0.58
1985	3331		6029		0.55
1986	3629	8.5	6520	13.8	0.55
<i>1987</i>	4176		7889		0.52
<i>1988</i>	4678		12665		0.36
1989	3313		9406		0.35
1990	2013		5571		0.36
1991	1348		3873		0.34
<i>1992</i>	1438		5080		0.28
<i>1993</i>	1575	-1.3	5446	1.2	0.28
1994	1732		5410		0.32
1995	1868		5965		0.31

Source : Calculated from UNIDO (1998), Industrial Statistics database . Productivity : Annual value Added / number of workers. Unit labor cost : wage per worker/ productivity.

Years	Real Wage \$	Growth	Real	Growth	Real unit labor
	per worker	Rate %	Productivity \$	Rate %	cost (\$)
			per worker		
1980	70		85		0.82
1981	83		98		0.85
<i>1982</i>	78		94		0.82
<i>1983</i>	83		97		0.85
<i>1984</i>	83		103		0.81
1985	82	-5.8	115	2.7	0.71
1986	72		118		0.60
<i>1987</i>	70		126		0.55
1988	66		178		0.37
1989	39		111		0.34
1990	20		56		0.36
1991	11		34		0.33
<i>1992</i>	11		37		0.28
1993	10	-11.4	36	- 8.4	0.28
1994	11		34		0.31
1995	10		33		0.29

Table (9) Real Wages, Real productivity and Real Unit labor cost in Manufacturing Sector

Source : Calculated from UNIDO (1998), Industrial Statistics Database. Consumer price Index (1990=100) was used to get Real wages. GDP Deflator was (1990=100) used to get Real Productivity.

Country	Unit labor cost (\$)	\$ Productivity
Malaysia	0.80	7280
Philippines	0.57	2714
Thailand	0.63	5366
Egypt*	0.28	5080

Table (10) Comparative unit labor costs in the Manufacturing sector (1992)

Agrowal, N. (1995), Indonesia: Labor Market Policies and International Competitiveness, Internet, Sept,p.15 * Table (8).

Table (11) Average Productivity and Average Unit Labor Cost in Manufacturing activities 1980-1995

(in U.S.\$)

1990-1995				1980-1989				Activity
4	3	2	1	4	3	2	1	
1.01	0.38	0.41	19	7.81	1.23	1.84	207	Food Products
1.62	0.61	0.36	17	2.51	1.70	1.07	120	Textiles Products
0.51	0.19	2.06	95	1.84	1.25	2.56	288	Chemical Products
1.60	0.60	0.62	29	4.85	3.29	2.03	229	Iron Products
1.28	0.48	0.73	34	2.05	1.39	1.74	19651	Metal Products & Equipment

Source : calculated from UNIDO (1998), Op. Cit.

Average productivity in each activity.
 The ratio of average productivity in each activity to average productivity in total manufacturing sector.
 Average Unit Labor Cost in each activity.

(4) The ratio of Average Unit Labor Cost in each activity to Average Unit Labor Cost in Total Manufacturing Sector.

Definition of activities

Food products include Food, Beverages and Tobacco(311+313+314)

Textiles products include Textiles ,Wearing Apparel ,Leather products and Footwear (321+322+323+324).

Wood products include Wood products and Furniture (331+332).

Paper products include Paper products ,Printing and Publishing (341+342).

Chemical products include Industrial chemicals ,Petroleum refineries , Miscellaneous petroleum &Coal products , Rubber & plastic products and other chemicals (351+352+353+354+355+356).

Iron products include Iron, Steel and non-ferrous metals (371+372).

Metal products and equipment include Fabricated metal products ,Machinery,Electrical machinery,Transport equipment ,Professional and Scientific equipment (381+382+383+384+385).

Pottery ,Glass and non –metallic mineral products include Pottery ,China Earthenware Glass and other non –metallic mineral products (361+362+369).

Others include Other Manufacturing products (390).

Trade and Foreign Exchange Regime in Egypt

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Abstract

The main objective of this study is to examine the most important components of foreign trade policy in Egypt, namely the tariff structure, non-tariff barriers (NTBs) and the exchange rate policy, trying to assess their likely impacts on Egyptian exports competitiveness. Although the study cover, the nineteen eighties and nineties, its main focus is on distortions resulting from these policies in 1998 (or the latest available data).

1- Introduction

Since the beginning of the nineties, Egypt began to accelerate plans for further liberalization of its restrictive trade policies and practices. The fundamental dual objective to be achieved by reforming the trade regime was to expand exports and to replace imports through pursuing two complementary lines of action: establishing competitive export channels and creating efficient import replacement capabilities.

Under the Economic Reform and Structural Adjustment Program (ERSAP), Egypt's strategy to improve its international competitiveness appropriately places emphasis on international trade policies which are viewed as a primary channel through which global market incentives are communicated to the local economy. As a realignment of the level of real exchange rate is believed to be an important determinant of both short-term profitability of export activities and medium-term attractiveness of investing in the export sector, the first element entailed in the process of the reform was the devaluation of the Egyptian pound and the commitment to a flexible exchange rate policy. The second element was the removal of any remaining restrictions or prohibitions on private sector's exports of primary commodities, as well as the promotion of exports through import duty drawbacks, export credits, and other subsidies and tax incentives. The third element of the trade reform was the reduction of the level and variance of import tariffs and further import liberalization through removing the remaining quantitative restrictions and other forms of non-tariff barriers.

The trade and foreign exchange regime in Egypt, as it prevails in 1998/1999, will be studied according to the following organization:

- Section 2 outlines the main developments in the Egyptian economy during the period 1980-1999, and presents the challenges it faces.
- Section 3 considers the tariff structure in Egypt and discusses some summary measures to evaluate the height and the dispersion of tariff rates, as well as the

implications of the tariff structure for exports and investment. Market access for industrial goods and agricultural commodities are also considered.

• Section 4 studies the evolution of the liberalization of non-tariff barriers on imports as well as on exports, and discusses export incentives in the Egyptian economy.

- Section 5 discusses issues of market access for services.
- Section 6 analyzes the behavior of nominal and real Egyptian exchange rates and examines the relationship between the exchange rate and Egyptian exports, and imports..
- Section 7 summarizes the overall findings of the paper and concludes.

2- Main Developments in the Egyptian Economy (1980-1999)¹

After about two decades of pursuing an inward-looking development strategy, the Egyptian economy has begun in 1974 to open up to the world economy. One of the main reasons behind the switch to an outward-looking orientation was the increasing crisis into which the economy had plunged since the late 1960s.

In spite of unprecedented economic growth during 1975-85, Egypt's trade balance has been continuously in deficit. This and other macroeconomic imbalances were veiled by the boom witnessed by the Egyptian economy, mainly due to large foreign exchange inflows: increased petroleum prices and export proceeds, higher Suez Canal revenues, accelerating workers' remittances and enhanced tourism earnings. However, this ended in 1986 as a result of unfavorable external developments, principally the glut in oil markets and the consequent decline in petroleum prices as well as in other related sources of foreign exchange, recession in the world economy, and the sharp decline in the flow of aid. Since structural weaknesses of the Egyptian economy constrained its capacity to respond to these external shocks, Egypt experienced a dramatic fall in growth; and the severity of the macroeconomic imbalances was to be faced.

Egypt adopted a fundamental reform of its economy, in mid-1986, aiming at introducing market forces as a major determinant of resource allocation in the economy. However, these reforms did not prove to be effective because they were fragmented and lacked an overall strategy for structural adjustment and growth-promoting reform. It is worth noting that one of the main factors delaying the decision of an overall strategy was the alleged concern of the Government of Egypt (GOE) about the likely unfavorable impact of such a strategy on the well being of low-income groups.

¹ In this section, all the figures for the years after 1992 are from various issues of Ministry of Economy and Foreign Trade's "*Monthly Economic Digest*", while those for previous years are from the World Bank's "*World Tables*" unless otherwise mentioned.

Finally, under the pressures of the increasing economic difficulties in the early 1990s, the GOE undertook some policy measures that were bolder, more encompassing, and more comprehensive. These developments culminated, in May 1991, in the launching of an Economic Reform and Structural Adjustment Program (ERSAP) that gained the support of the International Monetary Fund (IMF) and the World Bank (WB). The basic goal of ERSAP was twofold: to stabilize the economy, and to promote growth that would boost employment opportunities for the growing population. This would presumably raise living standards, reduce income disparity, alleviate poverty and ultimately enhance welfare. Macroeconomic stabilization, the first stage of the reform process, was achieved remarkably quickly and successfully. Structural reform, deregulation and privatization have, as in most countries, proceeded more slowly. The Egyptian authorities justify the particularly gradual reform pace by the need to build consensus in favor of reform.

Fiscal deficits were reduced from an annual rate close to 20 percent of GDP at the beginning of the nineteen nineties, to around 1.3 percent in 1998/99². Although the surplus, witnessed for the first time in decades, in the external current account during the period 1990/91 to 1994/95, was reversed again to deficit, it was kept at low levels. This has been accompanied by an impressive increase in Egypt's holdings of international reserves, from less than \$3 billion³ in 1990 (insufficient to cover 6 months of imports) to over \$20 billion in 1996/97 (equivalent to 15.7 months of imports), followed by a continuous decrease to reach only \$15.2 billion in January 2000 (equivalent to around 12 months of imports).

With the effective fiscal adjustment and management of sound monetary policies, inflation, which ranged between 20-30 percent a year in the late 1980s, was brought down to below 4 percent in the last two years. The total foreign debt fell from more than \$45 billions in the end of the 1980s (almost higher than GDP) to around \$28 billions by the end of 1990s (only 31.7 percent of GDP), due to a large extent to debt forgiveness and rescheduling following the Gulf War and Paris Club agreements. A quick resumption of growth was achieved, and real GDP growth rate rose from the stagnation of the early 1990s to 6 percent in 1998/99, while real GDP per capita growth rate increased from less than one percent in 1992/93 to 3.7 percent in 1998/99. It is worth noting here that the external and internal shocks of 1997 and 1998 resulting from declining oil prices, the Luxor attack on tourists and the Asian and Russian crises, demonstrated the relative strength of Egypt's macroeconomic indicators and its strong external debt position.

With respect to the trade sector, progress has also been made with tariff liberalization. Export controls have been removed, and the import tariff burden, particularly on capital goods and inputs, declined. Egypt's commitment to liberalization was fostered by the signing of the GATT/Uruguay Round agreement in 1995⁴. Furthermore, Egypt embarked

 $^{^{2}}$ The fiscal deficit, as a ratio of GDP reached its lowest level (0.9 percent) in 1996/97, and started to increase, although slightly, since then.

³ According to International Monetary Fund's "IFS, Yearbook", 1999.

⁴ Nonetheless, it is argued that tariffs remain above those in other North African and Middle- Eastern

on negotiations for a partnership agreement with the EU, and in 1998 a free trade area agreement with Arab countries (PAFTA) was implemented as well as a Common Market Agreement with East and South African Countries (COMESA). Other regional and bilateral free trade agreements, which are under consideration, include Turkey and the USA.

Notwithstanding these developments, Egypt's trade balance situation has been continuously negative throughout the whole period of the study (1980 to 1999). The gap between exports and imports increased by more than twofold between 1982 and 1999, and has been increasing from 1994 at an average annual growth rate of 11.5percent. During the second half of the 1990s, the share of the trade deficit in GDP has remained in the range of 13.5 percent.

The performance of the trade sector is an indication of the overall performance of the Egyptian economy. Trends in this sector can determine whether the country is keeping pace with productivity and technological change in the rest of the world, or is being progressively left behind. This explains why the low level and slow growth of non-oil exports have caused concern about the strength and flexibility of the real economy. It also explains why the present export performance is considered to be one of the major obstacles to future growth which is the key test of the success of the reform program.

Since 1996, Egyptian exports have accounted for less than 3percent of GDP, and this level has been falling through the last decade to reach 2.5 percent in 1999⁵. This makes Egypt different from most developing countries, for which growth in exports and particularly growth in manufactured exports have been a key element in promoting growth. On the contrary, Egyptian commodity exports in general, and manufactured exports in particular, are only a modest source of export earnings, as they represent 31 percent and 13 percent of total exports' earnings, respectively during the period 1993/94-1998/99. This poor performance is argued to be largely the result of past import substitution policies, protectionism and state intervention. Incentives were skewed against tradable goods; tariffs, controls and bureaucratic procedures restrict both exports and imports of the intermediate and capital goods that exporters require. Moreover. despite impressive progress on the macroeconomic front since 1990, the Egyptian economy remains relatively closed, even with respect to its recent history. The index of openness fell from nearly 70 percent in 1979/80⁶ to 50.9 percent and further to 40 percent in 1993/94 and 1997/98 respectively, and remained constant at this level in 1998/99.

In view of these developments, and of the estimated rate of unemployment which stands at about 10 percent and given the annual expected expansion of the labor force at 2.8

Countries.

⁵ These figures are calculated from the Ministry of Economy and Foreign Trade "*Monthly Economic Digest*".

⁶ Čalculated from International Monetary Fund's "*IFS*, *Yearbook*", 1999.

percent⁷ over the next 10 years (World Bank, 1997), Egypt's long term challenge remains daunting. Thus, it is imperative for Egypt to build on this macroeconomic and financial stability a set of sound economic policies to achieve sustainable and rapid high levels of real growth in order to create the job and income opportunities to meet the rising expectations of the growing population.

Since empirical studies suggest that the output response to significant trade reform can be rapid, with per capita incomes rising in the period immediately following trade liberalization (Sachs and Warner, 1995 in WB 1997); trade policy aiming at enhancing growth of Egyptian exports and diversifying sources of export income comes at the core of these policies. Moreover, the results of the empirical growth analyses from two different sources (Dollar 1996, and Sachs 1996 in WB 1997) show that Egypt could have achieved 2.7 percent to 3.7 percent higher per capita GDP growth by emulating economic policies adopted by the East Asian countries. The impact of Egypt being less open to trade is estimated to have resulted in a 2.0 percent lower real per capita GDP growth rate per year over the period of 1966-1993 (Dollar, 1996 in WB,1997). Thereby, Egypt could reap substantial gains by accelerating the pace of trade liberalization as well as by some further consolidation of macroeconomic stabilization.

3- The Tariff Structure

The tariff structure is one of the main economic policy tools. Its importance lies in the fact that it can achieve a number of economic and social objectives depending on the country's development strategy. The most traditional objective for a tariff is the creation of a revenue flow to the government. This is still the standard purpose in countries where customs duty is a large source of government revenue while the alternative tax bases are small or taxpayers' obligations are costly to enforce (DEPRA, 1998a). Tariffs are also imposed purposely either to restrict imports in order to protect the local market from external competition; to restrain expenditures on imports and thus preserve the economy's monetary reserves of foreign exchange; or to prevent the importation of commodities that might threaten the moral standards or health of the citizens. However, the dominant reason for tariffs in most economies today seems to be the protection of the local market for particular domestic industries following the standard argument that a local industry and its workers need protection against foreign competition.

Whatever might be the ultimate objective, tariffs raise the price and constrain the quantity, or the quality of imported commodities. As a consequence, the degree of market competition among suppliers is reduced, favoring the nation's producers at the expense of its consumers. The impacts of trade barriers on the allocation of resources and market prices reduce the efficiency in overall national production and thereby lower the standard of living.

⁷ Assuming a constant participation rate.

In order to adapt to the policy of "opening up the economy" in the mid-seventies, the government issued in 1975 a new law for customs duties. Furthermore, in 1980, a complete reform of the tariff structure was issued. This tariff structure was on the whole rational, but the wide variations in the rates of customs duties within broad commodity groups were highly distortionary. In August 1986, a new tariff plan was issued to reform the tariff structure, to address the distortionary effects of the previous one, and to try to create the right incentives to domestic producers.

As part of the structural adjustment program in Egypt, the tariff structure was further streamlined and restructured in 1991 (Presidential Decree No. 178 for 1991, issued on May 21,1991). The range of tariffs was narrowed from 0.7-120 percent to 1-100 percent. Some exceptions were made from the lower limit that includes a few basic foodstuffs, and some from the upper limit that include luxury cars, vans, cosmetics, tobacco, and alcoholic beverages. This structure has been revised by the Presidential Decree No. 38/1994, by which the harmonized customs tariff was issued. Egypt has ever since followed a program of tariff revisions and reductions, the latest was implemented in 1999.

Average nominal protection on manufacturing products and agricultural commodities declined successively from 47.5 percent after the 1986 tariff reform to 24.62 percent in 1997 and further to 22.2 percent in 1999.

3-1 Height of the Tariff

While Egypt's tariffs have clearly been trending downward, it is still believed that they are high. Hence, an assessment of the Egyptian tariff structure should be undertaken. However, this target is not as easy as it may seem to be, as it is confronted with some problems. One problem with trying to assess the height of a tariff is that summary measures are necessarily misleading. This is due to the fact that a simple average may give too much weight to high tariffs on goods which are not actually imported, or which have become redundant because trade was already precluded at much lower tariffs, as with alcoholic beverages in Egypt. On the other hand, an import-weighted average may significantly understate the tariff level, as high tariff themselves choke off imports and, hence, receive less weight in the calculation of the average (DEPRA, 1998b). However, the assessment of the two types of summary measures is helpful, especially if they both give the same insights.

The study uses different sets of tariff lines in assessing the overall tariff structure. The core analysis focuses on the tariff lines grouped in 15 sectors. The sectors under consideration are: 1. Food (SITC sections 0,1,4 and division 22); 2. Agricultural raw materials (SITC divisions 21,23,24,25,26,29); 3. Mining products (SITC section 3 and divisions 27,28 and 68); 4. Iron and steel (SITC division 67); 5. Chemicals (SITC section 5); 6. Other semi-manufactures (SITC divisions 61,62,63,64,66,69); 7. Textiles (SITC division 65); 8. Clothing (SITC division 84); 9. Power generating machinery (SITC division 71 minus group 713); 10. Other non-electrical machinery (SITC divisions

72,73,74); 11. Office machines and telecommunications equipment (SITC divisions 75,76 and group776); 12. Electrical machinery and apparatus (SITC division 77 minus group 776 and subgroup 7783); 13. Automotive products (SITC groups 781, 782,783 and subgroups 7132,7783); 14. Other transport equipment (SITC division 79, groups 785,786 and subgroups 7131, 7133,7138,7139); and 15. Other products (all commodities not specified above). The last sector will be disregarded in future calculations due to the heterogeneity of its composition.

The description of the different sets of tariff lines is presented in Table (3-1). For each set summary measures are calculated twice: the first, after excluding the lines with specific tariff (those of tobacco⁸) to make the calculations possible; the second after excluding the lines of alcoholic beverages and the remainder ones of tobacco and cigarettes, since the high tariffs on alcoholic beverages⁹ and tobacco¹⁰ items are thought to be imposed for religious and health reasons rather than for trade policy purposes.

Description of the Sets of Tariff Lines							
	No. of Lines	Value of Imports (billion L.E.)	Share of Total Imports(%)				
Set 1	8664						
Set 1*	8641						
Set 1**	8617						
Set 2	5354	56.024					
Set2*	5345	55.274	98.662				
Set 2**	5337	55.274	98.661				
Set 3	4651	49.741	88.785				
Set 3*	4642	48.992	87.448				
Set 3**	4634	48.991	87.446				

	Table (3-1)	
Description	of the Sets of Tariff Lines	

Set 1: All the tariff lines, of which: 2 items are with no tariff rate while 7 items are free of tariff. **Set 2**: Actually imported lines.

Set 3: Lines included in the 14 sectors.

* The corresponding set after excluding the lines with specific tariff.

** The corresponding set after further exclusion of alcoholic beverages and tobacco and cigarettes lines.

As Table (3-2) shows, the average tariff rate for actually imported lines (Set 2) as well as for those included in the previously described 14 sectors (Set 3) exceeds 20 percent, which is, despite the successive reductions, still relatively high, if compared with fast growing exporters whose average tariff level is 8.7 percent $only^{11}$, or furthermore with OECD countries which have a tariff level of 6.1 percent. Meanwhile the average tariff of all tariff lines, whether actually imported or not imported, (Set 1) is about three quarters

⁸ The value of the lines of tobacco that are actually imported represents 1.34% of the total value of imports.

⁹ The value of alcoholic imports is negligible, it represents 0.0006% of the total value of imports.

¹⁰ The remainder of tobacco items has a marginal value that is equivalent to 0.0005% of the total value of imports.

¹¹ As reported in GATT/WTO, Trade Policy Review Mechanism Reports, various issues, tariff level (including all import charges) is 11.1, 0.4, 9.7, and 8.5 percent in Korea, Singapore, Taiwan and Thailand respectively. Moreover, an Arab country like Qatar has a tariff level of only 0.4 percent. Even Mexico, which is a typical example of a developing country, has a tariff that is quiet lower than that of Egypt (only 13.4 percent).

of that imposed on the former two sets. This suggests that the tariff lines that are not imported have relatively low tariff rates, and that high tariff rates did not preclude imports of what seem to be important for the Egyptian economy.

In addition to the tariff rates stipulated by the customs law and its amendments, imports into the country are subject to extra charges for services which, according to the last amendment in 1997, amount to 2 percent of the value of the consignment subject to tariff rates of 5-30 percent and to 3 percent of the consignment value if the tariff rate exceeds 30 percent. Furthermore, an additional rate of 1 percent of the value of the consignment is charged, raising these supplementary charges to 3 percent and 4 percent successively according to the tariff band. These surcharges, when taken into consideration in the calculations, increase the average tariff rate by about 3 points as exhibited in Table (3-2).

Table (3-2)
General Summary Measures of
of Tariff Rates Height in Egypt in 1998

		(%)
	Average Applied	Average Applied Tariff
	Tariff	plus charges
Set 1*	18.89	21.07
Set 1**	14.83	17.01
Set 2*	22.25	25.61
Set 2**	20.55	23.91
Set 3*	22.02	25.12
Set 3**	20.06	23.16

Source: Own calculations

3-2 Tariff Dispersion

Further investigation of the tariff rates shows a highly dispersed tariff structure. Duties considerably differ across sectors of the economy. They range from zero to 50 percent as a norm and reach exceptionally high levels on some items: tobacco (at least 85 percent), poultry (80 percent), automobiles (135 percent), alcoholic beverages (600 -1800 percent). An indication of this dispersion in rates is given by the coefficient of variation which is a first pass summary measure of non-uniformity of protection. The higher this coefficient is, the more differentiated the tariff structure will be. It has been estimated at a value that ranges between approximately 63 percent and 109 percent according to the set of tariff lines used in the calculations. This dispersion is even higher when tariffs on alcoholic beverages and tobacco lines are considered, as the coefficient of variation jumps to a figure between 259 percent and 568 percent.

Another indication of dispersion is given by the tariff peaks or spikes, which refer to the ratio of lines for which the tariff rates exceed a reference level to the total number of lines. A large number of peaks implies a highly non-uniform tariff structure whereas a small number of peaks points to a flatter tariff structure. Three sets of shares of lines are computed using three reference levels:

- The first is 15 percent which we call "international peaks" (IP),
- The second reference level equals twice the national mean tariff which we refer to as "national peaks 1" (NP1), and
- The last one is equivalent to three times the national mean tariff, which we name "national peaks 2" (NP2).

Table (3-3)	
Summary Measures of Tariff Rates D	ispersion
in Egypt in 1998	

	Coef. of	Coef. of	IP	IP+	NP1	NP1+	NP2	NP2+
	Variation	Variation +						
Set 1*	567.99	510.07	36.87	38.54	13.52	3.52	0.45	0.45
Set 1**	108.74	101.41	36.64	38.31	29.12	13.39	3.37	3.32
Set 2*	297.63	259.08	52.05	54.50	3.89	3.65	0.39	0.39
Set 2**	70.84	62.94	51.98	54.43	3.75	3.75	0.24	0.24
Set 3*	321.74	282.36	49.85	52.63	4.42	4.14	0.39	0.39
Set 3**	72.38	64.15	49.76	52.55	4.25	3.97	0.22	0.22

Source: Own calculations

IP : number of lines exceeding international peaks (%)

NP1: number of lines exceeding twice the national average tariff rate (%)

NP2: number of lines exceeding three times the national average tariff rate (%)

indicates the corresponding figures after the inclusion of surcharges rates in the calculations.

Using the different definitions of tariff spikes, the tariff schedule of Egypt, according to the estimates shown in Table (3-3), exhibits the following characteristics. More than half of the actually imported tariff lines are considered international spikes; while less than 5 percent of these lines are national peaks according to (NP1). Furthermore, using the second definition of national peaks would be misleading as it indicates almost a complete uniformity of the Egyptian tariff structure. In the light of these figures, and the comparisons with other countries, it is fair to argue that tariffs in Egypt are, in general, still high and quite dispersed, and that a strong import-substitution bias still remains in the tariff structure.

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Furthermore, examination of the tariff structure of the 14 sectors may be more insightful. It is worth noting here that the summary measures are almost the same, whether using all the imported tariff lines (Set2) or the selected lines of the 14 sectors (Set3), or using the tariff lines before or after the exclusion of the alcoholic and tobacco lines. Moreover, the values of the summary measures, according to the 1998 Tariff List presented in Table (3-2), and Table (3-3) are not substantially different from those using the Tariff List of 1999, which are shown in Table (3-4). In the light of these two reasons, one would suggest that the use of (Set3**) with the Tariff List of 1999 in more detailed calculations is likely to lead to conclusions that are consistent with those from (Set2**).

							(%)
	Average Applied Tariff	Average Applied Tariff +	Coef. of Variation	Coef. of Variation +	IP	NP1	NP2
Set 3* Set 3**	22.18 20.22	25.32 23.35	319.34 71.75	280.15 63.62	50.09 49.87	1.142 3.172	0.668 0.237

Table (3-4) Summary Measures of Tariff Rates In Egypt in 1999

<u>(0 /)</u>

Source: Own Calculation

According to the figures presented in Table (3-5), the overall-weighted average tariff rate is 13.2 percent, which is about two thirds of the simple average (20.22 percent). This emphasizes the aforementioned understatement of the tariff level of import-weighted averages. However, the ranking order of the two averages is not substantially different. Both measures indicate that five sectors (6. Other semi-manufactures, 7. Textiles, 8. Clothing, 12. Electrical machinery and apparatus, and 13. Automotive products) have both simple and weighted average rates that are at least 20 percent.

If we divide the 14 sectors into four main categories: petroleum (SITC 3), other primary products (SITC 0, 1, 2, and 4), chemicals and resource-based manufactures (SITC 5 and 6), and true manufactures¹² (SITC 7 and 8), we will notice that sectors 5 to 7 are of the first group of manufactured goods, while sectors 8 to 14 belong to the true manufactures group. Combining this classification with the previous results, one can recognize that tariff rates in Egypt are generally rational in the sense that they increase with the stage of production. Raw materials generally receive nominal protection in the range of 0-10 percent, consumer goods in the range of 40 percent and above and intermediate goods in between. This is likely to lead to high Effective Rates of Protection, with their potential for encouraging inefficient production. However, capital goods, specifically non-electrical machinery, have recently been subjected to a reduced rate of 5 percent.

Moreover, Tables (3-5) and (3-6) show that tariffs on sectors 6 to 8 are the least dispersed indicating high tariff rates on all the included lines. Sector 13: Automotive products shows the highest coefficient of variation, and is thus subject to highly dispersed tariffs. It also exhibits highly differentiated components.

¹² The reason for the name "true manufactures" is that their production tends to be independent of any natural resource endowments (Louis Berger, 1999).

Sector no.	Description	Tariff Interval Range	Average Applied Tariff	Weighted Average Applied Tariff
1	Food	1 - 80	21.83	6.10
2	Agricultural Raw Mat.	5 - 40	11.11	5.81
3	Mining	3 - 40	14.97	8.14
4	Iron & Steel	3 - 30	16.73	14.61
5	Chemicals	1 - 40	14.51	10.93
6	Other Semi-Man.	0 - 54	26.13	21.43
7	Textiles	5 - 54	36.65	29.81
8	Clothing	30 - 80	39.49	38.72
9	Power Gen.Mach.	5 - 30	8.22	9.60
10	Other Non-Elec.Mach	5 - 40	10.71	10.62
11	Off.Mach.&Telec. Equip.	5 - 40	19.76	16.93
12	Electrical Mach.&App	5 - 40	21.12	21.81
13	Automotive Products	5 - 135	33.25	44.96
14	Other Transp. Equip.	5 - 40	20.10	19.72
Overall		0 - 135	20.22*	13.20

Table (3-5) Tariff Rates Height Summary Measures of the 14 Sectors (Set3**)

Source: Own calculations

* The difference between this figure and that presented in Table (3-3) results from the exclusion of 2 tariff lines whose imports are reported in quantity (number of ampoules) rather than in value.

Another way to assess the dispersion of the tariff structure is to follow up the distribution of sectoral imports by tariff bands as shown in Table (3-7). The table indicates that overall the highest concentration of tariff lines falls within the bands lower than 15 percent (47.3 percent of the number of tariff lines), 30 percent - (around 20 percent of tariff lines) and 40 percent - (less than 15 percent of tariff lines). Around 3 percent of tariff lines are subject to tariff rates exceeding 54 percent.

Table (3-6)

Dispersion Summary Measures of Set 3**

Sector	Description	Coefficients of Variation	IP	NP1	NP2
1	Food	69.34	59.85	0.38	0.38
2	Agricultural Raw Mat.	79.70	18.56	0.00	8.38
3	Mining	64.71	44.05	0.00	0.00
4	Iron & Steel	53.32	51.05	0.00	0.00
5	Chemicals	70.53	26.65	0.00	0.00
6	Other Semi-Man.	41.00	78.29	0.70	0.00
7	Textiles	37.58	92.02	30.28	0.00
8	Clothing	12.79	100.00	1.02	0.00
9	Power Gen.Mach.	77.46	6.85	0.00	6.85
10	Other Non-Elec.Mach	91.65	14.23	0.00	7.21
11	Off.Mach.&Telec.	79.18	39.10	0.00	0.00
	Equip.				
12	Electrical Mach.&App	63.22	55.02	0.00	0.00
13	Automotive Products	86.20	77.88	10.58	4.81
14	Other Transp. Equip.	57.85	64.58	0.00	0.00
Overall		71.76	49.88	3.20	0.24

(%)

(n ()

Source: Own calculations

The sectors with the highest concentration of their imports at the lower end of the tariff structure (bands 0 percent - and 5 percent-) include: food (31 percent of imports of sector 1), agricultural raw materials (44 percent of sector 2 imports), mining (30 percent of sector 3 imports), power generating machinery (63 percent of sector 9 imports) and other

non-electrical machinery (51 percent of sector 10 imports). These sectors provide the economy with basic foods, raw materials, intermediate and capital inputs. Textiles (sector 7) still enjoy a high protection with over 30 percent of imports protected at nominal rates exceeding 54 percent. These are fabrics imports which were until recently protected by a ban. This ban has been removed in 1998 and replaced by a high tariff. Clothing (Sector 8) is also highly protected with tariffs exceeding 40 percent. This duty is not effective as imports of ready-made garments are still banned.

Table (3-7)
Tariff Structure in 1999: Distribution of Tariff Lines by
Sector and according to Tariff Bands

(**n** /)

								(*	0)
	0-	5-	10-	15-	20-	30-	40-	54-	> 80
Sector 1	7.27	23.90	8.03	0.96	13.19	18.36	27.92		0.38
Sector 2		44.31	32.34	8.98	4.19	5.99	4.19		
Sector 3	3.57	26.19	23.41	2.78	26.98	14.29	2.78		
Sector 4	3.38	15.19	21.94	8.44	29.11	21.94			
Sector 5	1.30	16.83	53.21	2.00	5.71	15.13	5.81		
Sector 6	0.14	1.96	14.71	4.90	20.31	35.29	21.99	0.70	
Sector 7		0.47	1.64	5.87	7.28	41.31	13.15	30.28	
Sector 8						9.18	89.80		1.02
Sector 9		63.01	30.14			6.85			
Sector 10	0.18	51.02	34.01	0.55	3.33	3.70	7.21		
Sector 11		15.04	45.86		9.02		30.08		
Sector 12	0.37	23.42	20.82	0.37	4.83	32.34	17.84		
Sector 13		0.96	20.19	0.96	25.00	18.27	25.00	1.90	7.69
Sector 14		21.88	12.50	1.04	30.21	21.88	12.50	0.00	0.00
Overall	1.53	19.71	26.06	2.83	11.75	20.17	14.79	2.94	0.24

Source: Own calculations based on the 1999 Tariff List

3-3 Implications of the Tariff Structure for Exports

The current structure of Egypt's trade taxes gives rise to several concerns because the import duties are still high and very dispersed, giving more protection to finished goods than to raw materials, capital goods and other inputs. While this escalation of tariff structure aims to foster manufacturing through import-substitution, in fact it creates an anti-export bias, which is inconsistent with the current liberalization and export promotion strategy. Based on a previous study of one of the authors (Nathan Associates, 1998), this phenomenon will be reviewed more closely.

3-3-1 The General Sales Tax (GST)

The GST is a sales tax applied at the manufacturing level on imported and domestically produced goods, with some exceptions, and on certain services. The rates range from 5 percent to 25 percent with a standard rate on goods of 10 percent. There are also some exceptionally high GST rates on some goods - e.g. mineral water, soft drinks and juices (32.5 percent - 60 percent), cigars and cigarettes (50 percent - 200 percent) and alcoholic beverages (100 percent). Thus it is a fairly high, non-uniform tax on commodities.

Although the focus here is on international trade regime, the GST is relevant for two reasons. First, the GST is applied to imports on a duty-inclusive basis. Thus it has the effect of magnifying existing tariff rates. Second, the GST is relevant, because the welfare effect of any commodity tax depends on the addition to the tax wedge of each tax at the margin. As a rule of thumb, a 20 percent GST superimposed on a 20 percent tariff will have four times the negative welfare effect as a 20 percent tariff with no GST (Vousden,1990).

3-3-2 The Anti-Export Bias Due to Tariffs

Tariffs and other import charges are commodity taxes which raise the price of imports by the full amount of the duty for a small country like Egypt and so, provide a margin of protection for the domestic producers of similar goods who sell in the domestic market. The exporters, on the other hand, see the price of their exports fall relatively to prices of both the tariff protected import-competing goods and, to some extent, non-traded goods. Thus, *import tariffs affect prices in essentially the same way as taxes on exports*.

High import tariffs divert protection and investment away from exporting and into other sectors of the economy. Traditional exports like petroleum, mineral resources, the Suez Canal, tourism, and some agriculture, rely extensively on industry specific inputs the values of which can absorb the tax, and these exports will remain viable even though less profitable. However, non-traditional industries, such as manufactured exports, must compete in the world market with other high quality, highly competitively priced commodities. Profit margins of such exports are already squeezed by transport costs and other transactions costs and delays. So even a small export tax may be sufficient to discourage exports and non-traditional export industries never appear.

The negative effects on exporters are further magnified by non-tariff barriers. Beyond this implicit export tax owing to import tariffs, there is an additional tariff equivalent effect raising import-competing goods prices due to non-tariff barriers¹³, red-tape costs and the fact that GST is applied on a duty inclusive basis. However, it is difficult to determine the precise level of tariff equivalent of such import barriers and costs.

3-3-3 Measures of the Anti-Export Bias in Egypt

Economic analysis provides a way to estimate the export tax equivalent of import tariffs (Greenaway,1989). If the average tariff in Egypt is taken to be 20.2 percent, the equivalent export tax would be 13.9 percent. Using the weighted average tariff rate of 13.2 percent, the equivalent export tax would be 9.55 percent. [see Nathan Associates,1998a, Appendix 2 of the report for the details]. In other words, current Egyptian import tariffs are having the same effect as an export tax of 10 percent to 13 percent. If we add to this effect the supplementary charges of 3 percent to 4 percent and the effect of the GST this export tax will rise further. Note also that this tax falls on the

¹³ These barriers will be discussed in details in section 5.

gross value of exports, not just on profits and so can have a damaging effect on the incentive to export.

Tariffs represent further taxes on inputs for exporters and other producers. While their burden is not excessive, (they have been estimated, based on the 1997 tariff structure, at 7.2 percent for manufacturing and 4.8 percent for agriculture), and can be recovered through duty drawback, they represent nevertheless a cost, which for some sectors may be quite high.

An alternative way to assess tariff burden on exporters is to calculate effective rates of protection for firms that decide to export some of their products. Such firms pay the tariff protected prices for inputs- whether imported or domestically produced under protection, but receive no such protection for their output prices since they are selling into the world market. Such calculations for 1997 tariffs lists showed that tariffs provide negative effective protection for exporters. *Value added for firms that decide to export appeared to be on average 6.9 percent to 14.6 percent lower than it would be in the absence of tariffs on inputs*, depending on how well the duty drawback scheme works. For non-traditional exports, trying to compete with high quality products in world markets, even the lower of these two numbers may act as a serious impediment to competitiveness and a substantial disincentive to export. The calculated averages conceal large differences between sectors, due to the observed tariff dispersion and the previous conclusion may be significantly reinforced for some of the sectors facing high tariff rates on their inputs.

Calculation of anti-export bias points to the same conclusion. Although Egypt has implemented major tariff revisions aiming at reducing the level of protection to various economic activities, nevertheless, with the exception of the drawback scheme, very few incentives are directly provided to exports to increase their competitiveness abroad. The extent of the economy-wide average bias against exports was estimated at 19.7 percent in 1997. However, it varied among activities. Anti-export bias in agricultural activities was around 6.7 percent whereas it was 21.7 percent for manufacturing activities. It was particularly high for final wear.

3-4 Implications of the Tariff Structure for Investment

The dispersion of Egypt's tariffs along with their average height contribute to low productivity growth and divert new investments and employment away from the most promising sectors and activities of the economy, including exports.

At the margin, i.e. looking at the firms and businesses that are barely profitable, *the more protected industries are, the less efficient is the economy.* This is because tariffs distort the price signals to give the impression that highly protected industries are the most profitable, which they are in financial terms, but only because of the protection. Protection cannot add real value to an endeavour, it only draws resources to less productive activities.

There is wide *evidence that protection lowers productivity*. Empirically, there is considerable documentation of the resource inefficiency costs of protection (see, for example, Vousden (1990) and the many references therein). Also, numerous studies have linked import restrictions to low productivity levels (Thomas and Nash (1990); Nishimizu and Page (1991)).

3-5 Market Access of Industrial Products and Agricultural Commodities

Evaluation of the structure of protection may be further undertaken by considering Egypt's commitments to WTO in terms of bound tariffs. For this purpose we consider 10-digit HS bound tariffs and foreign trade data. Information on bound tariff rates using the set of 14 sectors (Set3**) is presented in Table (3-8). The table reports simple and weighted bound mean tariff rates for Egypt. It is evident from this table that the bound tariff rates of Egypt exhibit wide-ranging variations across different sectors of the economy. The simple and the weighted average bounds for different sectors range, respectively, from 13.28 percent and 9.62 percent in the case of sector 2 (agricultural raw materials), to 54.42 percent and 32.22 percent in the case of sector 13 (automotive products) and those for the entire set are 28.81 percent and 21.75 percent respectively. It is to be noted that averages of bound tariffs (both simple and import weighted) exceed the corresponding applied tariffs for all sectors considered with the exception of one sector namely clothing (8). This suggests that with respect to Egyptian commitments to WTO, Egypt does not have to lower its high tariffs. Moreover, Egypt could raise its tariff rates for most of its imported tariff lines as more than 80 percent of the number of products in nine¹⁴ of the fourteen sectors considered and around 70 percent or more of the number of products in four¹⁵ other sectors currently apply tariff rates below the simple average sectoral bound levels. The only sector with relatively few lines below the bound rates (around 15 percent) is that of electrical machinery and appliances and is likely to enjoy tariff reductions under WTO commitments. Even within the clothing sector, where on average the actually applied rates exceed the levels of binding, around 83 percent of the tariff lines appear to be subject to tariff rates below the simple average bound rates, suggesting that even within this sector, the government of Egypt could manipulate the tariff structure and increase the tariff protection for most clothing items. Finally, it appears that although, on average, textiles are subject to tariff rates below the bound levels, a relatively smaller number of lines within this sector (44.3% with respect to the weighted average binding) face lower tariff rates than the level of binding. Thus, as noted for machinery and equipments, reductions in applied tariffs are expected under Egypt's commitments to WTO. This will lower to some extent the traditionally high protection to this sector.

¹⁴ These sectors are: 2. Agricultural raw materials; 4. Iron and steel ; 5. Chemicals ; 6. Other semimanufactures; 7. Textiles; 8. Clothing; 11. Office machinery and telecommunication equipments; 13. Automotive products; 14. Other transport equipments.

¹⁵ These four sectors are: 1. Food; 3. Mining; 9. Power generating machinery; 10. Other non-electrical machinery.

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Sector	Description	Та	W. Ta	Tb	W. Tb	No.of	No.of
						lines <tb< th=""><th>lines</th></tb<>	lines
							<w.tb< th=""></w.tb<>
1	Food	21.83	6.10	31.99	13.08	71.70	39.20
2	Agricultural Raw Mat.	11.11	5.81	13.28	9.62	92.79	85.77
3	Mining	14.97	8.14	24.15	21.35	69.92	60.90
4	Iron & Steel	16.73	14.61	26.05	27.76	82.16	82.16
5	Chemicals	14.51	10.93	20.62	18.95	89.42	89.42
6	Other Semi-Man.	26.13	21.43	41.20	34.80	87.50	87.50
7	Textiles	36.65	29.81	27.12	19.93	89.82	44.31
8	Clothing	39.49	38.72	44.08	46.88	82.94	82.94
9	Power Gen.Mach.	8.22	9.60	19.51	11.15	78.06	78.06
10	Other Non-Elec.Mach	10.71	10.62	21.23	18.51	73.35	79.06
11	Off.Mach.&Telec. Equip.	19.76	16.93	33.68	17.24	99.30	77.31
12	Electrical Mach.&App	21.12	21.81	39.70	37.78	15.26	7.98
13	Automotive Products	33.25	44.96	45.54	54.42	98.98	98.98
14	Other Transp. Equip.	20.10	19.72	37.21	32.22	93.15	93.15
Overall		20.22	13.20	28.81	21.75		

 Table (3-8)

 Comparison between Applied Tariffs and Bound Tariffs in 1999

Ta: Average of Applied Tariff. Tb: Average Bound Tariff. W. Ta : Weighted Average of Applied Tariff. W. Tb : Weighted Average of Bound Tariff.

NP1 and NP2 have been calculated with respect to each sector's average tariff rate as a national sectoral reference level.

On the other hand, sectors with higher than average applied tariffs (6.0ther semimanufactures; 7. Textiles; 8. Clothing; 12. Electrical machinery and appliances; 13. Automotive products) and / or with highest relative frequency of tariff lines below the average binding for the sector (sectors 2,4,5,6,7,8,11,13,14) may still experience increases in their tariff levels, as the bound tariffs for 70 percent or more of their products are higher than the actually applied ones.

In conclusion, one may say that despite the substantial reductions in Egyptian tariffs in recent years, they are still high. Furthermore the overall unweighted average tariff actually applied is lower than 70 percent of the overall level of bound tariffs, while the weighted average applied tariff is lower than 60.7 percent of the corresponding weighted average bounds. This suggests that the Egyptian commitments to the WTO with respect to improving market access to foreign products do not, generally, lead to expect further reductions of the tariff levels and dispersion, unless the Egyptian government decides unilaterally to take this step to gain efficiency and enhance the competitiveness of Egyptian products.

4- Liberalization of Non-Tariff Barriers

Increasing international competitiveness of Egyptian products destined for both foreign and domestic markets is vital because it is viewed as one of the primary means of improving the economy's overall performance. Correcting market distortions created by past policies and restoring competition and efficiency are being attempted. To succeed in establishing competitive export channels and creating efficient import replacement capabilities, producers must have access to inputs at world prices, and be able to compete domestically with imported substitute products. This should provide the mechanism to modernize the economy and enhance productivity not only in the export sector but also in the domestic sector. Liberalization of foreign trade policy, as mentioned in a previous section, has been partly achieved by lowering the level and narrowing the range of tariff rates. Reducing, in phases, non-tariff barriers on both exports and imports, and creating and/or increasing export incentives are complementary lines of action.

Egypt began the 1980s with a much less restrictive trade regime compared to the period from 1958 to 1973 due to the trade liberalization policies implemented in the mid-1970s. Liberalization measures included eliminating the state monopoly on importation (by virtue of the Export-Import Law No. 118/1975), introducing the Own Import System, phasing out bilateral trade agreements and creating free trade zones (Wilson 1986). Nevertheless, non-tariff barriers were still used extensively.

Since 1991, the Egyptian economy has taken aggressive steps to liberalizE both domestic and foreign trade. With regard to Egypt's foreign trade regime, the government has made progress in removing quantitative restrictions and many other non-tariff barriers to imports and reduced tariff rates on most imported items. In addition to import liberalization, the government is trying to facilitate and simplify the process of exporting. From September 1996 to June 1997, non-tariff barriers on exports have been abolished. Administrative procedures for exports are being streamlined, a positive step that is expected to produce savings of about 10 % of earnings for Egyptian exporters. (MOE, 1998,13). These reforms should promote exports as well as imports, so long as the real exchange rate and domestic relative prices are sufficiently flexible to increase incentives for producing exports.

By giving the Egyptian producers greater opportunity to become export-oriented, the government is encouraging them to direct goods to the most promising external markets and to meet higher international technology and product standards.

4-1 Non-Tariff Barriers on Imports

There are numerous non-tariff barriers (NTBs) whereby imports can be restricted and the interests of special groups can be shielded from international competition. In recent years, more attention has been focused on quotas or other quantitative restrictions (QRs). In general, NTBs may distort and restrict international trade. So, reducing the coverage and level of NTBs lead to more liberalization. In considering NTBs, it is interesting to ask why governments may prefer them to tariffs. Some possible explanations are suggested:

1. Inelastic foreign supply of a certain good, which would make a country find it difficult to limit imports by using a tariff. In this situation, a quota is often the only way to limit imports and to uphold the domestic price of the goods.

- 2. Institutional constraints such as those included into the GATT/WTO rules and into national constitutions that limit the use of tariffs.
- 3. The role of firms and workers in influencing the choice of policies.
- 4. Considerations of reaction to or retaliation against the policies of trading partners, and uncertainty about the ways in which different policies may perform.

Deardorff (Deardorff, 1987) favors the last of these explanations insofar as government perceives that tariffs will not work effectively in reducing imports. That is, if the objective is to assist firms and workers who are being injured by imports, he shows that only an explicit quantitative restriction can be relied on to achieve this purpose in an uncertain world.

A basic difficulty in approaching NTBs is that they are defined by what they are not. That is, NTBs consist of all barriers to trade that are not tariffs. Indeed they are even more general than that, since the term is often used to include trade interventions such as export subsidies that serve to stimulate rather than impede trade and therefore are not "barriers" to trade at all. Thus NTBs include such well-known trade distorting policies as import quotas and voluntary export restraints (VERs). They also include a potentially unlimited set of policies that alter, however indirectly, the prices and/or quantities of trade. Some barriers may be formal in the sense that they are stated explicitly in official legislation or governmental mandates. But they may also be informal barriers arising from: administrative procedures and unpublished government regulations and policies, market structure, and political, social, and cultural institutions. The impediments associated with informal barriers may be the result of a conscious effort by government to favour domestic over foreign interests, or they may be the by-product of practices and policies that are rooted in domestic institutions. In this situation, no topology of NTBs can possibly be complete. Evidently, the list of NTBs is large and diverse, and it may be difficult to devise accurate measurements of many of them.

As the importance of the different forms of NTBs in Egypt has varied over time, a discussion of each item in the complex system of non-tariff barriers in Egypt will be briefly conducted. The phased out NTBs will be firstly introduced and then the still existing ones.

4-1-1 Phased Out NTBS

1. **Prior Approval by Specified Authorities.** Imports of some tariff lines were conditional on the approval of different ministries and government agencies as to quality, quantity, and price. Most of these conditional imports are subject to religion, security, environment, health, standard, ethic, and quality considerations. However, approvals granted on the basis of quantity may be for protectionist purposes.

Between 1978 and 1990, the list of tariff lines with conditional imports comprised 55 entries. The list was restricted to 16 and 9 items in 1991 and 1992 respectively, and was completely abolished in 1993.

2. Letters of Credit Suspensions. Under the pressure of mounting shortages of foreign exchange, this restriction was first applied in 1988 in the form of directives from the Ministry of Economy and Foreign Trade to banks via the Central Bank to suspend temporarily opening letters of credit for some commodities. The list covered 68 commodities and commodity groups by the end of 1990. As policy makers did not intend to consider this kind of restriction to be a permanent feature of Egypt's foreign trade system, a series of directives to the Central Bank started in May 1991 to reduce gradually this list. All suspensions of letters of credit for imports were lifted, except for a very few items that were transferred to the list of permanent bans.

3. *Servicing Facilities Requirements.* To import a number of commodities, the foreign exporter should have an Egyptian commercial agent, an appropriate service center approved by the Ministry of Industry in Egypt, and a guarantee to provide spare parts. The list covered 17 items comprising mainly household appliances, tractors, and transport equipment.

The declared objective of this NTB is to protect local consumers or users of such products. However since the adequacy of these servicing facilities is determined by the government, this restriction could become a protectionist measure to domestic producers by restricting the brands that these facilities would be allowed to operate in Egypt. This NTB as well was eliminated in May 1991.

4. **Public Import Monopolies.** Imports from bilateral agreement countries were confined to public sector foreign trade companies (general and specialized trading companies). Furthermore, imports of a list of commodities were confined to the above-mentioned companies, and the list covered wheat, flour, unpacked tea, edible oils, animal fats, tobacco, coal, petroleum and its products, military production inputs, and weapons. In 1991, private sector companies, law 43 companies, and cooperatives were permitted to import from bilateral agreement countries all products agreed upon without exception, and the import of commodities such as sugar and petroleum products (previously restricted to the public sector) was also opened to the private sector. These legislative efforts have been undertaken to eliminate the privileged treatment of foreign trade public companies, allowing them to operate on an equal footing with domestic private competitors. Controls by the General Authority for Investment (GAFI) and the General Organization for Industrialization (GOFI) on imports of equipment were abolished, as were import restrictions maintained by the Ministry of Military Production and the jurisdiction of the Industrial Monitoring Authority over imports.

5. *Foreign Exchange Budgeting and Allocation.* An annual foreign exchange budget allocates expected foreign exchange receipts from the Central Bank pool and the free banking pool to various uses. The private sector was allowed, under this system to retain its export earnings for a maximum period of one year. Unused balances, after this time, were to be sold to commercial banks at the free banking rate. Private sector units needing foreign exchange had to resort to the parallel market where exchange rates commanded a premium. This system of foreign exchange allocation, therefore, discriminated against the private sector.

The foreign exchange regime, together with reform of the public sector law introduced under ERSAP eliminated such discrimination in foreign exchange allocation.

4-1-2 The Still Existing NTBS

1. *Import Bans*. The import ban list included about 210 tariff lines of the Brussels trade nomenclature, comprising 548 commodities, half of which were consumer nondurable goods. In 1987 and 1989 more items were added to this list. (Kheir-El-Din and El-Dersh, 1991). However, these bans were not absolute as imports of banned goods were allowed for specific purposes in recognition of the importance of some activities in the economy or to satisfy some real needs that could not otherwise be met¹⁶. The system was less restrictive than it appeared.

Starting in May 1990 a number of commodities and / or commodity groups were taken off the list of bans., and with the continuous elimination of different items the number of banned items was reduced by 1998 to become 15 covering poultry parts, certain textiles and apparel items. These accounts for less than 5 percent of the domestic production. Nevertheless, products removed from the import ban list are sometimes subject to high duty rates (Refaat, 1998) a clear illustration is cotton fabrics.

2. **Prior Import Deposits.** According to this kind of NTBs, importers were required to deposit an amount equivalent to the value of imports: 35 percent was deposited when the importer applied for a letter of credit, and the remaining 65 percent when the letter of credit was actually issued.

These percentages applied to trading entities but when imports were made by production entities, they become 15 percent and 85 percent respectively. On average these deposits were frozen for about three months, and they received no interest. This obviously acted as a tariff surcharge and added to the protectionist bias of the trade regime. Another liberalization measure introduced in 1991 was to reduce such deposits from 35 percent to 20 percent for imports by trading entities, and from 15

¹⁶ Such as the needs of the tourism sector, local assembly industries, temporary admission system, and turnkey projects.

percent to 10 percent for production entities. In addition, interest rate could be paid on these deposits.

As of March 1999, this NTB was reinforced, as a means of relieving pressure on foreign exchange holdings. The GOE has required imports to put up 100 percent cash collateral for letters of credit, instead of the 10 percent which was previously required. This new restriction only applies to imports of consumer products and manufactured durables.

1. *Standards Specification and Quality Control.* Until 1990, the list of commodities subject to quality control covered about 62 items, most of which were foodstuffs. The number of items has been increasing since then and reached 159 items in 1993. While the elimination of many items reduced the list to 32 items in 1994, quality control is increasingly gaining importance as an NTB to trade, as its list now consists of 183 items. The removal of certain products from the list of banned imports were put on the quality control list, effectively retaining the import restrictions through long delays in approval.

In theory, quality controls are mandatory for a number of imported products, primarily for health and safety reasons, and sometimes to protect Egyptian consumers from low quality products. In practice, however, it has become a means to protect local industry through limiting imports by adding bureaucratic ties to the process in addition to consumer protection. While no one can argue with the desire to protect consumer's interests, the relevant items could be protected in a less restrictive manner. The restricted items include foodstuffs, electronic products and consumer goods (Louis Berger,1999). Although the restriction on imported foodstuffs is quite justified; the likely explanation is questionable for spare parts for cars, which are subject to quality control, while imported cars are not, or for imported playing cards, which are included in quality control list while toys and hand tools, which can be dangerous items too, are not (World Bank, 1997).

Egyptian standards on imports are considered a trade barrier by the European Union (Egypt's primary trading partner). Product standards set by the General Organization for Export and Import Control (GOEIC) are at variance with internationally recognized standards, thus causing problems with imports from the EU (DEPRA, 1998a). The current quality control system has two main deficiencies. First is the multiplicity of agencies involved in issuing and enforcing the regulations. Second is the lack of transparency and due process in the system, which increase uncertainty in decision making and have a negative impact on imports and investment.

Though a series of mandatory technical specifications and regulations embodied in ministerial decrees from, not just the Ministry of Industry, but also from the Ministries of Health, Agriculture and Supply and Internal Trade, product coverage by mandatory standards has been extended to a vast array of goods, some 2500, or 50% of all tariff lines that have corresponding ISIC items. The product coverage by sector shown in Table (4-1) and illustrated by Figure (4-1) indicates that the sectors of iron and steel, chemicals, other semi-manufactures, textiles, other non-electrical machinery, and foods have the highest percentage of tariff lines restricted by quality control, whereas clothing is highly restricted by bans.

Table (4-1)

Number and Percentage of Tariff Lines by Sector Restricted by Bans and Quality Control Requirements

Sector	Description	Total Toriff	Lines Perm.	Lines Subject	% of Dorm	% under
по.		Lines	Ваппеа	Control	Bans	Qual. Control
1	Food	494	16	446	3.24	90.28
2	Agricultural Raw Mat.	134	6	45	4.48	33.58
3	Mining	315	0	41	0.00	13.02
4	Iron & Steel	277	0	234	0.00	84.48
5	Chemicals	968	0	559	0.00	57.75
6	Other Semi-Man.	739	0	419	0.00	56.70
7	Textiles	561	67	202	11.94	36.01
8	Clothing	264	141	2	53.41	0.76
9	Power Gen.Mach.	79	0	42	0.00	53.16
10	Other Non-Elec.Mach	515	0	144	0.00	27.96
11	Off.Mach.&Telec. Equip.	126	0	53	0.00	42.06
12	Electrical Mach.&App	249	1	220	0.40	88.35
13	Automotive Products	106	0	55	0.00	51.89
14	Other Transp. Equip.	124	0	47	0.00	37.90
Overall		4951	231	2509	4.67	50.68

Source: Compiled from Various Ministerial decrees published in the *Egyptian Official Gazette* (1994 to 1999)

Figure (4-1) Percentage of Tariff Lines Subject to NTBs



Some preliminary estimates of the economy-wide impact of the current quality system based on the cost estimates reported in surveys and field interviews have been attempted (DEPRA, 1996b). The results suggest that the cost impacts are highest for food- related and consumer goods' producers and traders and smallest for industrial products and pharmaceuticals. Using World Bank estimates that 25 percent of Egyptian tariff lines are subjected to some form of mandatory technical regulations, it has been estimated that:

- Direct and indirect additional costs to affected producers and traders vary between 5 percent and 90 percent according to industry, with the highest costs for food products and imported final consumer goods.
- Exports are lowered by 9 to 12 percent and GDP by 1 percent as lengthy and irrational quality control procedures raise import costs of raw materials, intermediate inputs, and capital goods; reduce market access to the regionally important EU market and lower the incentive for foreign and domestic investment.
 - 1. *Other Measures.* Egypt has implemented WTO- consistent anti-dumping, countervailing and safeguards measures. The recent cases adjudicated have all complied with WTO norms. Egypt initiated two anti-dumping cases, involving 7 European producers in 1997. Dumping margins were assessed on Greece, Spain, Russia, Romania, Ukrania, Latvia and Macedonia in 1998. In 1999, Egypt imposed dumping margins on imports of tires from the EU, Japan, and Korea.

The most convenient mechanism to control trade, currently utilized by the GOE as well as other developing countries relies on the process of importation rather than the substance (Louis Berger,1999). In the case of Egypt, the importer must provide a customs declaration, the original commercial invoice, delivery order from the carrier in return for the bill of lading, and in some cases a content analysis of the commodity. In case of food imports, a chemical certification for additives used in the food processing industry is required. In the case of shaving brushes and bristles imports, a disinfection certification is required. Other restrictive NTBs exist for agricultural products and animal products. For textile and apparel imports it is required that the name of the importer and country of origin be inscribed on the selvedge of the fabrics. All of these measures are substitutes to the reduced tariffs.

Along the same lines, Ministerial Decree 619, issued in November 1998, requires that all imported consumer durable and non- durable goods must be shipped directly from the country of origin. Ministerial Decree 553 of October 1998 goes one step further, in that it requires that all goods be clearly labeled and carry a certificate of origin. These decrees represent major NTBs for importers because of the product definition used in the new administrative rules. As an example of the possible bias in the rules of origin, it should be noted that for countries within the Greater Arab Free Trade Agreement a 40 percent value added is required whereas a 50 percent value added is required for all other countries. The 40 percent rule may be applicable to COMESA as of 1999. It is expected that these decrees issued at the end of 1998 will increase both non-tariff barriers and the effective rate of protection.

4-2 Non-Tariff Barriers on Exports

Until the early nineteen nineties, exports in Egypt were subject to taxes, some explicit (e.g. raw hides and skins) and others implicit (e.g. cotton growers), in addition to a number of NTBs such as export bans, export quotes, prior approvals and quality control.

The list of export prohibitions covered 20 commodities most of which were foodstuffs and fodder, raw hides and skins, waste paper and paperboard, low-grade cotton and scrap metals. In general, these bans were not enforced to protect domestic industries, except those on raw hides and on scrap metal. Export bans of hides and skins provide significant protection to downstream leather tanning and other processing activities. The list of export prohibitions has been considerably reduced by 1993, it only includes raw hides, waste paper and scrap metal.

Export quotas were imposed on 17 items, mostly foodstuffs as well as cotton waste and various yarn waste. The rationale behind restriction on foodstuffs is relatively short local supply. The export quota on cotton waste and yarn waste appears to be imposed for protectionist purposes. Export products subject to quantitive quotas have been scaled down to tanned skins and newspaper waste.

Export prior approvals have been reduced in 1992 from 37 export items to only one item: yarn and gauze made of cotton and man- made fibers quality control that required approval of the General Organization of Exports and Imports Control (GOIEC) was cancelled. Quality control requirements are only maintained for foodstuffs.

4-3 Export Incentives

These incentives cover the drawback and temporary admissions systems and the removal of discrimination between public and private sectors in foreign trade.

Drawback and temporary admissions systems. A commonly practiced form of assistance for exporters is to remove the burden of tariffs and possibly the domestic indirect taxes on materials used in manufacturing export products that add to their cost. Relief from paying such duties takes two basic forms: refunding taxes and duties previously paid on materials used in manufacturing a product when it is exported (drawback); and allowing duty-free imported materials intended for use in manufacturing products for export (temporary admission).

It is certainly more advantageous for the exporter to be exempt from paying duties than to pay them initially and then to get a refund, or drawback, later, because he does not have to lock up his funds, for however short a time, in any refundable tariffs. However, schemes of temporary admissions also have their limitations. As part of the Government's attempt to liberalize trade and promote exports, both schemes were expanded and improved. Procedures for refunding drawbacks have been considerably simplified. Refunds can sometimes be made within a week.

Alleviating restrictions on private sector trading activities. Removing discrimination between the public and private sectors in effecting foreign trade transactions has been undertaken gradually. Private sector companies, Law 8/1997 companies, and cooperatives are permitted to export and even conclude offset trade deals with companies and entities in countries with which Egypt has trade and payments agreements, provided that these transactions include commodities appearing in the commodity lists annexed to these agreements. Thus, past reliance on public trading companies has been phased out through increased participation by the private sector in foreign trade.

In sum, Egypt has implemented aggressive measures with regard to trade policies: accelerating reduction in the variance as well as in the height of tariff rates, and removal of the remaining quantitative restrictions and abolishment or reduction of other forms of NTBs. Meanwhile, advances in the export area have fallen short of what would be desirable. As mentioned above, average unweighted and weighted actually applied tariffs have been estimated to range between 20.2 percent and 13.2 percent in 1999. Non-tariff barriers to trade may add from 5 percent to 15 percent to this average. Nathan Associates (1996b) used the figure 5 percent for non-tariff barriers associated only with the system of standards and quality control. Maskus and Konan (1997) used 10 percent for exports and 15 percent for imports. Therefore, substantial reforms still, need to be made on trade fronts, if satisfactory export-led growth is to be achieved in the longer term.

5- Market Access Issues for Services

Since trade barriers in services are more subtle and less transparent than they are in other sectors like agriculture or industry, the General Agreement on Trade in Services (GATS), which is the first multilateral agreement to provide legally enforceable rights to trade in all services, is viewed as one of the major results of the Uruguay Round.

The GATS was inspired by essentially the same objectives as the GATT: improving trade and investment conditions through multilaterally agreed disciplines; stabilizing trade relations through policy bindings on a most- favored- nation (MFN) basis; and achieving progressive liberalization through subsequent rounds of negotiations. The economic rationale calling for services' liberalization under GATS is not different, in principle, from the rationale that has driven the liberalization of merchandise trade under GATT since 1948. It is believed that open markets are expected to encourage quality improvement and product and process innovation, reduce the scope for wasteful resource use and rent-seeking, constrain the power of individual economic operators, and ensure users continued product availability at reasonable conditions.

The GATS allows its members to gain various economic and political *advantages* in undertaking liberalization commitments through: *improving conditions for sectoral growth* and *promoting overall economic efficiency*, as many services sectors provide efficiency-enhancing inputs across a wide range of user activities. In turn, this underscores the importance of maintaining a competitive environment, through market access and national treatment obligations, for such sectors.

Although the GATS applies in principle to all services, except those supplied in the exercise of governmental authority¹⁷, at least five or six services sectors may prove- from a development perspective- relevant to a number of economies. These sectors are: tourism, maritime transport, construction, software development and, possibly, telecommunications and health services, which may be viewed as the infrastructural backbones of any economy.

The basic obligations under the GATS may be categorized into two groups:

• *General Obligations* which apply directly and automatically to all members, regardless of the existence of sectoral commitments. These obligations include: the Most-Favored-Nation (MFN) principle, (i.e. that there should be no discrimination between other members of the agreement) and transparency principle(i.e. members must publish all relevant laws and regulations).

• **Specific Commitments** which are limited to the sectors and activities where a member has decided to assume market access¹⁸ and national treatment obligations.¹⁹ In scheduling commitments, members are free to tailor the extent of the commitments they take so as to avoid or modify obligations that they consider too demanding at present²⁰.

While the notion of progressive liberalization is one of the basic principles of the GATS, Article XIX provides that liberalization takes place with due respect for national policy objectives and members' development levels, both overall and in individual sectors. Developing countries are thus given flexibility for opening fewer sectors, liberalizing fewer types of transactions, and progressively extending market access in line with their

¹⁷ Article I(3) of the GATS defines "services supplied in the exercise of governmental authority" to cover any service not provided on a commercial basis or in competition with other suppliers. This includes the activities of central banks and other monetary authorities, statutory social security and public retirement plans, and public entities using government financial resources. Moreover, the Annex on Air Transport Services exempts from coverage measures affecting air traffic rights or directly related services; and the Annex on Movement of Natural Persons specifies that the GATS does not apply to measures either affecting natural persons seeking access to the employment market of a member or regarding citizenship, residence or employment on a permanent basis.

¹⁸ It may be made subject to one or more of six types of limitations enumerated in Article XVI(2): limitations may be imposed on the number of services suppliers, service operations or employees in a sector, the value of transactions, the legal form of the service supplier, or the participation of foreign capital.

¹⁹ In any sector included in its Schedule of Specific Commitments, a member is obliged to grant foreign services and service suppliers treatment no less favorable than those extended to its own like services and service suppliers. In this context, the key requirement is to abstain from measures which are liable to modify, in law or in fact, the conditions of competition in favor of a member's own service industry.

²⁰ However, Article XIX stipulates a common obligation of WTO members to enter into successive rounds of trade negotiations with a view to achieving a progressively higher level of liberalization.

development situation. In addition, developing countries are entitled to receive technical assistance from the WTO Secretariat.

Services sectors in Egypt make an important and growing contribution to Egypt's economy. Since 1993/94 services (whether production or social services) contributed more than 50 percent of Egyptian GDP, and if the construction sector is added, the share increases by another 5 points. From Table (5-1) Egypt's share of services in GDP appears to be generally consistent with those of other developing countries.

Contribution of Services to GDF in 1996, Selected Countries (76)				
Country	Services/GDP			
Algeria	38			
Egypt	51			
Indonesia	41			
Jordan	64			
Kuwait	46			
Malaysia	41			
Morocco	49			
Pakistan	50			
Turkey	55			
Low Income	37			
Middle Income	53			
Low and Middle Income	51			

Table (5-1)					
Contribution of Services to GDP in 1998, Selected Countries (%	%))			

Source: World Tables, World Bank, 1998.

Moreover, as Table (5-2) shows, over the period 1990-97, apart from Asian countries, Egypt was among the most dynamic service exporters, recording average growth rates in the order of 10 percent²¹. This rate exceeds that recorded by North and Latin America, Africa and Western Europe.

The GATS divides services into twelve aggregate sectors: business, communication, construction and engineering, distribution, education, environmental, financial, health and social, tourism and travel, recreation, cultural and sporting, transport, and other. Egypt has committed itself to trade reforms in four out of the twelve service sectors: construction and related engineering services, financial services, tourism and transport services. According to a recent study (Tohamy, 1999), these sectors are among the six most favored sectors, in which countries are more likely to make commitments. Therefore, Egypt's choice of these four sectors seems to be consistent with the willingness of countries to offer commitments. Nonetheless, Egypt does not have any type of commitment in two sectors, namely business and communication services, where the percentage of WTO countries having commitments is over 50 %. This may be explained by the fact that Egypt may have comparative advantage in particular sectors justifying their liberalization irrespective of other countries' patterns of commitments.

A close examination of commitments made by Egypt reveals the following aspects:

²¹ Egypt witnessed the same annual average growth rate over the period 1994/95 to 1998/99.

The sector of *"Construction and related Engineering Services"* has five sub sectors, of which Egypt has commitments in four.

In the case of *"Tourism and Travel Services"* sector, Egypt has listed commitments in three of the five possible sub-sectors.

Table (5-2)Commercial Services Trade Performance
of Selected Regions and Countries

	Average ar	nual change	(%)
Country/Region	Exp	orts	I
	1990-97	1997	T
Asia	12	5	T
China	23	19	
Hong Kong, China	11	0	
Japan	7	3	
Korea, Rep.	16	12	
Singapore	13	2	
Latin America	8	9	
Brazil	11	37	
Mexico	6	5	
Africa	6	3	
Egypt	10	6	
South Africa	5	11	
North America	8	11	
United States	8	11	
Western Europe	5	1	

Source: WTO, *Annual Report* and *International Trade Statistics*, Geneva, 1998.

The "*Financial Services*" sector has two sub sectors. In the case of "*Insurance Services*" sub-sector, Egypt has commitments in all of the five possible entries; while in the sub sector of "*Banking and Other Financial Services*" Egypt has commitments in 11 out of the 17 lines.

Finally, "*Transport Services*" sector has nine sub-sectors. Egypt has commitments in the cases of "*International Maritime Transport*" and "Supporting Services for Maritime Transport: port dredging" sub sectors.

Although the number of sectors where Egypt has made commitments cannot be a means of a comprehensive evaluation of the extent of a country's liberalization of services, it could serve as a preliminary indicator of how Egypt is similar to, or different from, groups of WTO countries. Tables (5-3) and (5-4) indicate that, compared to other developing countries, Egypt's number of commitments per sector and its sectoral coverage are not very different from an average developing country, although consistently

less than those of larger developing countries. This point is of a special importance given the literature that links trade openness with growth and development (Tohamy, 1999).

Table (5-3)
Covered Service Sectors of Selected Countries
of the Organization for Islamic Countries

Country	Number of	Number of Sectors Where	Average of
	Commitments	Commitments were made	Commitments
			/ Sector
Turkey	72	9	8.0
Malaysia	69	9	7.7
Kuwait	44	8	5.5
Morocco	41	7	5.9
Pakistan	35	6	5.8
Egypt	28	4	7.0
Tunisia	11	2	5.5
Indonesia	7	6	1.2
Bahrain	4	1	4.0
Bangladesh	1	1	1.0

Sources: http: // www.wto.org/ services/ websum. htm, and http: // www.icdt.org/ publications. uttyy.htm; in Tohamy, 1999.

Table (5-4)

Sectoral Coverage of Specific Commitments in Trade in Services (%)

	High- income Countries	Other Countries	Large Developing Countries	Egypt
Market Access Average Coverage* "No restrictions"(1) "No restrictions"(2)	40.6 56.4 30.5	9.4 47.3 6.7	17.1 36.7 10.9	10.48 47.1 7.9
National Treatment Average Coverage* "No restrictions"(1) "No restrictions"(2)	42.4 65.1 35.3	10.2 60.4 8.5	18.8 49.3 14.6	11.69 61.5 10.3
Memorandum No restrictions on market access and national treatment (2)	28	6.4	10	7.9

Source: American Chamber of Commerce, Egypt, 1998.

* Sectors/modes listed as a share of total GATS classification, weighted by openness and binding scale factors.

(1) As a share of total offer made. (2) As a share of total GATS classification.

In what follows, attention will focus on a closer examination of liberalization of "financial services" and transport services" as their performance has direct effects on that of the commodity producing sectors.

Insurance and Banking Since foreign companies seek to reduce both political and business risks associated with doing business abroad, having an appropriate insurance is, thus, critical for international trade. Although the Egyptian insurance sector consists of 11 major companies and 544 private insurance funds, which may suggest a competitive industry, about 80 percent of insurance assets are held by the five largest companies: four restructured state-owned enterprises (SOE), which are in preliminary stages of valuation for privatization; and one with a majority public share position under private listing.
The inefficient state oligopoly, as well as the incomplete process of privatization and creation of an appropriate oversight function, are reflected in the failure of Egyptian companies to enter this market (Louis Berger, 1999). Meanwhile, the insurance industry represents a significant saving sector where individual and company premiums amount to 1.5 percent of GDP. By the end of June 1998, 31.9 percent of these funds were invested in the Egyptian securities market, and an estimated 52 percent of funds were directed toward property markets (Louis Berger, 1999).

In 1998, a new law (Law 156/1998) was enacted and full privatization of the insurance sector was ratified by Parliament. The law has also removed all restrictions on majority private ownership (domestic or foreign) of insurance companies. Non-Egyptians may now manage insurance companies based in Egypt, whereas under former laws, all insurance companies operating in Egypt had to have an Egyptian managing director. It also waves the requirement that net profits; after deducting wages, reserves, provisions, and profit sharing for employees; be transferred to the State Treasury (Tohamy, 1999). However, the World Bank reported in January 1999 that legislative reforms are essential before privatization can occur. In addition, a modernization program for insurance procedures would be required before government could pursue more than preliminary privatization plans. While it is reported that over the next two years the Government of Egypt (GOE) will begin privatizing the public sector-dominated insurance industry, no developments have been announced yet to address the expected privatization, which may be delayed because the necessary reforms are likely to take several years.

With regard to the Egyptian banking system, it is dominated by four state-owned banks, which hold half of total assets . An international rating agency identified the banking sector, in particular the public sector banks, as a key area for reform (Fitch IBCA, 1997). The increasing attention that this sector has received from the Egyptian authorities, as well as from the World Bank and the IMF, over the past two years, resulted in a significant improvement of the public sector banks and the supervision regime (Fitch IBCA, 2000).

In 1998, The People's Assembly (Egyptian Parliament) passed the Banking Law No.155 allowing private sector entry and privatization of the "Big Four" state-owned commercial banks. Regulations for transferring a public sector bank to the private sector are almost complete. However, until the long delayed privatization of the banks is begun, uncertainty will persist as to their true quality and the level of contingent liabilities the government might face.

With respect to Egypt's commitments toward the WTO for financial services, while considered the lowest level of restrictions in the Arab world, they remain vague and leave many areas unconstrained by either an immediate or a future commitment. It is argued that specific restrictions are expected to produce a limited impact on banking services but will have a large impact on insurance (Tohamy, 1999). The overall commitments account

for less than 20 percent of the service sectors and most of the commitments are not very far from the status quo.

However, two important points are worth mentioning:

First: The experiences of other countries with financial sector liberalization support the argument that caution must be exercised when liberalizing banks, especially where a few large public sector banks dominate.

Second: The absence of an effective antitrust law in Egypt legally permits noncompetitive business practices that can essentially block market entry and thus perpetuate inefficient oligopolies.

Therefore, while privatization is important for both insurance and banking, the key to a healthy financial sector is de-monopolization and promoting competition.

Maritime Transport Transport services make an important and growing contribution to Egypt's economy. From 1993/94 to 1998/99, transportation sector contributed about 9.8 percent to GDP. Transport services are also vital to Egypt's export performance. Without transport services there could be no global trade. Efficient and reliable transport and distribution services are essential if exporters are to prosper in the global economy. But transport and distribution services, including Suez Canal, were decreasing after 1994/95, but the estimates of 1998/99 show an upturn due to an increase in the transportation services that overweigh the continuing decrease in Suez Canal tolls. Egyptian exports of transport sector have always overtaken imports of these services by about three times.

Nonetheless, despite Egypt's favorable location, costs of doing business through Egyptian ports incur 15-20 percent higher freight and handling charges than those of Cyprus, Greece, Israel and Turkey, according to World Bank studies in 1995 and in 1996 (Louis Berger, 1999). This may be explained by the inefficient monopolies in ports and airports, which have long undermined Egyptian competitiveness in international markets. While there are deficiencies in the ports infrastructure and equipment, the main problem is the institutional structure.

In the past, Egypt's high port costs have been due largely to public sector shipping agencies and other government monopolies that control freight unloading, storage facilities and other services for traded commodities into and out of Egypt. Customs clearance is too slow and undertaken by unqualified workers. According to exporters, there are approximately 20 costly administrative steps, which cannot be justified. In addition, at least 17 percent of the overall costs go to the shipping agents, which is very high compared to ports of competitor countries.

However, there are major projects under development that will improve commodity transport within few years, and with greater private ownership of container port and shipping facilities, the existing monopolies for shipping, stevedoring, warehousing, and port services will begin to face competition by the year 2001. Eliminating the government monopolies and introducing private sector services in a competitive setting would lower the costs of exporting and importing and would greatly enhance marketing. One major development is the substantial reform undertaken, in 1998, by GOE to allow private sector entry aiming at improving and varying services due to increased competition.

In January 1998, the New Maritime Law 1/1998 was issued modifying Law 12/1964, which had given the state a monopoly in maritime transport. After Law 1/1998 was issued, the Specialized Ports Law 1/1996 was amended and new decrees regulating maritime transport works and licensing were issued to facilitate private sector competition. The Specialized Ports Law 1/1996 was amended by Law 22/1998 on 25 March 1998 which allows concessions to local and foreign investors, for the establishment of general or specified ports or platforms, in existing ports. This law also governs the management, exploitation and maintenance of these ports and regulates fees levied by the government of Egypt (GOE) for their use.

Prior to May 1998, there were six public enterprises through which all trade and shipping flowed. When the Holding Company for Maritime Transport and the Holding Company for Inland Transport started privatizing fractions of their shares (20 percent and 17 percent respectively), freight rates decreased as a proportion of the value of goods transported²². Moreover, once the GOE opened this business to private companies, more than 300 private trading companies emerged, within a year, taking 90 % of the business away from the government enterprises. They accomplished this by offering more efficient services, providing rapid transit of commodities with improved international shipping connections, and by expediting business transactions at half the cost of public companies. However, the issue of anti-trust and competition policies remains a concern in this sector.

One other important development is the international joint-venture projects, which are underway to double Port Said's bulk and container capacity, and add more than a third to the Port of Alexandria within 2 to 3 years. These steps are aimed to cure the problems of port facilities that are at capacity. The high estimates of the port capacity limits induced legislative change by the GOE to allow private sector participation in port development and management in order to reduce this non-tariff barrier to trade and investment (DEPRA, 1996).

With respect to the GATS, it divides transport services into a number of broad categories including maritime, air transport, road and services auxiliary to all modes of transport such as warehousing and freight forwarding. The maritime category in GATS covers

²² They represented 6.64 percent of value in 1980 and 5.27 percent in 1997 (Fawzy, 1998).

international shipping, maritime auxiliary services, such as warehousing, and access to and use of ports. Only 29 countries, including Egypt, have made maritime commitments (Commonwealth of Australia, 1999). The majority of these are still quite limited.

It is argued that liberalizing the Egyptian Maritime Transport sector in the context of GATS commitments, will increase the welfare gains. On one hand, the costs of Egyptian port services act as a significant non-tariff barrier to trade and a potential serious impediment to investment. The World Bank (1998) has reported that freight plus port costs are as much as 40 percent for some perishable goods requiring refrigerated containers and that port costs for containerized cargo represents 9-14 percent of the c.i.f. price. On the other hand, it was shown that a deep Free Trade Agreement (FTA), which eliminates non-tariff barriers (where services has the lion's share), adds to welfare one-and-a-half times more than the welfare gains from a shallow FTA, which only eliminates tariffs (Hoekman, 1998).

6- Exchange Rate System

The more recent experience of the high performing East Asian countries, as well as that of other successful countries in other regions, such as Chile in Latin America, have often been associated with an export-oriented development strategy that has usually emphasized export competitiveness. Exchange rate (ER) policy has been one of the key instruments of this winning strategy (El-Badawi, 1997). Currency appreciation can lead to significant discrimination against domestic production in general, and against tradables' production especially. Given the weak performance of Egyptian exports, evolution of the Egyptian exchange rate policy is discussed, in this section, in order to assess its likely role in this performance.

6-1 Evolution of the Nominal Exchange Rate Policy

A shift from multiple exchange rates (ERs) to a uniform rate and a real devaluation constitute a step toward liberalization. Unification of the ER removes discrimination between tradable activities, and devaluation reduces the pressure of quantitative restrictions on rationing imports and also reduces anti-export bias (Papageorgiou et al. 1991).

The early 1980s were an extension to the year 1979, as there were three rates of foreign exchange. The first rate was that of the Central Bank which was kept fixed at 0.7 L.E/US\$ from 1979 until 1989 when the Egyptian pound was devalued to 1.1, and further to 2 LE/US\$ in 1990. The second rate was the commercial banks' rate initially fixed at 0.83 L.E./US\$ in 1982, it continued to devalue till its abolishment in 1989. In addition, foreign exchange was traded at a premium rate in the own exchange pool. At that time, Egypt faced pressures from its balance of trade, as well as from current account imbalances, due to the precipitous fall in oil prices and consequently in the related sources of foreign exchange, i.e. Suez Canal tolls, workers' remittances. Nevertheless, exchange rate was not actively used to restore external equilibrium, and instead the

government resorted to imposing restrictions. This was probably due to the usual fear that currency devaluation would fuel inflation. As should be expected, non-oil exports and workers' remittances were discouraged by the overvaluation of the exchange rate (GATT, 1993), and the current account situation has been worsening.

By mid- 1980s, the ER policy in Egypt had to change significantly as development and industrialization requirements were inconsistent with the overvalued exchange rate (Giacono, 1986). Egypt embarked on a gradual simplification of the foreign exchange system including exchange rate devaluation. In February 1991, the old multiple fixed parity exchange system was abolished, and replaced temporarily by a dual flexible peg exchange rate system (Abdel-Khalek, 1995). In October 1991, for the first time in decades in Egypt, segmented markets for foreign exchange were unified at a value guided by the market forces. The nominal exchange rate (NER) was revalued by 23 percent²³ and became fully convertible. Buying and selling foreign currencies, upon obtaining proper licensing, was allowed outside the banking system. Since then, NER of the Egyptian pound vis-à-vis the US dollar, being used as a nominal anchor, has been roughly constant.

6-2 Evolution of the Real Exchange Rate

Although changes in the exchange rate affect the domestic price of foreign goods, adjustments that merely offset existing inflation differentials do not alter a nation's competitive position. Therefore, economists construct, for analytical purposes, real exchange rate (RER)²⁴ indices, which remove changes in relative price levels from NER movements.

The RER is a key relative price. When it becomes too high it hurts growth²⁵, leads to a buildup of a large external deficit, and endangers financial stability (Dornbusch and Goldfajn, 1995). It is also a decisive factor in determining the response of production of both exportables and importables (Agosin and Ffrench-Davis, 1995). In addition, RER policies are important for stimulating employment, and for protecting the traditional export sectors in developing countries (Ikoba and Nyatepe-Coo, 1996).

In the case of real exchange rate appreciation, for example, imports would tend to increase their penetration while exports would decline. The exchange rate appreciation would

 $^{^{23}}$ From US\$ 1 = LE 2.708 at the end of June 1990, to LE 3.342 by February 1991.

²⁴ Defined as (P* NER/P), where P stands for the price level of the home country under consideration, P* the price level in the rest of the world, and NER the nominal exchange rate defined as domestic currency units per foreign currency unit.

²⁵ It is common now to use in the economic literature the term "real exchange rate appreciation" to designate the national currency appreciation, which necessitates the devaluation of this currency or equivalently, the revaluation of the properly said RER. From now, the RER appreciation will be used in this study to mean the appreciation in the real value of the Egyptian pound vis-à-vis Egypt's trading partners.

reduce the margin between output prices and input prices and thereby limit the ability of domestic producers to compete in the domestic and foreign markets. Real appreciation can, then, be held accountable for trade deterioration by making imports cheaper and restricting export expansion.

In this study, following Klein's (1988) approach to international competitiveness, which is based on the real exchange rate, we concentrate on the real effective exchange rate (REER), which uses consumer price differentials as the basis for the measurement.²⁶ Regarding the choice of currency basket, currencies of major competitors in export markets as well as currencies of major suppliers to the domestic market- which include 35 currencies- are first selected. The former communist block countries as well as countries with no available data (i.e. Taiwan), or with no continuous CPI series (i.e. China) were excluded to be left with a smaller set of 30 countries which together accounted for about 80% of reported total trade between 1990-98. Table (6-1) shows the export, import and trade weighted REER indices used in the calculations.

weighten KEEK mulces in Egypt (1980-98)							
	Export-weighted REER	Import- weighted REER	Trade-weighted REER				
1980	78.73	82.27	81.44				
1981	71.57	79.02	77.24				
1982	65.92	74.26	72.25				
1983	64.12	74.52	71.99				
1984	58.59	71.39	68.22				
1985	62.40	84.24	78.63				
1986	73.17	100.04	93.10				
1987	79.76	106.60	99.73				
1988	78.67	101.22	95.52				
1989	55.72	64.37	62.27				
1990	71.06	73.06	72.60				
1991	100	100	100				
1992	93.12	89.86	90.60				
1993	79.95	74.91	76.04				
1994	76.47	69.32	70.90				
1995	76.97	70.44	71.89				
1996	73.41	67.24	68.61				
1997	66.51	61.46	62.65				
1998	63.10	57.92	59.07				

Table (6-1)Weighted REER Indices in Egypt (1980-98)

Source: Calculated

Regarding the evolution of the real exchange rate of the Egyptian pound, as a partial consequence of the policy adopted during the 1980s, the real effective exchange rate appreciated by nearly 13 percent and 10 percent respectively,

²⁶ The RER in this study is equivalent to what the World Bank and IMF staff call effective exchange rate. Actually, this latter is not the one meant by many economists. The effective exchange rate should incorporate the effects of all the various incentives offered (tariffs, subsidies, etc...,) (Agosin and Ffrench-Davis, 1995).

between 1980-84 and 1984-89. Moreover, from Table (6-2) it appears that using the nominal exchange rate as an anchor, during the 1990s, has resulted in a continuous real appreciation reaching, in 1998, about 40 percent. Of this decline, about 9 percent is due to differentials in inflation rates between Egypt and its trading partner countries. The rest is accounted for by the rise in the value of the dollar relative to other countries' currencies, which mostly compensated for their inflation, taken as a group, while the Egyptian pound has remained constant against the dollar in nominal terms (ER anchor). It should be noted that the coefficient of variation of the REER, calculated in this study, is only 15 percent showing a relatively low volatility of the REER in Egypt. Figure (6-1) illustrates the relationship between NER and RER in Egypt during the period 1980-1998.

 Table (6-2)

 EGYPT: Nominal, and Real Export-Weighted Foreign

 Fxchange Rate Indices 1990-98

				LACHA	inge itat	ie mulee	.s , 1770-	<i>7</i> 0		
ſ	Ratio / Year	1990	1991	1992	1993	1994	1995	1996	1997	1998
ſ	NER(LE/US\$)	61.41	100	100.01	101.21	101.7	101.8		101.74	101.74
	FC CPI/Eg.CPI	110.03	100	94.41	90.04	89.48	87.78	101.74 86.58	86.83	86.90
	NER (LE/FC)	64.58	100	98.64	88.79	85.46	87.69	84.79	76.94	72.61
	RER (LE/FC)	71.06	100	93.12	79.95	76.47	76.97	73.41	66.81	63.10

Source: Calculated

Note: FC denotes foreign countries, Eg is the Egyptian counterpart

Figure (6-1) Evolution of Nominal and Real Exchange Rates in Egypt (1980-1998)

The nominal exchange rate anchor has been the cornerstone of both monetary and economic stabilization. It has succeeded in both building reserves to a level



which provides strong external liquidity, amounting to 12.8 months of imports and in reducing inflation to less than 3% at the end of 1998/99 (MOE, 2000). However, the government and the Central Bank were widely criticized for mismanaging their response to pressure on the Egyptian pound in 1998/99. While a strong emotional attachment to the current regime persists, the case for greater flexibility is being discussed and thought to be applied in the long run and on a gradual and cautious basis, because it is argued the RER appreciation, by making tradables cheaper, will create incentives for the reallocation of resources from the production of tradables to the production of nontradables and for switching of consumers' expenditures from nontradable to tradable goods. This will finally result in a larger nontradable sector, a smaller tradable sector, and a larger trade balance deficit (Corbo and Hernandez, 1994 and 1996; Calvo, et al., 1996).

In the light of these developments, one can understand why the fixed exchange rate regime has been controversial in the 1990s. On the one hand, the IMF insisted on devaluation, arguing that appreciation of the REER was making Egyptian exports uncompetitive, and that the depreciation of currencies of Egypt's main trading partners vis-à-vis the US dollar and the inflation rate differential would continue to persist in the medium term, thereby the situation would continue to worsen. On the other hand, Egyptian authorities claimed that increased productivity growth in Egypt and falling inflation differentials would check further real appreciation. They also believed that appreciation in the late 1990s has simply offset the 30% devaluation of 1991, that Egypt's reliance on imported goods resulted in a low price elasticity of demand for imports, and that the poor performance of Egyptian exports reflected institutional and qualitative factors rather than price uncompetitiveness. Although these differences in views terminated the negotiations between Egypt and the IMF in 1994, it seems that the latter came to accept somehow this argument.

6-3 The Equilibrium Real Exchange Rate (ERER)

Caution should be observed when interpreting the likely results of a REER appreciation. At their face, they may imply that the country is loosing its international competitiveness. This, however, should be qualified in an important respect, *vis-à-vis* the behavior of fundamental factors determining the equilibrium real exchange rate (ERER). Without knowing the value of the so-called ERER, it is difficult to judge whether the current anchor for the NER is over- or undervalued.

Despite the real appreciation of the Egyptian pound, a recent IMF study concluded that although the REER was substantially overvalued before 1991, since then it has moved closer to the ERER. At the end of 1996, the REER was estimated to have appreciated only 7% compared to the ERER. The reason for this improvement is the significant appreciation of the ERER during the period 1991 to 1995, which can, to a large extent, be attributed to the reduction in the debt-service ratio over this period. Other factors that positively contributed to the appreciation of the ERER were technical progress and the Gulf War. Terms of trade, government consumption and the lagged capital account balance contributed negatively to the appreciation of the ERER (Mongardini, 1998). On balance, the appreciation of the ERER may not be sustainable in the future and the Egyptian pound could become substantially overvalued if the ER continues to be used as a policy anchor. However, some argue that the analysis embodied in this study would justify the IMF's stance on Egypt's exchange rate.

According to another econometric study of RER (El-Badawi, 1997), it was shown that the RER in Egypt was overvalued for most of the 1980s until 1987, which witnessed the peak of the overvaluation episode (at 113%). In 1988 a steep RER depreciation took place resulting in an under-valuation of about 16 percent. This trend was maintained for the next two years (1989-90), where at least serious overvaluations were avoided. However, the RER overvaluation increased significantly in 1991 (to more than 75%), even though the rate of overvaluation has declined to about 11% in the following years, it rose again to an average of 28% for 1993-94. Furthermore, the study argues that these findings are strongly corroborated by a more simple, but direct, assessment of the Egyptian exchange rate policy during the first half of the 1990s, when the relatively high inflation; combined with the fixed NER against the US dollar; has led to a mounting real appreciation. Therefore, the study concludes that it is likely that there was deterioration in competitiveness in Egypt during the period in question.

Finally, using the Constant Market Share Analysis (CMSA), it was calculated that Egypt's under performance amounted to an annual loss of US\$3.2 billion in 1993. The causes of this loss are the failure to shift exports to rapidly growing markets (loss of US\$0.7 billion), not adapting the composition of commodity exports to changes in world demand (loss of US\$2.3 billion), with the residual measuring the loss in international competitiveness US\$0.2 billion). While it is encouraging that Egypt has not suffered a

major loss in competitiveness, exporters' inability to adjust to changing product demands and to penetrate new markets points to a lack of agility in Egypt's manufacturing sector (World Bank, 1997).

Nevertheless, one weakness of the existing foreign exchange regime is Egypt's vulnerability to shocks in foreign exchange earnings which make the ERER volatile. The problem started to be important when the fall in earnings from oil and tourism in $1997/98^{27}$, and the impact of the Asian crisis in 1998/99 caused a shortfall on supply of foreign currency. Under the fixed exchange rate, the Egyptian government should have responded immediately to this situation either by running down reserves or by raising the interest rate. Instead, the authorities effectively rationed foreign exchange by delaying access and by imposing restrictions on imports, and attempted to end the shortage of foreign exchange by denying its existence, or by claiming it was a temporary result of practices of foreign exchange dealers (who actually account for a small share of total turnover). However, the rising fears of foreign exchange restrictions seemed to aggravate the problem by increasing reluctance to repatriate foreign currency, which is suggested by the increases in the negative errors and omissions item in the balance of payments²⁸. By the end of 1998, the authorities finally addressed the problem by drawing from the international reserves, which declined, through 1999, by an amount of US\$4.169 billion (Ministry of Economy, Monthly Economic Digest, several issues). As long as reserves could comfortably absorb such a fall, no serious damage could have been done.

However, the episode weakened the credibility of the Central Bank, which appeared to lack independence. Moreover the continuous government denials of the problem and of any plausible future devaluation shook the confidence. Expectations of a devaluation continue, and doubts about the continuity of the current exchange regime increase. For Egypt, it is suggested that a more appropriate system would be to peg the pound to a weighted average of the Euro and the US dollar according to their relative importance to Egypt's trade. This is especially important for two reasons: first, the imported input content of domestic production is relatively high (Abdel-Khalek, 1995)²⁹. Thus, the effect of a pound devaluation on domestic costs of production is considerable. Second, Egypt is negotiating an agreement to establish a free trade area with the EU. The agreement is to enhance the importance of Europe in Egypt's trade. Pegging Egypt's currency to the US dollar means that appreciation of the dollar vis-à-vis the Euro will hurt Egypt's competitiveness in the European market.

 ²⁷ They dropped from US\$2578 million and US\$3646 million. in 1996/97 to US\$1728 million, and US\$2941 million, respectively in 1997/98 (MOE, 1999).
 ²⁸ This item was US\$ -247, US\$-1043, and US\$-1288 million in 1996/97, 1997/98 and 1998/99

²⁸ This item was US\$ -247, US\$-1043, and US\$-1288 million in 1996/97, 1997/98 and 1998/99 successively. ²⁹ The coefficient of total intermediate instants in instants of the label of total intermediate instants in instants of total intermediate instants.

²⁹ The coefficient of total intermediate inputs in important tradable sectors is: 0.551 for transport equipment, 0.544 for wood and furniture, 0.479 for chemicals (except oil), 0.44 for printing and publishing, and 0.438 for food (Abdel-Khalek, 1995).

6-4 Egyptian Pound Exchange Rate and Export Performance

Whether a nominal or a real depreciation can help net exports is controversial. In trying to resolve the prolonged dispute about the likely impact and the effectiveness of a devaluation on exports in the Egyptian case, a recent study (El-Shawarby,1999) gave conclusive evidence on the weak role of exchange rate variations on Egyptian export performance, and a marginal support for the argument in favor of devaluing the Egyptian pound.

However, a preliminary assessment of the correlation coefficients between the REER and NER on one hand, and the different export categories classified by degree of processing, as shown in Table (6-3), and the visual inspection of the figures (6-2) to (6-5); enable us to argue that the REER, in the Egyptian economy, did not exhibit the usual impact on exports predicted by economic theory during the period under consideration.

Table (6-3) Correlation Coefficients between REER / NER and the Different Export Categories, During the period (1980-98)

Export Category	Merchandise Exports	Primary Product Exports	Semi-Finished Exports	Finished Exports	
NER	0.626	0.772	0.348	0.911	
REER	0.175	0.289	-0.143	0.271	

Source: Calculated

Figure (6-2) The Relation between NER, REER and Real Total Merchandise Exports (1990-98)



Figure (6-3) The Relation between NER, REER and Real Primary Product Exports (1990-98)



Figure (6-4) The Relation between NER, REER and Real Semi-Finished Exports (1990-98)



Figure (6-5) The Relation between NER, REER and Real Finished Exports (1990-98)



Nevertheless, as visual inspection is not a formal test of the existence of a relation between variables, and as correlation does not imply a causal relationship in any sense, a Granger causality test has been performed. The test results show that causality does not run from the REER to any of the export categories at any acceptable level of significance. Furthermore, the test suggests that causality runs from the real total merchandise exports to REER at 6% level of significance. However, inferences from the Granger causality F-tests, although indicative of the structure of the relationships among variables, have only limited validity. Therefore, the study attempted to estimate the Egyptian export demand equation, with the real exchange rate (REER) and the foreign demand represented by the export-weighted real gross domestic product index of Egypt's trading partners (FGDPR) as explanatory variables. All the variables have been used in real terms and in their natural log forms. It is worth noting here that an estimation of this relation using OLS is subject to criticisms, as the non-stationarity of all the export categories, except the primary product exports, invalidates classical statistical inferences, and may yield spurious regression. However, the problem is more serious when at least one of the explanatory variables is non-stationary. In that case, it is very likely to obtain significant regression coefficients and high values of R_{-}^{30} , even if the variables are completely unrelated, or the significance will be artificially increased if there exists a causal relationship. In our case, both explanatory variables REER and FGDPR are stationary at 5% and 10% levels respectively³¹. Moreover, if the so-called spurious relation indicates no significant relation between REER and the relevant export category, then any other more appropriate and more advanced estimation method is not likely to vield a different result.

 ³⁰ A spurious regression has typically significant coefficients, high R_, and a low Durbin-Watson statistic.
 ³¹ Stationarity was tested using Dickey-Fuller, Augmented Dickey –Fuller and Phillips-Perron Unit Root tests.

Both explanatory variables are expected, a priori, to have positive coefficients. An increase in the value of RER means a depreciation of the national currency, which increases the competitiveness of the country and hence increases its exports. An increase in FGDPR, will also increase the foreign demand for national exports. According to the OLS estimates shown in Table (6-4), only semi-finished exports' equation seems to be a non-spurious regression. However, none of the REER coefficients is significant at any acceptable level, while all those of FGDPR are significant at more than 99% confidence level, and indicate an income elastic demand for all all export categories (if we ignore the problem of spurious regression in three out of four regressions)

 Table (6-4)

 OLS Estimates of Export Categories' Demand Equations

	REF	ZRex	FGI	DPR	R	D.W
	Coefficient	t-statistic	Coefficient	t-statistic		
EXTM	0.138	0.330	1.790	5.072	0.635	1.284
EXPP	0.159	0.514	1.500	5.758	0.694	2.401
EXSF	-0.437	-1.050	1.201	3.422	0.425	2.022
EXF	0.401	0.770	4.456	10.151	0.875	0.872

REEex= export-weighted REER, EXTM = Total Merchandise exports; EXPP = Primary Products exports (excl. fuel and cotton); EXSF = Semi-Finished exports; EXF = Finished exports; PS = Price Indices of respective groups prefix R refers to real values; FGDPR - Foreign GDP in real terms

If a correction of the autocorrelation problem is attempted for the three equations with autocorrelated errors, the results will not significantly change. As Table (6-5) exhibits, all the REER coefficients are still insignificant, and that in the finished export equation becomes marginally significant but with a wrong sign. All income elasticities of exports with respect to external demand exceed one and are highly significant.

		Table (6-5)	
OLS	Estimates	of Export Categories' Demand Equation	ons
	after	Correction for Autocorrelation	

	REERex		FGDPR		R_	D.W
	Coefficient	t-statistic	Coefficient	t-statistic		
EXTM	-0.203	-0.330	1.680	2.521	0.651	1.829
EXPP	0.195	0.642	1.503	6.065	0.688	2.130
EXF	-0.728	-1.752	4.037	1.955	0.933	1.563

REEex= export-weighted REER, EXTM = Total Merchandise exports; EXPP = Primary Products exports (excl. fuel and cotton); EXSF = Semi-Finished exports; EXF = Finished exports; PS = Price Indices of respective group, prefix R refers to real values; FGDPR - Foreign GDP in real terms

These findings suggest that the Egyptian economy, despite a substantial record of policy reform over the last ten years, still suffers from some distortions and difficulties, which make variations in exports dependent on other variables than those provided by economic theory and empirical evidence for other developing countries. There are three main sources for these difficulties: the business-sector itself, the government, and external factors.

While one of the main characteristics of the global market for exports is rapidly changing tastes and preferences, most Egyptian exporters lack the readiness to adapt their production techniques to these rapid changes, and fail, therefore, to penetrate new markets and, further, loose existing market shares. Egyptian exporters suffer also from marketing problems, especially those related to quality assurances, including those associated with ISO 9000 standards and guarantees in the form of both product warranties and compliance with environmental standards³². In addition, high proportions of commodity exports are still produced by state-owned enterprises with limited capacity to respond to market signals such as a change in the RER.

The government is responsible for some policies and factors that impede export expansion and has to adopt major reforms. The current tariff structure and the limited competition of shipment services, for instance, impose additional costs on exports, hitting non-traditional exports especially hard.³³ Financial services, such as pre- and post-shipment finance, insurance against exporters/importers' default and soft loans for export activities also need solid improvements. In addition, bureaucracy, import red tape and non-tariff barriers to trade cost the exporter large indirect expenses. A recent study (Nathan Associates, 1998a) indicates that current GOE policies impose an implicit tax of roughly over 30% on exports, which is inconsistent with the GOE strategy of export-led growth.

Among the external difficulties that are not within Egypt's ability to control, are nontariff and tariff barriers imposed by other countries. Usually, the internal preferences implied by Custom Unions (CU) and Free Trade Areas (FTA) hurt outside parties: Egyptian exporters in our case.

It is thus apparent that export promotion in Egypt is not entirely an exchange rate problem, but rather more a behavioral and an institutional one. The prevailing view is that export development in Egypt has been hampered by the low quality/high cost of support services, the absence of adequate information on foreign markets, and inability to satisfy foreign technical specifications or standards and an inadequately trained work force and management (EIU,1997). Consequently, a continued policy and institutional reform effort, including the privatization of state-owned enterprises, is crucial to resolve the weak export performance and improve Egypt's economic responsiveness to normal economic price signals like the exchange rate. It appears that, unless these problems are effectively tackled, devaluation, although needed to improve the long-term economic prospects of Egypt and to secure the benefits of economic reform, will not help much, per se, in enhancing Egyptian exports.

³² For more details, see Al-Garf (1995).

³³ However, the positive effect of lower export production costs due to the reduction of tariffs and non-tariff barriers to trade in the 1990s may have counteracted the negative effects of real exchange rate appreciation and contributed to the lack of statistical correlation between the RER and export performance during this period.

7- Summary and Policy Implications

In response to mounting economic difficulties, the Government of Egypt adopted in 1991 a comprehensive economic reform program (ERSAP), with the dual objective of stabilizing the economy, and placing it on a higher growth trajectory that would boost employment opportunities for the growing population. Reform of the trade regime was among the major components of ERSAP. The *first* element entailed in the process of the reform was the reduction of the level and variance of import tariffs and further import liberalization through removing the remaining quantitative restrictions and other forms of non-tariff barriers. The *second* element was the removal of any remaining restrictions or prohibitions on private sector's exports of primary commodities, as well as the promotion of exports through improving import duty drawbacks, provision of export credits, and of other subsidies and tax incentives. The *third* element of the trade reform was the devaluation of the Egyptian pound and the commitment to a flexible exchange rate policy.

With respect to trade liberalization, the effort of the GOE in the 1990s provides a good basis for moving towards integrating Egypt into the world economy. The tariff reform of 1986 addressed the distortionary effects of the prevailing tariff structure, and tried to create the right incentives to domestic producers. In 1991, as part of the structural adjustment program in Egypt, the tariff structure was further streamlined. Since 1994, when the harmonized customs tariff (HS) was issued, Egypt has followed a program of tariff revisions and reductions, the latest was implemented in 1999.

The average tariff rate for actually imported lines exceeds 20 percent, which, despite successive reductions, is still relatively high, if compared with fast growing exporters with average tariff level of less than 9 percent. Meanwhile the average tariff rate of all tariff lines, whether actually imported or not imported, is about three-quarters of the former. This suggests that the tariff lines that are not imported have relatively low tariff rates, and that high tariff rates did not preclude imports of what seems to be important for the Egyptian economy. Furthermore, if extra charges for services on exports are taken into account, the average tariff rate will increase by about 3 points.

Further investigation of the tariff rates shows a highly dispersed tariff structure. Duties considerably differ across sectors of the economy. They range from zero to 50 percent as a norm and reach exceptionally high levels on some items. An indication of this dispersion in rates is given by the coefficient of variation that is estimated at a value that ranges between approximately 63 percent and 109 percent according to the set of tariff lines used in the calculations and excluding alcoholic beverages and tobacco lines.

Another indication of dispersion is given by the tariff peaks or spikes which show that *tariffs in Egypt are, in general, still high and quite dispersed, and that a strong import-substitution bias still remains in the tariff structure.*

Examination of the tariff structure of the 14 manufacturing sectors shows that the overall import-weighted average tariff rate is 13.2 percent, which is about two thirds of the simple average (20.22 percent). Both measures indicate that:

• The sectors with the highest concentration of their imports at the lower end of the tariff structure ($5 \neq \text{ercent}$) include sectors which provide the economy with basic foods, raw materials, intermediate and capital inputs.

• Five of the manufacturing sectors; including textiles, clothing, electrical machinery and apparatus, and automotive products; have both simple and weighted average rates of at least 20 percent.

• Tariff rates in Egypt are generally rational in the sense that they increase with the stage of production. Furthermore, capital goods, specifically non-electrical machinery, have recently been subjected to a reduced rate of 5 percent. This is likely to *lead to high Effective Rates of Protection*, with their potential for encouraging inefficient production. In addition to the tariff structure, the current structure of Egypt's sales taxes (GST) gives more protection to finished goods than to raw materials, capital goods and other inputs. This in fact creates an *anti-export bias*, which is inconsistent with the current liberalization and export promotion strategy.

According to the calculated simple and import-weighted average tariff, current Egyptian import tariffs are having the same effect as an export tax of 10 percent to 13 percent. If we add to this effect the supplementary charges of 3 percent to 4 percent and the effect of the GST this export tax will rise further. This tax falls on the gross value of exports, not just on profits and so can have a damaging effect on the incentive to export.

The dispersion of Egypt's tariffs along with their average height contribute to low productivity growth, and divert production, new investments and employment away from the most promising sectors of the economy, including non-traditional industries, such as manufactured exports.

In assessing the burden of input tariffs on exporters, calculations showed that tariffs provide negative effective protection for exporters. *Value added for firms that decide to export appeared to be on average 6.9 percent to 14.6 percent lower than it would be in the absence of tariffs on inputs,* depending on how well the duty drawback scheme works. This may act as a serious impediment to competitiveness and a substantial disincentive to export particularly non-traditional products.

Calculation of anti-export bias points to the same conclusion. The extent of the economywide average bias against exports was estimated at 19.7 percent in 1997. However, it varied among activities, ranging between 6.7 percent and 21.7 percent for manufacturing activities, and being particularly high for final wear. It further appeared, that Egypt's commitments to WTO; with respect to improving market access to foreign products and in terms of bound tariffs; do not generally lead to expect further reductions of the tariff levels and dispersion, unless the GOE decides unilaterally to take this step to gain efficiency and enhance the competitiveness of Egyptian products. The overall unweighted ,as well as weighted, average tariff actually applied is lower than 70 percent and 60 percent of the corresponding average bound tariffs.

Examination of Egypt's trade policy since the eighties has shown that *non-tariff barriers* (*NTBs*) on imports have been used widely for various purposes. In spite of serious attempts at phasing out some NTBs on imports, and at reducing some others, their production coverage remained high in several activities. There is evidence that the removal of certain products from the list of banned imports were put on the quality control list, effectively retaining the import restrictions through long delays in approval. Moreover, as a means of relieving pressure on foreign exchange holdings, the GOE has required, importers to put up 100% cash collateral for letters of credit, instead of the previously required 10%. In addition, Egypt has implemented WTO-consistent anti-dumping, countervailing and safeguards measures. Ministerial Decrees require that all imported consumer durable ad non-durable goods must be shipped directly from the country of origin, and that all goods be clearly labeled and carry a certificate of origin. It is expected that these decrees issued at the end of 1998 will increase both non-tariff barriers and the effective rates of protection.

NTBs on exports have also been used as well, but to a lesser extent. Until the early nineteen nineties, exports in Egypt were subject to taxes, some explicit and others implicit, in addition to a number of NTBs. The list of export prohibitions has been considerably reduced by 1993, it only includes raw hides, waste paper and scrap metal. Export quotas have been scaled down to tanned skins and yarn and gauze made of cotton and man-made fibers. Quality control requirements are only maintained for foodstuffs. In addition, in trying to facilitate and simplify the process of exporting, the GOE provided some forms of assistance for exporters. These incentives cover the drawback and temporary admissions systems and the removal of discrimination between public and private sectors in foreign trade.

Since services sectors make an important and growing contribution to Egypt's economy, reducing the trade barriers in services would be an important step toward reinforcing the dynamic export performance of these sectors. Egypt has committed itself, under GATS, to trade liberalization in four services sectors: construction and related engineering services, financial services, tourism and transport services. Compared to other developing countries, Egypt's number of commitments per sector and its sectoral coverage are not very different from an average developing country, although consistently less than those of larger developing countries. This point is of a special importance given the literature that links trade openness with growth and development.

With respect to Egypt's commitments toward the WTO for "*financial services*", they remain vague and leave many areas unconstrained by either an immediate or a future commitment. It is argued that specific restrictions are expected to produce a limited impact on banking services but will have a large impact on insurance. The overall commitments account for less than 20 % of the service sectors and most of the commitments are not very far from the status quo. However, in the light of the experiences of other countries with financial sector liberalization, and given the absence of an effective antitrust law in Egypt, while privatization is important for both insurance and banking, the key to a healthy financial sector is de-monopolization and promotion of competition.

As to *transport services*, they make an important and growing contribution to Egypt's economy. Nonetheless, despite favorable location, costs of doing business through Egyptian ports incur 15-20% higher freight and handling charges than those of Cyprus, Greece, Israel and Turkey. This may be explained by the inefficient public sectors monopolies in ports and airports, which have long undermined Egyptian competitiveness in international markets. While there are deficiencies in the ports infrastructure and equipment, the main problem is the institutional structure.

However, important measures have been undertaken, and major projects are under development. They will improve commodity transport, enhance greater private ownership of container port and shipping facilities, and phase out the existing monopolies for shipping, stevedoring, warehousing, and port services. Liberalizing the Egyptian maritime transport sector in the context of GATS commitments would lower the costs of exporting and importing, would greatly enhance marketing, and would, thereby, increase the welfare gains.

In 1991, the GOE took steps towards shifting from multiple exchange rates (ERs) to a uniform rate and a real devaluation. Since then, the nominal exchange rate of the Egyptian pound vis-à-vis the US dollar, being used as a nominal anchor, has been roughly constant. This has resulted in a continuous real appreciation reaching about 40 percent in 1998. About 9 percent of this appreciation is due to differentials in inflation rates between Egypt and its trading partner countries. The rest is accounted for by the rise in the value of the dollar relative to other countries' currencies, while the Egyptian pound has remained constant against the dollar in nominal terms. This appreciation has penalized exports, partly offsetting the opportunities created by reducing regulation and eliminating controls, particularly in the agricultural sector. The failure to adjust the exchange rate also demonstrates the limits of Egyptian commitment to increased participation in the world market.

Whether a nominal or a real depreciation can help net exports is controversial. In trying to resolve the prolonged dispute about the likely impact and the effectiveness of a devaluation on exports in the Egyptian case, the study emphasized the evidence on the weak role of exchange rate variations on Egyptian exports performance. All the results

indicate that the exchange rate in the Egyptian economy did not exhibit the usual impact on exports predicted by economic theory during the period under consideration (1990-1998).

In sum, since 1991, Egypt has taken serious steps towards trade liberalization through a series of corrective measures aimed at accelerating reduction in the height as well as in the variance of tariff rates, phasing out most of NTBs on imports as well as on exports, reducing other types of NTBs, providing export incentives, and simplifying the exchange rate system. These reforms should have promoted exports, if the RER and domestic relative prices were sufficiently flexible to increase incentives for producing for export. However, advances in export performance being short of what is desirable, show that substantial reforms are still required if satisfactory export-led growth is to be attained and sustained in the longer run. Furthermore, it should be emphasized that trade policy in Egypt is not the only determinant of trade performance or of the pattern of resource allocation which are still controlled by various government regulations and interventions and by institutional, legislative, political, and social considerations. Awareness of the need to reform on various economic and non-economic fronts would be an important step toward the potential overall improvement.

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