TRADE AND FOREIGN EXCHANGE REGIME IN EGYPT

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Abstract

The objective of this paper is to examine the most important components of foreign trade policy in Egypt: the tariff structure, non-tariff barriers (NTBs) and the exchange rate policy. With the intent of assessing the policies' likely impacts on Egyptian export competitiveness the paper also focuses on distortions resulting from these policies. The study found that since 1991, Egypt has taken serious steps towards trade liberalization through a series of corrective measures aimed at accelerating the 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. However, substantial reforms are still required if satisfactory export-led growth is to be attained and sustained in the long-run. Trade policy in Egypt is not the only determinant of trade performance or of the pattern of resource allocation. Performance is also 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 in competitiveness.

1. Introduction

At the beginning of the nineteen-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 appropriately improve its international competitiveness 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 objective of this paper 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, with the purpose of assessing their likely impacts on Egyptian exports competitiveness with a focus on distortions resulting from these policies in 1998 (or the latest available data). It is organized under six sections. The next section 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 non-tariff barriers on imports as well as on exports, and discusses export incentives in the Egyptian economy. Section 5 analyzes the behavior of nominal and real Egyptian exchange rates and examines the relationship between the exchange rate and Egyptian exports. Section 6 summarizes the overall findings of the paper and concludes.

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

In spite of unprecedented economic growth during 1975-85, Egypt's trade balance has been continuously in deficit. 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, ended in 1986 as a result of unfavorable external developments, principally the 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 severe macroeconomic imbalances.

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.

Under the pressures of increasing economic difficulties in the early 1990s, the government of Egypt (GOE) undertook bolder, and more comprehensive policy measures. An Economic Reform and Structural Adjustment Program (ERSAP) that gained the support of the International Monetary Fund (IMF) and the World Bank (WB) was launched in May 1991. The basic goal of ERSAP was twofold: to stabilize the economy, and to promote growth that would boost employment opportunities for the growing population. 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.

With respect to the trade sector, progress has 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 1995[2]. Furthermore, Egypt embarked 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

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[1] In this section, all the figures for the years after 1992 are from various issues of the 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.

[2] Nonetheless, it is argued that tariffs remain above those in other North African and Middle-Eastern Countries.

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 11.5 percent. 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 three percent of GDP, and this level has been falling through the last decade to reach 2.5 percent in 1999. 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 1979/80[3] 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 percent[4] 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. 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. 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.

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

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[3] Calculated from International Monetary Fund's *"IFS, Yearbook"*, 1999.

[4] Assuming a constant participation rate.

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 were implemented in 1999 and additional implementations were scheduled in 2000.

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 following a downward trend, they are still seen as high. An assessment of the Egyptian tariff structure is not easy, 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. 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.

This 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 group 776); 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 1. For each set summary measures are calculated twice: the first, after excluding the lines with specific tariff (those of tobacco[5]) to make the calculations possible; the second after excluding the lines of alcoholic beverages and the remaining ones of tobacco and cigarettes, since the high tariffs on alcoholic beverages[6] and tobacco[7] items are thought to be imposed for religious and health reasons rather than for trade policy purposes.

As Table 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 remains, despite the successive reductions, still relatively high, if compared with fast growing exporters whose average tariff level is 8.7 only percent [8], 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 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 two percent of the value of the consignment subject to tariff rates of -30 percent and to three percent of the consignment value if the tariff rate exceeds 30 percent. Furthermore, an additional rate of one percent of the value of the consignment is charged, raising these supplementary charges to three percent and four percent, respectively, according to the tariff band. These surcharges, when taken into consideration in the calculations, increase the average tariff rate by about three points as exhibited in Table 2.

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[5] The value of the lines of tobacco that are actually imported represents 1.34 percent of the total value of imports.

[6] The value of alcoholic imports is negligible, it represents 0.0006 percent of the total value of imports.

[7] The remainder of tobacco items has a marginal value that is equivalent to 0.0005 percent of the total value of imports.

[8] 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 quite a bit lower than that of Egypt (only 13.4 percent).

3.2 Tariff Dispersion

Further investigation of the tariff rates shows a highly dispersed tariff structure. Duties differ considerably 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).

Using the different definitions of tariff spikes, the tariff schedule of Egypt, according to the estimates shown in Table 3, exhibits the following characteristics. More than half of the actually imported tariff lines are considered international spikes; while less than five percent of these lines are national peaks according to (NP1). Finally, using the second definition of national peaks would be misleading as it indicates almost a complete uniformity of the Egyptian tariff structure.

In 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.

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 2, and Table 3 are not substantially different from those using the Tariff List of 1999, which are shown in Table 4. In 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**).

According to the figures presented in Table 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 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 manufactures[9] (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, it appears 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 (ERP), with their potential for encouraging inefficient production. However, capital goods, specifically non-electrical machinery, have recently been subjected to a reduced rate of five percent.

Moreover, Tables 5 and 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.

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 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 three percent of tariff lines are subject to tariff rates exceeding 54 percent.

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

The sectors with the highest concentration of their imports at the lower end of the tariff structure (bands zero percent and five 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 was 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.

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 briefly reviewed.

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 five percent to 25 percent with a standard rate on goods of 10 percent. There are further some exceptionally high GST rates on some goods - e.g. mineral water, soft drinks and juices, cigars and cigarettes and alcoholic beverages. Thus it is a fairly high, non-uniform tax on commodities.

Although the focus here is on international trade regime, the GST is relevant since it is applied to imports on a duty-inclusive basis. Thus it has the effect of magnifying existing tariff rates.

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.

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 barriers[10] , 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 14 percent. If we add to this effect the supplementary charges of three percent to four percent and the effect of the GST this export tax will rise further. Note also that 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.

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 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. Moreover, the calculated averages conceal large differences between sectors, due to the observed tariff dispersion and the previous

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[10] These barriers will be discussed in details in Section 4.

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. 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, the more protected industries are, the less efficient is the economy.

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 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 (clothing (8)). This suggests that with respect to Egyptian commitments to the 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 nine[11] of the fourteen sectors considered, and around 70 percent or more of the number of products in four [12] 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 it 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 GOE 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 percent with respect to the weighted average binding) face lower tariff rates than the level of binding. Thus, as noted for machinery and equipment, reductions in applied tariffs are expected under Egypt's commitments to the WTO. This will lower to some extent the traditionally high protection to this sector.

On the other hand, sectors with higher than average applied tariffs (6.other semi-manufactures; 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 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 GOE decides unilaterally to take this step to gain efficiency and enhance the competitiveness of Egyptian products.

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[11] These sectors are: 2. Agricultural raw materials; 4. iron and steel ; 5. chemicals ; 6. other semi-manufactures; 7. Textiles; 8. Clothing; 11. office machinery and telecommunication equipment; 13. automotive products; 14. other transport equipment.

[12] These four sectors are: 1. Food; 3. mining; 9. power generating machinery; 10. other non-electrical machinery.

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 shown previously, has been partially 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. Between September 1996 to June 1997, non-tariff barriers on exports were abolished. Administrative procedures for exports are being streamlined,. 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 for export.

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

A basic difficulty in approaching NTBs is that they are defined by what they are not (Deardorff, 1987). 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 favor 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. Obviously, 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, since 1980, will not be attempted. However, the still prevailing ones will be briefly sketched.

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 non-durable 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 met[13]. 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 account for less than five percent of the domestic production. Nevertheless, products removed from the import ban list are sometimes subject to increased duty rates a clear illustration is cotton fabrics. Currently, import bans are predominatly applied to clothing and apparel items.

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

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 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 importers 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.

3.   *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 the quality control list, while toys and hand tools, which can be dangerous items, 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 (Kheir-El-Din, 2000).

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 percent of all tariff lines that have corresponding ISIC items. The product coverage by sector shown in Table 9 and illustrated by Figure 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.

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 five percent and 90 percent according to industry, with the highest costs for food products and imported final consumer goods.

▪ Exports are lowered by nine to 12 percent and GDP by one 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.

4.   *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 seven European producers in 1997. Dumping margins were assessed on Greece, Spain,

Russia, Romania, Ukraine, 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 Pan-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 quotas, 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 had been considerably reduced by 1993, including only 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 a relatively short local supply. The export quota on cotton waste and yarn waste appears to be imposed for protectionist purposes. Export products subject to quantitative quotas have been scaled down to tanned skins and newspaper waste.

Export prior approval was reduced in 1992 from 37 export items to only one item-yarn and gauze made of cotton and man-made fibers. Quality control requiring approval of the General Organization of Exports and Imports Control (GOIEC) was also cancelled, with the exception of 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 (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 payment 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 five percent to 15 percent to this average. Nathan Associates (1996b) used the figure five 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. Exchange Rate System

The more recent experience of the high performing East Asian countries, as well as that of 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 in particular. 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.

5.1 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 LE/US$ from 1979 until 1989 when the Egyptian pound was devalued to 1.1, and further to two LE/US$ in 1990. The second rate was the commercial banks' rate initially fixed at 0.83 LE/US$ in 1982, which continued to devalue until its abolishment in 1989. In addition, foreign exchange was traded at a premium rate in their 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 - Suez Canal tolls

and workers' remittances. Nevertheless, the 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 could be expected, non-oil exports and workers' remittances were discouraged by the overvaluation of the exchange rate (GATT, 1993), and the current account situation worsened.

By mid- 1980s, the ER policy in Egypt had to change significantly as development and industrialization requirements were inconsistent with the overvalued exchange rate (Giacomo, 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 market forces. The nominal exchange rate (NER) was revalued by 23 percent[14] 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.

5.2 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)[15] 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 growth[16], 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 French-Davis, 1995). In addition, RER policies are important for stimulating employment, and for protecting the

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[14] From US$ 1 = LE 2.708 at the end of June 1990, to LE 3.342 by February 1991.

[15] 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.

[16] It is now common in economic literature to use, 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.

traditional export sectors in developing countries (Ikoba and Nyatepe-Coo, 1996). Real appreciation can 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[17]. 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 (Taiwan), or with no continuous CPI series (China) were excluded to be left with a smaller set of 30 countries which together accounted for about 80 percent of reported total trade between 1990-98. Table 10 shows the export, import and trade weighted REER indices used in the calculations.

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, between 1980-84 and 1984-89. Moreover, from Table 11 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 nine 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 2 illustrates the relationship between NER and RER in Egypt during the period 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 percent at the end of 1998/99 (MOE, 2000). However, the GOE 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 thinking is that it ought to be applied in the long run, 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 non-tradables and for switching of consumers' expenditures from non-tradable to tradable goods. This will finally result in a larger non-tradable sector, a smaller tradable sector, and a larger trade balance deficit (Corbo and Hernandez, 1994 and 1996; Calvo, *et al.*, 1996).

In 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 percent 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 somehow came to accept this argument.

5.3 The Equilibrium Real Exchange Rate (ERER)

Caution should be observed when interpreting the likely results of a REER appreciation. At face value, they may imply that the country is losing 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 percent 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

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[17] 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 French-Davis, 1995).

the 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.

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 percent). 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). However, the RER overvaluation increased significantly in 1991 (to more than 75 percent), even though the rate of overvaluation has declined to about 11 percent in the following years, it rose again to an average of 28 percent for 1993-94. Furthermore, the study argues that these findings are strongly corroborated by 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 situation started to deteriorate when the fall in earnings from oil and tourism in 1997/98[18], and the impact of the Asian crisis in 1998/99 caused a shortfall in supply of foreign currency. Under the fixed exchange rate, the GOE should have responded immediately either by running down reserves or by raising the interest rate. Instead, the authorities effectively rationed foreign exchange by imposing restrictions on issuing letters of credit and delaying access to imports. They further denied the

existence of the shortage of foreign exchange or claimed it was a temporary result of practices of foreign exchange dealers (who actually account for a small share of total turnover). The rising fears of foreign exchange restrictions seemed to aggravate the problem by increasing reluctance to repatriate foreign currency. 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*, various issues). As long as reserves could comfortably absorb such a fall, no serious damage should have been done.

This 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 confidence. At the time of writing, 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)[19]. 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 European markets.

5.4 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, and the different export categories classified by degree of processing, as shown in Table 12, along with the visual inspection of the Figures 3 to 6; enable us to

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[18] 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).

[19] The coefficient of total intermediate imported 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).

argue that the REER, in the Egyptian case, did not exhibit the usual impact on exports predicted by economic theory.

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 percent 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 main trading partners (FGDPR) as explanatory variables. All 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 export categories, except primary products exports, invalidates classical statistical inferences, and may yield spurious regression. However, the problem is more serious when the explanatory variables are also non-stationary. In that case, it is very likely that significant regression coefficients and high values of R^2[20] will be obtained, 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 percent and 10 percent levels respectively[21]. Moreover, if OLS estimates indicate no significant relation between REER and the relevant export category, then any other more appropriate and more advanced estimation method is not likely to yield a different result.

Both explanatory variables are expected, *a priori*, to have positive coefficients. An increase in the value of REER 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 foreign demand for national exports. According to the OLS estimates shown in Table 13, none of the REER coefficients are significant at any acceptable level, while all those of FGDPR are significant at more than 99 percent confidence level, and indicate an income elastic demand for all export categories (if we ignore the problem of spurious regression).

If a correction of the auto-correlation problem is attempted for the three equations with auto-correlated errors, the results will not significantly change. As Table 14 exhibits, all the REER coefficients are still insignificant, and that in the finished export equation, become marginally significant, but with a wrong sign. All income elasticities of exports with respect to external demand exceed one and are highly significant. 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 variables other 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 flexibility to adapt their production techniques to these rapid changes, and fail, therefore, to penetrate new markets and, further, lose 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 standards[22]. 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 REER.

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[23]. Financial services, such as pre- and post-shipment finance, insurance against payment 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 percent on exports, which is inconsistent with the GOE strategy of export-led growth.

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[20] A spurious regression has typically significant coefficients, high R^2, and a low Durbin-Watson statistic.

[21] Stationarity was tested using Dickey-Fuller, Augmented Dickey –Fuller and Phillips-Perron Unit Root tests.

[22] For more details, see Al-Garf, 1995.

[23] 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 REER and export performance during this period.

Among the external difficulties that are not within Egypt's ability to control, are non-tariff and tariff barriers imposed by other countries. Usually preferences implied by customs unions (CU) and free trade areas (FTA) hurt non-member parties - Egyptian exporters in our case.

It is thus apparent that export promotion in Egypt is not entirely an exchange rate problem, but rather 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 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.

6. 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. 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 2000. Despite successive reductions, the average tariff rate for actually imported lines, exceeds 20 percent, which is still relatively high, if compared with fast growing exporter with average tariff level of less than nine 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 three points.

Further investigation of the tariff rates shows a highly dispersed tariff structure. Duties differ considerably 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 ($\leq$ five percent) 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 five 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 14 percent. If we add to this effect the supplementary charges of three percent to fpur

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 for non-traditional products.

Calculation of anti-export bias points to the same conclusion. The extent of the economy-wide 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, 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 percent cash collateral for letters of credit, instead of the previously required 10 percent. 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, 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 had been considerably reduced by 1993, including only raw hides, waste paper and scrap metal. Export quotas have been scaled down to tanned skins, 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.

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 kept almost constant. This has resulted in a continuous real appreciation reaching about 40 percent in 1998. About nine 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. This appreciation has penalized exports, partly offsetting the opportunities created by reducing administrative restrictions and eliminating controls.

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 emphasizes 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 (1980-1998).

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 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 long 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 in competitiveness.

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Figure 1: Percentage of Tariff Lines Subject to NTBs

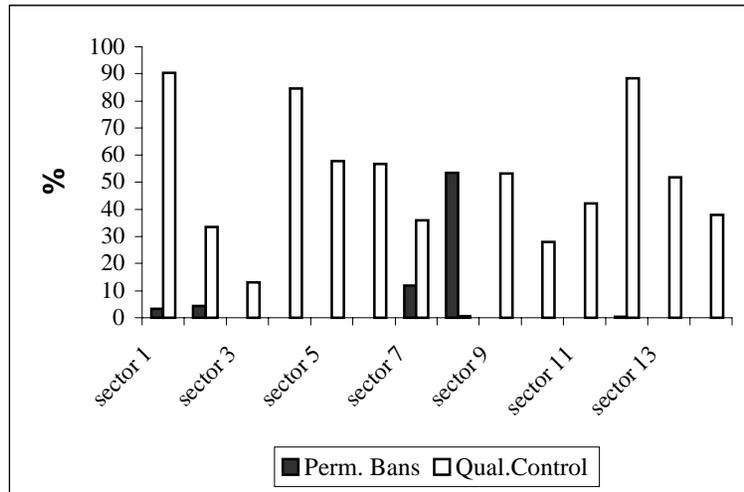**Figure 3: The Relation between NER, REER and Real Total Merchandise Exports (1980-98)**

Figure 2: Evolution of Nominal and Real Exchange Rates in Egypt (1980-1998)
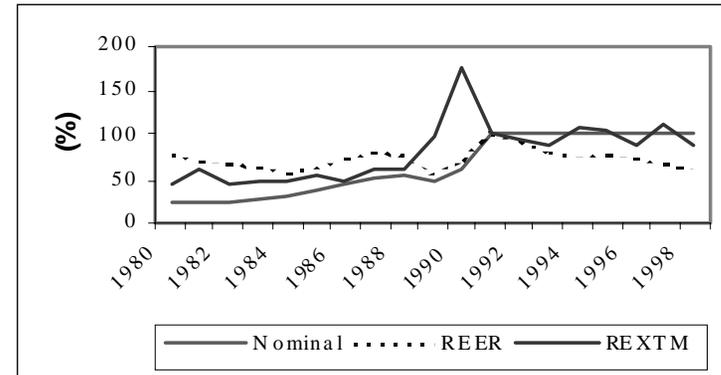
Figure 4: The Relation between NER, REER and Real Primary Products Exports (1980-98)
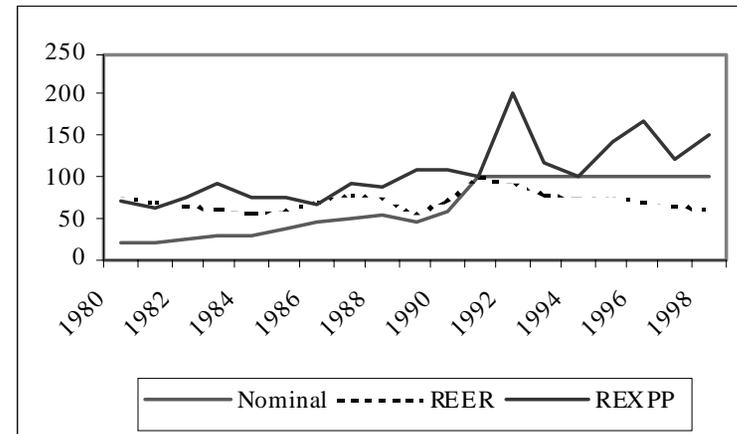
Figure 5: The Relation between NER, REER and Real Semi-Finished Exports (1980-98)

Table 1: Description of Tariff Lines Sets

	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	
Set 2*	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

Note: Set 1: All the tariff lines, of which: 2 items are with no tariff rate while 7 items face zero 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.

Figure 6: The Relation between NER, REER and Real Finished Exports (1980-98)

Table 2: General Summary Measures of Tariff Rates Height in Egypt: 1998 (%)

	Average Applied Tariff	Average Applied 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: Authors' calculations

Table 3: Summary Measures of Tariff Rates Dispersion in Egypt: 1998 (%)

	Coef. of Variation	Coef. of Variation +	IP	IP+	NP1	NP1+	NP2	NP2+
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

Note: 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.
Source: Authors' calculations

Table 4: Summary Measures of Tariff Rates In Egypt: 1999 (%)

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

Source: Authors' Calculation

Table 5: Tariff Rates Height Summary Measures of the 14 Sectors (Set 3)**

Sector no.	Description	Tariff Interval Range	Avg. Applied Tariff	Weighted Avg. 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	Ofc.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**

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

Table 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	Ofc.Mach.& Telec. Equip.	79.18	39.10	0.00	0.00
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**

Source: Authors' calculations

Table 7: Tariff Structure in 1999: Distribution of Tariff Lines by Sector and According to Tariff Bands

Sector	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: Authors' calculations based on the 1999 Tariff List

Table 8: Comparison between Applied Tariffs and Bound Tariffs in 1999

Sector	Description	Ta	W. Ta	Tb	W. Tb	No.of lines<Tb	No.of lines <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-Mfg.	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	Ofc. 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**	

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

Table 9: Number and Percentage of Tariff Lines by Sector Restricted by Bans and Quality Control Requirements

Sector.	Description	Total Tariff Lines	Lines Perm. Banned	Lines Subject to QLTY. Control	% of Perm Bans	% under QLTY. 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	Ofc. 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)

Table 10: Weighted REER Indices 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	100.00	100.00	100.00
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

Source: Authors' calculations

Table 11: Egypt: Nominal, and Real Export-Weighted Foreign Exchange Rate Indices, 1990-98 (%)

Ratio/Year	1990	1991	1992	1993	1994	1995	1996	1997	1998
NER(LE/US$)	61.41	100	100.01	101.21	101.7	101.8	101.74	101.74	101.74
FC CPI/Eg.CPI	110.03	100	94.41	90.04	89.48	87.78	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

Note: FC denotes foreign countries, Eg is the Egyptian counterpart
Source: Authors' calculations

Table 12: 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: Authors' Calculations

Table 13: OLS Estimates of Export Categories' Demand Equations

	REERex		FGDPR		R²	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

Note: REEex = export-weighted REER, EXTM = Total Merchandise exports; EXPP = Primary Products exports (excl. fuel and cotton); EXSF = Semi-Finished exports; EXF = Finished exports; FGDPR = Foreign GDP in real terms

Table 14: OLS Estimates of Export Categories' Demand Equations after Correction for Autocorrelation

	REERex		FGDPR		R²	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

Note: REEex = export-weighted REER, EXTM = Total Merchandise exports; EXPP = Primary Products exports (excl. fuel and cotton); EXSF = Semi-Finished exports; EXF = Finished exports; FGDPR = Foreign GDP in real terms