

Egypt's Export Puzzle

Policy Viewpoint is intended to contribute to the discussion of ideas and policy options for enhancing economic development in Egypt. The series is based on research conducted by ECES. The content and recommendations are endorsed by the Center's Board of Directors.

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The Egyptian government is committed to export promotion. Senior government officials have been stating that, "Exporting is a matter of life and death for the Egyptian economy." And over the last ten years, this statement has been supported by sustained reform efforts to reduce the bias against exports through such measures as trade liberalization, the adoption of duty drawback/tax rebate and temporary admission schemes, and the simplification of customs procedures. Yet, the export record does not correspond to this commitment and reform effort. The trend, composition and destination of exports have not grown sufficiently to generate the foreign exchange needed to boost economic development. Clearly something is not working – either reform priorities are not well targeted, the measures taken are insufficient, or a mix of both. This *Policy Viewpoint* addresses the export puzzle in Egypt.

The novelty of this study is not in identifying the variables that impair Egyptian exports. Several studies have identified such variables, which include lack of exchange rate competitiveness, high levels of protection, excessive costs of transport and communication, and large transaction costs in dealing with customs and tax administrations. Rather, the novelty lies in the attempt to estimate the extent and origin of the disincentives to export, with a view to proposing a set of priority actions that correspond to the most important variables. The analysis is guided by the simple notion that producers favor selling in domestic markets because prices and cost structures make it more attractive to sell at home rather than abroad. Any measures to change their behavior will have to change the bottom line to make exporting more attractive. Measures that only affect profitability marginally are not likely to make a noticeable difference.

To build the case, the *Viewpoint* first reviews the export performance record over the past decade. Next, an attempt is made to explain that performance record by comparing the rates of return of two hypothetical producers in which one is an exporter and the other sells exclusively in domestic markets. The analysis moves on to compare the effects of Egypt's export incentive structure on profitability with those of other developing countries. On the basis of the above, the note simulates the impact of changing different variables on the profitability of Egyptian exporters in an attempt to identify reform priorities.

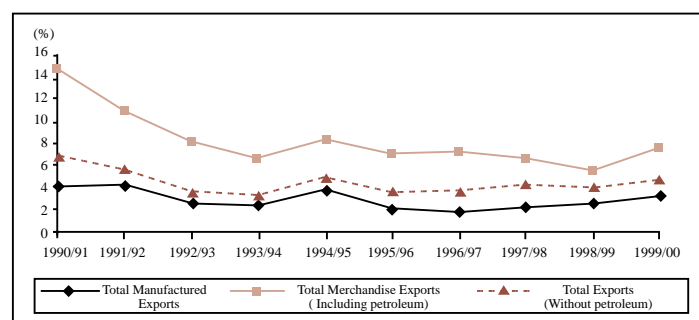
Export Performance

The export figures for the 1990s carry good and bad news. The good news is that exports increased in absolute terms, up from US\$ 4.2 billion in 1990/91 to US\$ 6.3 billion in 1999/00. Exports have also become more diversified in their composition and geographical destination. In terms of composition, the share of manufactured exports to total exports went up from 27 percent in 1990/91 to 45 percent in 1999/00, while the importance of traditional resource-based exports (such as crude oil, agriculture and mining products) declined from 40 percent in 1990/91 to 19 percent in 1997/98. With respect to geographical distribution, the share of the EU countries in total exports decreased from 35 percent in 1990/91 to 26 percent in 1999/00, while the share of the MENA countries and the US increased from 16 and 8 percent to 45 and 16 percent, respectively (Ministry of Economy and Foreign Trade, *Quarterly Economic Digest*, October-December 2000).

The bad news is that the share of merchandise exports to GDP decreased sharply from 14 percent in 1990/91 to around 7 percent in 1999/00 (Figure 1). Excluding oil exports, the figure goes down to 4.7 percent. The share of manufactured exports to GDP also fell from 4 percent in 1990/91 to 3.3 percent in 1999/00. Moreover, the basket of Egyptian exports did

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Figure 1. Share of exports to GDP in Egypt, 1990/91-1999/00



Source: Ministry of Economy and Foreign Trade, Quarterly Economic Digest, Oct.-Dec. 2000.

not reflect changes in world demand. The 2000 World Bank study, *Arab Republic of Egypt: Plan of Actions for Export Promotion*, points out that 32 percent of Egypt's exports were growing while world consumption was declining. Furthermore, nearly 17 percent of Egyptian exports were declining while world consumption of these commodities was increasing.

A comparison of the performance of Egyptian exports with that of other countries supports the conclusion that Egypt could do better. The figures in Table 1 indicate that while per capita export in Egypt (\$63/person) does exceed that of South Asia (\$40/person), it is much less than per capita export elsewhere in the world, including Sub-Saharan Africa (\$122/person). A similar point can be made with respect to the share of merchandise exports to GDP, the share of manufactured exports to total exports, and the share of high-tech exports to manufactured exports. As a result, Egyptian exports have lost their competitive position in the world market, as their share in world exports declined from 0.11 percent in 1990 to 0.09 percent in 1999 (IMF, *International Financial Statistics*, 2000).

Table 1. Export performance indicators, 1996-1999 (%)

Region	Average merchandise exports to GDP 96-99	Average manufactured exports to total merch. exports 96-99	Average high-tech exports to manufactured exports 98-99	Per capita exports (US\$) 96-99
East Asia & Pacific	28.5	77.5	29.5	266.7
Europe & Central Asia	24.1	55.3	10.0	531.4
Latin America & Carib.	13.9	47.8	14.0	562.7
Middle East & North Africa	23.9	19.0	1.5	466.4
South Asia	9.8	77.3	4.0	40.5
Sub-Saharan Africa	23.6	39.0	9.0	122.2
Egypt	4.9	39.0	0.0	63.3

Source: World Bank, *World Development Indicators*, several issues.

Why Are Egyptian Producers Not Exporting? A Simple Answer

Some analysts attribute the disappointing track record of Egyptian exports to the inability of local firms to compete due to outdated technology, management techniques and marketing strategies. They conclude that even if exporters were offered sufficient price incentives, they would not respond (which is the low elasticity of supply argument). The logical conclusion on the basis of this argument is that firms have to become more competitive before attention is turned to reducing the anti-export bias.

This view of the problem is partial at best. There is strong evidence that exports typically go up when governments reduce or eliminate the anti-export bias (e.g., Edward, Sebastian, *Trade and Industrial Policy Reform in Latin America*, NBER Working Paper Series, No. 4772, 1994). Firms do adjust to changes in incentives, once favorable incentives are put in place and rents from producing for local markets diminish. The question for Egypt is whether the trade liberalization of the 1990s and the adoption of the export duty drawback, tax rebate and temporary admission schemes have sufficiently reduced the anti-export bias. This section provides an estimation of this bias, based on the current incentive structure.

The methodology followed is simple. It is based on calculating the rates of return on equity (ROE) and return on assets (ROA) of two identical producers. Both are engaged in manufacturing and operate inland. The first produces fully for overseas markets; the second produces fully for the domestic market. The two producers have the same output, cost structure, and balance sheet. They operate under the same parameters, including corporate tax rates, borrowing rates and depreciation rates. They only differ in two respects. First, the exporter generates his/her revenue in the international market at world prices. He/she is assumed to obtain all intermediate inputs under the temporary admission scheme. As such, he/she does not pay any tariffs or sales tax on imported inputs, but incurs the cost of a letter of guarantee at a rate of 1.2 percent of the value of tariffs and sales taxes on these imports for a year (6 months for the production cycle and 6 months for settlement), as well as the cost of the cash held in the bank to cover the letter of guarantee.¹ In comparison, the producer for the local market is able to charge the international price, plus tariffs and surcharges on imports, subject to the price elasticity of local demand. (We simulate the results under three price elasticities of demand: -1, -0.9 and -1.1.) He/she is not exempted from tariffs or sales tax on imported intermediate inputs. The results of the simulation are presented in Table 2.

Table 2. Rates of return on investment of two identical producers under the current incentive regime (%)

	Exporter	Domestic Market Producer		
		Elasticity = -1	Elasticity = -1.1	Elasticity = -0.9
ROE	19.0	43.3	24.9	60.1
ROA	4.8	10.4	6.0	14.5

Source: Authors' calculations.

Under all scenarios of demand elasticities, the producer for the domestic market makes a higher ROE and ROA than the producer for overseas markets. The difference is greatest when the price elasticity of demand is less than one, reaching a ROE of 60.1 percent for the producer for the home market compared with 19.0 percent for the exporter. This difference diminishes when the consumers are responsive to price hikes (elasticity is larger than one, or specifically -1.1). But even then, the producer for the domestic markets makes a ROE of 24.9 percent compared to 19.0 percent for the exporter. These results indicate that the protection afforded to producers for the domestic market through tariffs more than offset the partial compensation offered to exporters under the temporary admission scheme by a substantial margin. The trade liberalization effort of the 1990s has yet to significantly reduce the bias against exports.

The above conclusions hold on average for all industries. At the level of specific industries, the results will vary depending, among other variables, on the relevant debt/equity structure, the share of imported intermediate inputs in total cost, the level of tariff and para-tariff rates on final products and imported inputs, and the specific demand elasticity. By way of illustration only, the above exercise has been carried out for the food processing and leather products sectors (Table 3). Although the ROE results for these industries vary in magnitude from the average results for the economy, the main conclusion remains: It is more profitable for Egyptian producers to sell at home rather than export.

Table 3. Rates of ROE of two identical producers in the food processing and leather industries (%)

	Exporter	Domestic Market Producer		
		Elasticity = -1	Elasticity = -1.1	Elasticity = -0.9
Food processing	19.0	34.0	20.5	47.6
Leather products	16.8	37.5	18.2	56.8

Source: Authors' calculations.

Why Are Egyptian Producers Not Exporting? Another Simple Answer

Another way of explaining the reasons for the sluggish growth of exports in Egypt is by comparing the impact on profitability of the incentive structure facing Egyptian exporters and their counterparts in developing countries. This approach has two main merits. It highlights the need for reforming national policies (e.g., the exchange rate, tariffs and surcharges on intermediate inputs, tax rebate and temporary admission schemes, the cost of capital, profit tax rate) and national institutions (e.g., customs administration, tax administration). In addition, it draws attention to the inefficiencies of domestically produced goods and services, especially of non-tradable goods, such as financial services, port services, local transport and communication.

To find out whether or not the incentive structure in Egypt favors Egyptian exporters over their competitors, we begin by examining a set of key variables for Egypt and 27 developing countries (Table 4).²

On the basis of this information, it is clear that Egyptian tariffs, surcharges and sales taxes on intermediate inputs and capital goods are higher than the average for this sample of countries. In addition, Egyptian exporters face higher interest rates on loans in local currency and higher profit tax rates. It is also probable that most Egyptian exporters face a modest overvaluation of the pound, if the unofficial market rate is taken as an indicator of the equilibrium exchange rate.

Table 4. Parameters affecting exporters in Egypt and other developing countries (%)

Parameters & Variables	Egypt	Developing Countries
<i>Exchange Rate (LE/\$)</i>	3.85*	
<i>Tariffs, surcharges and sales taxes</i>		
Tariff rate on intermediate inputs	21.0	12.5
Tariff rate on machinery & equipment	10.0	11.5
Surcharge on output	3.0	2.7
Surcharge on intermediate inputs	3.0	2.7
Sales tax on intermediate input	10.0	9.7
Sales tax on machinery & equipment	10.0	9.7
<i>Interest rate</i> (on short and medium term loans in local currency)	13.0	12.2
<i>Profit Taxes</i>	34.0	26.3

Note: * The unofficial market rate is LE4.05/\$, June 2001.

Sources: All variables are from the European Commission Website. <http://mkaccedb.eu.int/>, except for interest rates, which are taken from the International Monetary Fund, *IFS*, Vol. III, 2000.

Notably, this list does not include some of the cost items frequently cited by Egyptian exporters as excessive in comparison to other countries, such as customs and tax administration and the cost of port services, storage facilities and local transport. The omission of these variables is due to the lack of unbiased and consistent data for our sample of countries. Including them would have further enhanced the less than favorable treatment received by Egyptian exporters.

But even with the set of variables identified in Table 4, the results of the simulation indicate that the incentive structure in Egypt does not support exporters relative to their competitors (Table 5). These results are presented for exporters from Egypt and developing countries, with and without exemption from tariffs and sales tax on imported inputs. Where the Egyptian and developing country exporters benefit from the exemption, the Egyptian exporter only makes a ROE of 19.0 percent compared with 28.6 percent for the developing country exporter. When neither of them benefit from the exemption, the Egyptian exporter makes a modest 8.1 percent compared with 18.8 percent for the developing country exporter. The situation is much worse for the Egyptian exporter when only the exporters from competing developing countries receive the exemption. The single situation in which the Egyptian exporter essentially breaks even with the developing country exporter is when the Egyptian exporter benefits from the temporary admission scheme but not the developing country exporter.

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Table 5. ROE of Egyptian and developing country exporters, with and without exemption of tariffs and sales tax on imported inputs (%)

Exporters	With exemption	Without exemption
Egypt	19.0	8.1
Developing countries	28.6	18.8

Source: Authors' calculations.

Reform Priorities

The analysis so far suggests that Egyptian producers prefer to sell at home because high protection far outweighs the benefits from the temporary admission scheme. Compared with developing countries, the analysis also suggests that Egyptian exporters endure additional costs in securing imported inputs and capital, pay higher profit tax, and possibly forgo some revenue due to an overvaluation of the pound. For policy makers who are keen on tackling the policy variables with the greatest positive contribution to exporters, it is a question of where to start.

One way of answering this question is by calculating the impact of changing the policy variables by the same percentage (say, 10 percent) on profitability. The results of such calculations are reported in Table 6 below. Their interpretation is straightforward. A devaluation of the pound by 10 percent brings about the greatest improvement in the bottom line for Egyptian exporters, followed by a 10 percent reduction in tariffs on imports of final goods, then a 10 percent reduction in the profit tax rate. In contrast, a reduction of a similar percent of tariffs and sales tax on imported inputs and capital, or in interest rates on loans in domestic currency, or a reduction in the length of time of holding the letter of guarantee of the temporary admission scheme only brings about modest improvements.

These findings indicate that if there were three areas that deserve government attention the most, they would be the exchange rate,

Table 6. The effect of a 10 percent change in policy variables on the exporter's base ROE of 19 percent (%)

Policy variables	New ROE	Percentage change in ROE	Absolute change in ROE
Exchange rate (LE/\$)	22.94	20.71	3.94
Tariff on output*	40.13	-7.32	-3.17
Profit taxes	19.98	5.15	0.98
Tariffs on intermediate input	19.69	3.65	0.69
Interest rate (on short and medium term loans in local currency)	19.65	3.44	0.65
Sales tax on intermediate input	19.36	1.91	0.36
Letter of guarantee	19.09	0.50	0.09
Sales tax on capital goods	19.04	0.20	0.04
Tariffs on capital goods	19.04	0.20	0.04

Note: * Calculated for the import-substituting firm, starting from a ROE of 43.3 percent.

Source: Authors' calculation.

import tariffs on finished products and profit tax. Note that a reduction in the tariff rates on imports of finished products does not affect the exporter directly. It does, however, reduce the profitability of import substituting firms, thereby making it more attractive for them to export. Furthermore, all other reforms would affect exporting and import substituting firms alike, with the effect of enhancing their competitiveness in world markets.

Concluding Remarks

Increasing exports has been on top of the government agenda for years. Substantial effort has also been made to reduce the anti-export bias and increase the competitiveness of Egyptian firms through a host of policy and institutional reforms. The present analysis suggests, however, that reforms to date have not changed the incentive structure sufficiently to make it attractive for Egyptian firms to export. To reverse this trend, bold reforms are needed to:

- Change the incentive structure through further liberalization of the trade regime and maintaining a competitive real exchange rate. Pursuing trade liberalization through bilateral agreements is not necessarily the best way forward. Similarly, partial measures to reduce the bias against exports by, for example, refining the tax rebate or temporary admission schemes are inadequate and may not bring about tangible results.
- Improve the competitiveness of all Egyptian producers, exporters or not, through the reduction of corporate tax rate, deregulation, corporatization, and in some cases privatization of key service providers (e.g., ports, financial sector), as well as reforms of the relevant institutions (e.g., customs administration, tax administration, etc.)

These reforms are complex and require dedicated effort. But they are the surest way to boost exports. Experience in Egypt and elsewhere shows that piecemeal reforms, while useful, do not bring about tangible results. Postponing reforms until firms modernize simply translates into a long waiting period. Firms only respond to competitive pressure.

¹ Banks require varying cash coverage, depending on the exporter's track record. We assume an average coverage requirement of 50 percent of tariffs and sales taxes and 13 percent borrowing rate.

² The list of countries includes India, Bangladesh, and China in Asia; Morocco and Israel, in the Middle East; Mexico, Brazil and Argentina in Latin America; and Poland, Hungary, and Bulgaria in Eastern Europe.

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For more information about the Center and its publications contact:

*The Egyptian Center for Economic Studies
World Trade Center - 1191 Corniche El Nil,
14 th Floor - Cairo 11221 - Egypt.*

Tel.: (202) 578 1202

Fax.: (202) 578 1205

E-mail: eces@eces.org.eg

URL: www.eces.org.eg