INDUSTRIAL SECTOR
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EXECUTIVE SUMMARY ON COMPARATIVE ADVANTAGE

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The Egyptian Manufacturing Sector is likely to experience very substantial investment and expansion over the next few years.

Such expansion is certainly essential both for raising general levels of income and for insuring provision of employment for Egypt's growing labor force.

But in pursuing this expansion, several elements must be borne in mind for effective use of limited investment resources. Certainly the current planning practice of assuming investment must be directed to closing all gaps between domestic production and consumption is woefully inadequate. High priority must be given to job creation through investment, particularly recognizing the skill composition of the Egyptian economy. But these jobs must be productive ones or the economy will stagnate.

In turn this brings us to the difficult issue as to what is meant by "productive." Essentially, the Egyptian economy should be directed to some healthy balance of import substitution and export promotion. Import substituion is the replacement of current imports by domestic production with a view to both employment creation and saving on foreign exchange. Export promotion is the development of export products and markets with the same aim in mind. Both are worth pursuing both because they expand employment and hence incomes, and because they save or earn foreign exchange. Thus "productive" jobs should be defined as ones which both keep the costs of job creation down and are effective in replacing current imports or furthering exports.

The system of prices existing within the domestic economy of Egypt is not a good guide line to such notions of "productivity" This is true of commodity prices which do not reflect the amount of imports which would be displaced by domestic production or of foreign exchange earned through exports, because of the pervasive system of price controls, subsidies, import duties, and taxes. But in addition, the price or wage of labor does not really reflect its true cost to society, for at present wages in manufacturing there are several applicants for each job and not all find jobs.

It is consequently important to direct future investment to productive job creation where productivity is defined in terms of real social prices (shadow prices) which reflect relative scarcities of goods, labor and capital, rather than in financial terms defined by prevailing prices.

In a companion paper, we have examined some of the potential areas for investment in Egypt in these terms. That paper ---- "Comparative Advantage in Egyptian Manufacturing" --- draws both on results from other studies and undertakes new calculations. Both have been severely restricted by limited access to existing data. If such data were made available, far more reliable estimates could be undertaken, but meanwhile the results discussed here, although of varying quality, seem to be our main source of guidelines for future investments.

Before proceeding to discussion of the implications of those calculations on a sector by sector basis, I may however note two additional points. First, our evidence applies only to existing industries in Egypt. Socially attractive investments may exist in fields where Egypt is not now producing (toys, calculators, etc.), but to examine this would require detailed information on products now produced --- information not made available to this study. In addition, new investments even in existing lines but adopting different technologies or practices from those in existence may prove socially profitable though current practices do not appear so.

Second, it is important for Egypt to consider investment in a diversified range of industries. Why not invest only in that one sector which has the highest social returns? At least three reasons may be cited:

(a) However good one's information, one can never be quite sure this single industry is indeed best.

(b) Since world markets, technology and other factors may shift in unpredictable ways, it is worth spreading the risks by developing a range of industries.

(c) Expansion of one sector alone may incur diminishing returns in that sector, for example as some material input comes increasingly into short supply.

With this in mind the next section examines each sector in turn. The results indicate that there are existing sectors in the Egyptian economy which warrant further investment when viewed in appropriate prices, even though the reported financial rate of return may be low-- such as the case of cement. On the other hand, a product such as aluminium is so expensive to produce when viewed in appropriate prices as to certainly not warrant expansion, even though it now successfuly exports.

Individual recommendations cannot be made with great confidence owing both to the very restricted access to data and to the inherent uncertainties in such calculations, but our best approximations may be divided into three main classess --- recommended, marginal and not recommended.

I. Areas where further investment seems warranted.

i) Food Industry

- food flavors
- vegetable oils
- jams and marmelades
- biscuits
- confectionary
- starch

ii) Soft drinks / sodas

iii) Textiles

- rayon filament
- nylon carpets

iv) Leather products (especially bags)

v) Cotton underwear

vi) Cosmetics

vii) Cement

viii) Bicycles

2. Areas where further investment probably is worthwhile though some may be marginal cases or uncertain.

i) Food industry

sugar
preserved beans
juices and sherbets

ii) Cigarettes

iii) Cotton textiles, but only if based on imported short staple cotton.

iv) Acrylic and polyester fibres.

v) Final wear in general

vi) Wooden furniture

vii) Paper production

viii) Chemicals

phosphate fertilizer
perfumed oils
PVC
synthetic leather
polymers and paints

ix) Nonmetallic products

tiles
cement bricks
sanitary ware

x) Engineering products

televisions
refrigerators
washing machines
air conditioning wall units
sewing machines
enamel ware
batteries

oil, fuel and air filters
electric cables
automatic bakery lines

xi) Rubber tires

3. Areas not recommended for expansion

i) Food Industry

tomato products
frozen products
canned fish

ii) Artificial fibres

nylon filament
rayon staple

iii) Nitrogen fertilizer
iv) Iron and steel plants at least of the Helwan type
v) Aluminium
vi) Steel structures for construction
vii) Automobiles

As in studies of many other countries, the advantageous group of products is generally based either on local materials (vegetable oils, confectionary, leather, cement) or is labor intensive (bicycles).

Moreover, again in line with studies of other countries, we find the least advantageous most protected by the price structure or subsidised (iron and steel, automobiles) and the most advantageous discouraged through price controls on outputs and taxes on inputs (cement, leather). In turn, the protection of less advantageous sectors can make it very difficult for industries using their products as inputs to compete. Such is the case with the protection of domestic steel harming the engineering sector, and possibly the inefficiency and low quality of output in cotton textiles in retarding the final wear sector.