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INDUSTRY AND DEVELOPMENT

No. 32



**UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION**

Vienna, 1993

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Industry and Development attempts to provide a link between practitioners and theorists working on economic and related aspects of industrialization. The focus of the journal is on applied economics, particularly in areas emphasized in the Lima Declaration and Plan of Action on Industrial Development and Co-operation.

The journal is published as an integral part of the work programme of the Industrial Policy and Perspectives Division of the United Nations Industrial Development Organization. It is prepared under the general guidance of a Supervisory Panel, composed of staff members from the Division, with the Head of the Global Issues and Policy Analysis Branch as its Chairman. Responsibility for the detailed supervision of a specific issue is rotated among the members of the Panel. The member responsible for this issue was J. Cody.

The Supervisory Panel of *Industry and Development* welcomes readers' opinions and comments and will be glad to consider for possible publication articles relevant to the aims and scope of the journal (see "information for contributors").

ID/SER.M/32

UNIDO PUBLICATION
Sales No.: E.93.III.E.1
ISBN 92-1-106280-2
ISSN 0250-7935

Explanatory notes

References to dollars (\$) are to United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million.

In tables:

Totals may not add precisely because of rounding.

A hyphen indicates that the item is not applicable.

An em dash (--) indicates that the amount is nil or negligible.

Two dots (..) indicate that data are not available or are not separately listed.

The following abbreviations are used in this publication:

EIB	Emirates Industrial Bank
GDP	gross domestic product
IBK	Industrial Bank of Kuwait
IMF	International Monetary Fund
MVA	manufacturing value added
ODB	Oman Development Bank

Government planning in a small oil economy: factors limiting the industrial diversification efforts of Qatar

*Robert E. Looney**

The oil reserves of Qatar are small compared to those of some of its neighbouring States in the Persian Gulf. The country has estimated crude oil reserves of 3,200 million barrels, or less than 1 per cent of the world total. This is equivalent to about 30 years of output at current levels, and represents a fraction of reserves in the Persian Gulf region. On the other hand, the country does have significant gas reserves, estimated at 4,400 million cubic metres, or more than 4 per cent of the world total. Only the United Arab Emirates, the former Union of Soviet Socialist Republics (USSR), the Islamic Republic of Iran and Abu Dhabi have larger gas reserves [1].

Because of its limited natural wealth, Qatar was the first of the Arab States in the Persian Gulf region to commit itself firmly to industrial diversification. To this end, in 1972 the Government of Qatar commissioned a detailed study of the country's development opportunities. The result was the creation in 1973 of a national plan providing development guidelines for the next two decades.

The plan emphasized the need for acceleration in housing and paid special attention to the development of the capital city of Doha. It also encouraged the development of light and heavy industries and expansion of the fishing industry. The plan concentrated on infrastructure and diversification of the economy.

The purpose of this paper is to assess industrialization efforts of Qatar to date. In doing so, questions such as the following will be raised: has the country made significant progress towards industrial diversification and in what sense; how has the industrial performance of Qatar compared with that of neighbouring Arab economies in the Persian Gulf region; what particular problems will hinder industrial diversification; and what are the prospects for the future?

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A. Recent economic trends

Crude oil accounted for just under 30 per cent of the gross domestic product (GDP) of Qatar in 1987. Between 1983 and 1987, it accounted for 91-94 per cent of export earnings. Since 1981, Qatar has, with the other States of the Organization of Petroleum Exporting Countries (OPEC), suffered from the impact of the world oil glut. Between 1983 and 1987, the oil sector declined by 15 per cent, with the non-oil sectors increasing by only 0.3 per cent of the period as a whole.

The manufacturing sector in Qatar accounted for 5 per cent of total GDP and 11 per cent of non-oil GDP 1980. There was a steady increase in manufacturing output in the 1980s. By 1987, manufacturing thus accounted for 9.9 per cent of total GDP, or 14.3 per cent of non-oil GDP. It is noteworthy that this increase in the share of manufacturing in GDP is overstated as a result of the decline of the oil sector. While the increase in the share of manufacturing in non-oil GDP is more suggestive of the success achieved by the country in industrial diversification, even here an inflated figure is obtained because of various subsidies, including low utility rates and low rents received by industry.

B. Industrial efficiency

One aim of industrial planning has been to encourage the establishment of industries that use the output of the heavy industries of Qatar as intermediate products. Industries producing tiles, precast concrete items, fine lime and plastic products fit this category rather well. Still, the combined demand for cement, steel bars, lime, and polyethylene is only a fraction of the total output of the industries concerned.

As might be expected, these four heavy manufacturing industries accounted for the bulk of the gross value of output and value added. Thus, the gross value of output in the chemical and plastic products, non-metallic mineral products, and basic metal industries amounted to 1,905.8 million Qatari riyals (QR)* in 1983. That was nearly 72 per cent of the total gross value of output in manufacturing industry. The combined value added in these three industry categories also amounted to just under 78 per cent of total value added in the manufacturing sector in 1983.

In terms of value added, UNIDO [2] data provide another picture of the dual economy of Qatar, as described below:

*Based on the following exchange rate between the United States dollar (\$) and the Qatari riyal: US\$ = QR 3.65.

(a) The share of value added in gross output is highest in the manufacture of fabricated metal products (106.7 per cent), followed by jewellery (87.6 per cent), and fertilizers and pesticides (84.7 per cent);

(b) The high share of value added in the gross output of most of the heavy industries partly reflects the technical progress that has been injected into the productive process in this sector;

(c) The somewhat low share of value added in the gross output (23.3 per cent) of the manufacture of food, beverages, and tobacco is a reflection of the high cost of imported raw materials and services in this sector. The country is almost totally dependent on imports for manufactured food items.

The Central Statistical Organization, in its industrial survey of 1983 [3], attempted to measure productivity levels in manufacturing industries. That survey produced several interesting patterns:

(a) In 1983, 15,558 persons worked in manufacturing industries, of which 4,058 worked in non-metallic mineral products and 2,557 in chemical and petroleum industries;

(b) Value added per employee was the highest in petroleum refineries (QR 480,000), followed by industrial chemicals other than fertilizers (QR 360,000), and fertilizers and pesticides (QR 316,000);

(c) Labour productivity was lowest in the manufacture of soap, cleaning preparations and perfumes (QR 10,000);

(d) Many industries - slaughtering, preparing and preserving meat, and grain mill products - operate under economies of scale and thus have relatively high working costs.

As Whittingham [4] has noted, a key problem for Qatar is that a handful of small export-oriented factories, of the kind found in any oil-producing country, will never be competitive with those of larger production facilities. Also, the domestic market of Qatar has a minimal need for heavy industrial products. This is another aspect of the country's dualistic industrial structure. The extent to which problems exist is clearly an empirical question. Yet it is one that should be addressed before any conclusions can be drawn about the future development of the manufacturing sector.

C. Comparative analysis

In an effort to compare the development pattern of Qatar with that of other Arab countries, especially neighbouring oil economies, a factor analysis was performed. Factor analysis was chosen as the appropriate technique since it can identify a relatively small number of elements

representing relationships among sets of many interrelated variables. For example, concepts such as sectoral diversification may be expressed as a linear combination of factors that represent different aspects of this phenomenon. In the analysis below, these measures include the sectoral share in non-oil GDP and absorption (total expenditures). Each measure represents a different aspect of diversification. Combined into a single dimension, they provide a more complete measure of diversification than does any single measure alone [5].

D. Methodology

Factor analyses is also appropriate for dealing with the problem at hand since it can compute a relative ranking index without resorting to an arbitrary weighing system [6]. The technique is also very amenable (see annex) to the most recent database available, that provided by the Arab Monetary Fund. This organization, representing the Arab countries of North Africa and Western Asia, recently compiled and refined the national income statistics of its member countries. Because of its larger sample size, this database now allows for more precise estimates of output and structural change over time than was possible from individual country data compiled by standard sources such as the International Monetary Fund [7].

Factor analysis created an index representing each of the four main areas of sectoral output: manufacturing, distribution, services and construction. Each sectoral index contains two measures of output: share of non-oil gross domestic product; and absorption (total consumption and investment expenditures). Analysis focused on three years: 1974, at the beginning of the oil boom; 1981, at the end of the oil boom; and 1985, the last year for which the Arab Monetary Fund [8] provides data. The data set covers the 20 member countries of the Arab Monetary Fund in 1985: Algeria, Bahrain, Democratic Yemen, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.

The factor analysis included all 20 countries. However, to save space, tables 1, 2 and 3 below include only the results for Qatar and (as a frame of reference) the other oil producers in the region: Bahrain, Kuwait, Libyan Arab Jamahiriya, Oman, Saudi Arabia and United Arab Emirates.

The factor analysis identified four main sectors: manufacturing, construction, distribution and services. These are the "sectoral dimensions" presented in part (a) of the tables. The sectoral shares of non-oil gross domestic product and absorption (defined as consumption and investment expenditures) each represent one of the four main sectors.

Table 1. Qatar and the oil producers: factors affecting relative industrial performance - linkage and shift effects, 1975

Country	Factor 1: manufacturing	Factor 2: construction	Factor 3: distribution	Factor 4: services
(a) Sectoral dimension (factor scores)				
Qatar	0.27	1.82	1.84	0.13
United Arab Emirates	-1.15	2.00	1.88	-0.90
Bahrain	2.74	0.35	0.91	-0.01
Saudi Arabia	0.90	1.06	-1.00	0.65
Oman	-1.53	1.10	-0.21	0.59
Kuwait	0.05	-0.83	-0.50	2.08
Libyan Arab Jamahiriya	-0.73	-0.98	-0.60	1.35
(b) Impact of oil (factor scores)				
Qatar	0.18(=)	1.79(=)	1.90(=)	0.14(+)
United Arab Emirates	-1.23(=)	1.66(-)	1.90(=)	-1.00(=)
Bahrain	2.69(=)	-0.38(=)	0.92(=)	0.06(=)
Saudi Arabia	0.98(=)	1.81(+)	-1.09(=)	0.70(=)
Oman	-1.56(=)	1.03(=)	-0.20(=)	0.50(=)
Kuwait	0.21(+)	0.24(+)	-0.90(-)	2.22(=)
Libyan Arab Jamahiriya	-0.83(=)	0.57(-)	-0.40(+)	1.20(-)
(c) Impact of domestic linkages (factor scores)				
Qatar	0.43(+)	1.86(=)	1.64(-)	0.71(+)
United Arab Emirates	-1.33(-)	1.83(-)	1.99(+)	0.14(+)
Bahrain	2.51(-)	-0.31(=)	0.85(=)	0.94(+)
Saudi Arabia	0.97(=)	1.22(+)	-0.99(=)	-0.50(-)
Oman	-1.32(+)	1.14(=)	-0.04(+)	-1.49(-)
Kuwait	0.60(+)	-0.25(+)	-0.43(=)	-2.29(-)
Libyan Arab Jamahiriya	-0.32(+)	0.98(=)	-0.58(=)	0.98(-)
(d) Impact of Dutch-disease effects (factor scores)				
Qatar	0.19(-)	1.73(=)	1.25(-)	0.18(=)
United Arab Emirates	-1.01(-)	2.25(+)	1.30(-)	-0.01(-)
Bahrain	2.73(-)	0.02(+)	0.65(-)	-0.17(-)
Saudi Arabia	1.04(+)	1.70(+)	-1.42(-)	0.36(-)
Oman	-1.71(-)	0.48(-)	0.41(+)	0.89(+)
Kuwait	0.07(+)	0.90(+)	-0.04(+)	1.93(-)
Libyan Arab Jamahiriya	-0.96(-)	0.34(-)	0.07(+)	1.64(+)

Note: See annex for a description of the factor model and its use in generating factor scores. Figures in parentheses depict the direction of movement in ranking relative to sectoral dimension factor scores associated with each structural phenomenon: the impact of oil revenues, the impact of domestic linkage, and the impact of Dutch-disease factors. The signs (+ and -) depict the direction of sectoral movement associated with each impact. For brevity, only the oil country results are reported here.

Table 2. Qatar and the oil producers: factors affecting relative industrial performance - linkage and shift effects, 1981

<i>Country</i>	<i>Factor 1: manufacturing</i>	<i>Factor 2: construction</i>	<i>Factor 3: distribution</i>	<i>Factor 4: services</i>
(a) Sectoral dimension (factor scores)				
Qatar	0.50	0.37	0.89	1.64
United Arab Emirates	0.59	1.22	1.26	-0.58
Bahrain	2.32	-0.31	2.26	0.72
Saudi Arabia	0.24	2.07	-0.97	0.21
Oman	-1.67	0.24	1.34	0.36
Kuwait	-0.02	-0.33	0.56	1.36
Libyan Arab Jamahiriya	-0.22	1.54	-0.88	0.54
(b) Impact of oil (factor scores)				
Qatar	0.12(-)	0.92(+)	1.26(+)	1.99(+)
United Arab Emirates	0.45(-)	1.32(+)	1.30(=)	-0.29(+)
Bahrain	2.33(=)	-0.38(=)	1.97(-)	0.51(-)
Saudi Arabia	0.06(-)	2.17(+)	-0.66(+)	0.46(+)
Oman	-1.85(-)	0.57(+)	1.45(+)	0.64(+)
Kuwait	0.31(-)	0.17(+)	0.87(+)	1.64(+)
Libyan Arab Jamahiriya	-1.11(+)	1.28(-)	-0.91(=)	0.33(-)
(c) Impact of domestic linkages (factor scores)				
Qatar	0.44(=)	0.47(+)	1.05(+)	1.69(+)
United Arab Emirates	0.47(+)	1.24(=)	1.19(=)	-0.43(-)
Bahrain	2.41(=)	-0.54(-)	2.22(=)	0.55(-)
Saudi Arabia	0.15(+)	1.98(=)	-0.85(=)	0.29(=)
Oman	-1.75(+)	0.54(+)	1.32(=)	0.58(+)
Kuwait	-0.26(+)	0.11(+)	0.65(=)	1.65(+)
Libyan Arab Jamahiriya	-1.21(-)	1.47(=)	-0.84(=)	0.55(=)
(d) Impact of Dutch-disease effects (factor scores)				
Qatar	0.22(-)	0.24(-)	0.85(=)	1.52(-)
United Arab Emirates	0.87(+)	1.18(=)	1.15(+)	-0.42(+)
Bahrain	1.78(-)	-0.44(-)	2.34(=)	0.49(-)
Saudi Arabia	-0.12(-)	1.85(-)	-0.96(=)	0.03(-)
Oman	-1.37(+)	0.45(+)	1.26(=)	0.46(+)
Kuwait	-0.44(-)	-0.23(+)	0.49(=)	1.52(+)
Libyan Arab Jamahiriya	-1.00(+)	1.62(=)	-0.86(=)	0.56(=)

Note: See note to table 1.

Table 3. Qatar and the oil producers: factors affecting relative industrial performance - linkage and shift effects, 1985

Country	Factor 1: manufacturing	Factor 2: construction	Factor 3: distribution	Factor 4: services
<i>(a) Sectoral dimension (factor scores)</i>				
Qatar	0.79	0.29	0.16	2.75
United Arab Emirates	1.37	1.23	1.34	-0.02
Bahrain	0.86	0.40	1.96	0.59
Saudi Arabia	-0.16	1.60	-0.78	0.57
Oman	-1.53	0.39	1.11	0.23
Kuwait	-0.42	-0.87	-0.22	1.00
Libyan Arab Jamahiriya	-0.94	1.53	-0.83	1.04
<i>(b) Impact of oil (factor scores)</i>				
Qatar	1.03(+)	0.20(=)	-0.09(-)	2.36(-)
United Arab Emirates	0.88(-)	1.39(+)	1.63(+)	0.77(+)
Bahrain	1.02(+)	0.30(=)	1.63(+)	0.12(-)
Saudi Arabia	-0.15(=)	1.53(=)	-0.75(=)	0.59(=)
Oman	-1.72(-)	0.50(+)	1.37(+)	1.01(+)
Kuwait	-0.62(-)	0.84(=)	-0.01(+)	1.49(+)
Libyan Arab Jamahiriya	-0.77(+)	1.47(=)	-0.85(=)	0.98(=)
<i>(c) Impact of domestic linkages (factor scores)</i>				
Qatar	0.51(-)	0.33(=)	-0.12(-)	2.51(-)
United Arab Emirates	1.35(=)	1.33(+)	1.54(+)	0.34(+)
Bahrain	0.80(=)	0.37(=)	1.70(-)	0.37(-)
Saudi Arabia	0.02(+)	1.53(=)	-0.57(+)	0.67(+)
Oman	-1.52(=)	0.48(+)	1.44(+)	0.61(+)
Kuwait	-0.14(+)	-0.82(+)	0.24(+)	1.33(+)
Libyan Arab Jamahiriya	-1.04(-)	1.51(=)	-0.80(=)	1.05(=)
<i>(d) Impact of Dutch-disease effects (factor scores)</i>				
Qatar	0.87(=)	0.48(+)	0.06(-)	2.91(+)
United Arab Emirates	1.25(-)	1.23(=)	1.24(-)	0.02(=)
Bahrain	0.88(=)	0.44(=)	1.89(=)	0.62(=)
Saudi Arabia	-0.35(-)	1.56(=)	-0.85(=)	0.54(=)
Oman	-1.58(=)	0.30(=)	1.14(=)	0.14(-)
Kuwait	-0.70(-)	-0.97(-)	-0.26(=)	0.84(-)
Libyan Arab Jamahiriya	-0.88(-)	1.48(=)	-0.75(=)	1.02(=)

Note: See note to table 1.

The resulting factor scores for each sector (again the sectoral dimension part of tables 1, 2 and 3) therefore represent the relative ranking (in terms of the development of each sector) of each of the 20 Arab countries. As noted above, for brevity the presentation includes only the factor scores of Qatar and the other regional oil producers.

In analysing the factor scores it is noteworthy that they have a mean of zero. In other words, the country with the highest positive factor score for a particular sector possesses the largest share (relative to the other 19 sample countries) of that sector in its economy. Similarly, the country with the lowest (negative) factor score has the smallest share of that sector in its economy. The remainder of the countries lie in between.

An interesting extension of factor analysis involves the determination of the relative extent to which developments in the rest of an economy affect (positive or negatively) national industrial diversification. Caves [9] notes the mechanism by which exports could act as an "engine of growth" (or leading sector). In the classic situation of staples, exports contribute to economic growth directly (through direct contributions to GDP), and indirectly through the medium of spread (or carry-over) effects.

As Metwally and Tamaschke [10] show, this indirect contribution to growth embraces Hirschman-type linkages. It is also a sequence of multiplier-accelerator mechanisms, by which increases in non-oil GDP augment demand for sectoral outputs (manufacturing, services and distribution). Theoretically, indirect contributions (or spread effects) can continue to accrue long after some export stimulus has occurred. The impact of an export stimulus on the economy has many determinants, such as technology and the propensity to import.

Obviously, neither the timing pattern exhibited by, nor the relative sizes of, direct and indirect contributions of exports to growth need to be fixed. They could conceivably vary between subperiods, especially over long periods of economic development. If the country exploits the investment opportunities generated by the growth of the export sector, the model predicts that economic growth will be a process of diversification about an export base.

For policy purposes, it is of some interest to identify the factors responsible for these movements. Were improvements in industrial diversification largely the response to spread effects - increases in industrial demand created by an expanding non-oil sector of the economy? These first two effects are straightforward: Mikesell [11] documents them in several case studies of primary product exporters.

A third effect is the one related to oil-financed government expenditures, the so-called "Dutch disease" effect [12]. This phenomenon stems from the overvaluation of the domestic exchange rate following an oil revenue boom. Here, the increase in domestic inflation, arising from stepped-up governmental expenditures, concentrates in those sectors of the economy that do not face foreign competition.

Because of the presence of foreign substitutes for most manufactured goods produced in Qatar, economic theory would predict a lower relative rate of price increase in the country's industrial sectors. Similarly, the resulting fall in the relative profitability of manufacturing (cheaper imports and price-cost squeeze) may cause a shift in resources to activities and products not traded in international markets.

In Qatar, the resulting suppression of the industrial sector should depend in large part on the composition of industry, that is, the relative amounts of internationally traded and non-traded goods produced and the extent to which tariffs protect domestic producers of traded goods from foreign competition. *Ceteris paribus*, the effect would be expected to occur in Qatar because of the dominance of the oil sector, and because the country is largely open to world market forces and foreign competition. In addition, the Dutch disease effect occurs in two neighbouring countries, Kuwait ([13] and [14]) and Saudi Arabia ([12], [15] and [16]).

More specifically, it appears that, at least for Saudi Arabia and Kuwait, oil revenues work somewhat at cross purposes. On the expenditure side, oil revenues provide both effective demand and available credit, factors that would not otherwise be present. On the other hand, the competitive effects associated with exchange appreciation offset any cost-reducing effects arising from lower-cost imports of capital, intermediate goods and labour. Clearly Governments burdened with an overvalued real exchange rate will find it increasingly difficult to attain diversification through expansion of the traded goods sector.

E. Operational procedures

The following methodology (see annex) was used to measure the relative extent of the above-mentioned effects in Qatar:

(a) The factor analysis employed, on a case-by-case basis, proxies for each of the three linkage effects. As noted earlier, three dates were relevant here: 1975 - incorporating the initial effects of the oil price shocks; 1981 - the end of the oil boom; and 1985 - the last year for which comparable data were available;

(b) The first sets of factor analysis for each year were the sectoral dimension scores noted above. Each sectoral variable occurred twice, its share of non-oil GDP and as its share of absorption (consumption plus investment expenditures);

(c) In the second set of four factor exercises, the sectoral linkage effects associated with the development of the oil sector were examined. Here the oil sector appears as a share of non-oil GDP and a share of absorption. The impact of the oil sector was measured by its correlation

coefficients in each of the four sectors (for brevity, the tables present only the resulting factor scores);

(d) Generalized linkage effects arose in the third set of factor exercises, with sector correlations for non-oil GDP measuring these linkages. Non-oil GDP occurred in the analysis as a share of absorption and total GDP. As with oil, the extent of these linkage effects depended on the correlation of non-oil GDP variables with each of the four sectors;

(e) Finally, the Dutch disease, or sectoral shift factors, were introduced with the four sectoral variables. The shift factors are reflected in the change in inflation (from 1974 to the year examined) and in the appreciation of the real exchange rate (again from 1974 to the year examined). The assumption made is that inflationary periods will increase the profitability of non-tradables and reduce that of tradables, with manufacturing considered an internationally tradable product. The same was true for appreciation of the real exchange rate. As with the previous two linkage effects, shift effects were measured by the correlation of non-oil GDP variables with each of the four factors;

(f) The factor scores were computed for each of the oil-producing countries (the Libyan Arab Jamahiriya was added for the basis of comparison) in each of the four exercises. The changes in factor scores (indicated in parentheses in tables 1, 2 and 3) depict linkage and shift effects associated with each of the three effects under examination. Specifically, each of the structural variables - oil domestic linkages and the Dutch disease - will load primarily on one or more of the sectoral dimensions (factors). A country with a high degree of attainment or development of that structural variable will have a proportionately large change in its factor score. Using these changes (relative to the base or sectoral dimension), it is possible to assess the differential impact by country and sector (especially manufacturing) produced by each structural condition.

F. Results

Based on the change in factor scores (tables 1, 2 and 3) associated with each structural condition, several interesting patterns have developed over time. Initially, 1975 (see table 1) saw the following developments:

(a) The oil sector had not had time to make much of an impact on Qatar and the other six oil producers in the region. As anticipated, this impact was generally positive. The negative effects (as evidenced by the relative decline in factor scores from the base sectoral dimension with the inclusion of oil) for the United Arab Emirates and the Libyan Arab Jamahiriya were most likely the result of the simple fact that these countries began their construction boom shortly after the others and, as

a result, had a relative - but not absolute - decline in construction activity;

(b) At the beginning of the period under consideration (table 1), and before its heavy industries existed, the manufacturing sector appeared integrated with the non-oil sectors of the economy. This linkage was positive in the sense of demand linkages with non-oil GDP; factor scores (over the sectoral dimension) increased for Qatar with the inclusion of domestic linkages. At the same time, manufacturing in Qatar suffered through the negative effects associated with the Dutch disease (as reflected in the decline in factor scores from 0.27 to 0.19). In essence, Dutch disease effects were reducing the manufacturing output of Qatar below that anticipated from the benchmark (sectoral dimension) results.

By the end of the oil boom (1981), the situation was as follows:

(a) In Qatar, as well as most of the other oil countries, the oil sector continued to dominate resource allocation. Most likely, this reflected the fact that direct government expenditure of oil revenues had gone to expand government services and construction. The expansion of these sectors, with distributional activities, drew resources that might otherwise have gone to industrial activities;

(b) In terms of the creation of domestic linkages, Qatar was still not experiencing any positive effects, in contrast to the United Arab Emirates, Saudi Arabia, Oman and Kuwait. Each of these countries saw their industrial activities increase as a result of the growth of their non-oil economies;

(c) The manufacturing sector in Qatar was still feeling some effects of the Dutch disease. This apparently resulted in a shift of resources to other activities. These shifts were not nearly as great as those experienced by Saudi Arabia and Kuwait.

Finally, by 1985 the following conditions had emerged:

(a) Manufacturing in Qatar was experiencing some positive linkages with the oil sector, which were still offset by negative linkages with the non-oil sector of the economy. In this regard, the Libyan Arab Jamahiriya was the only other country experiencing similar effects;

(b) Perhaps because of relatively prudent monetary and fiscal policies, industrial output in Qatar was no longer affected by Dutch disease effects. Again, this was in sharp contrast to the situations in Kuwait and Saudi Arabia.

The findings presented above are consistent with earlier ([17]-[23]) studies of developments in oil-based economies, whose experiences have

generally differed from those of the staple-based economies. It appears that in oil economies such as that of Qatar, the general absence (until recently) of significant spread effects has made the industrialization process much less predictable than in countries experiencing classic patterns of stable development ([15], and [24] and [25]). In this regard, the large role played by the Government of Qatar has resulted in the predominance of discretionary elements over market prices as the chief factor responsible for the allocation of resources. A similar set of public policies has created a comparable situation in Saudi Arabia ([12], [16], [26-29]) and Kuwait ([13] and [14]).

In theory, Qatar should be a major beneficiary from the establishment of the Gulf Cooperation Council. In fact, a major factor behind the establishment of the Council in 1981 was the desire to create a regional marketplace to relieve the almost total dependence on oil revenues and the massive cost of imports to meet the needs of the fast-growing population, whether native or immigrant, in the Persian Gulf region. Unfortunately, the import statistics of Qatar [1] show that, in the first five years of the Council's existence, little changed. The following points are noteworthy:

- (a) Slightly over 50 per cent of the imports of Qatar still came from Japan, United Kingdom, Germany, Federal Republic of and United Arab Emirates;
- (b) Imports from the neighbouring Arab States in the Persian Gulf region amounted to only 5 per cent of the country's foreign supplies;
- (c) More than QR 2,000 million of a total import bill of QR 3,046 million went to machinery, transport and semi-manufactured and manufactured goods.

With the uncertainty surrounding the Iraqi invasion of Kuwait (August 1990) reducing private foreign investment in the region, the era of the rapid transformation and growth of Qatar's manufacturing industry seems to be over or at least in decline. The heavy industries are now in place and must, more than ever, prove their worth. The current economic uncertainties together with the proliferation of competing light industries throughout the Persian Gulf region can only reduce, unfortunately, the incentives for private-sector industrial investment in Qatar.

G. Conclusions

The arrival of a viable and self-sufficient manufacturing industrial structure has long been the prime objective of the Government of Qatar. Industry appears as the key to successful economic diversification and as the main assurance of continued self-sustaining economic growth. Since

the large increases in oil revenues in the 1970s, the Government has directed a substantial portion of its huge development outlays towards the creation of an adequate industrial infrastructure and the establishment of certain major State and joint public-private heavy industries.

It is clear from the patterns described above, however, that industrial diversification has proceeded at rates lower than anticipated, and that this has stemmed from the lack of internal stimuli. This is particularly true for other sectors of the economy. Consequently, the process of industrialization has depended more on external rather than on internal dynamics.

As al-Niajil [30] notes, for the countries of the Persian Gulf region as a whole, industrialization has been an external rather than an internal process, thus resulting in a false understanding of the true meaning of industrialization. The theory of industrialization in its broadest sense has been confused with the practical process of installing industrial plant through turnkey contracts with foreign construction and engineering companies. Factories set up in Persian Gulf countries on this turnkey basis belong to the region in a geographical sense, but the existence and continued functioning of the factories is dependent on external factors. In other words, the process of industrialization in the Persian Gulf region has tended to be a geographical rather than a historical phenomenon. These effects appear to be magnified in Qatar.

Annex

METHODOLOGY

The main statistical tool used in the analysis above was factor analysis, and in particular oblique rotation factor analysis.* As used here, this technique was appropriate because it made it possible to: examine the correlations of a large number of variables by clustering the variables into factors such that variables within each factor are highly correlated; interpret each factor according to the variables belonging to it; and summarize many variables by a few factors. This factor analysis model expresses each variable as a function of factors common to several variables and a factor unique to the variable:

$$z_j = a_{j1}F_1 + a_{j2}F_2 + \dots + a_{jm}F_m + U_j$$

where

*In addition to Rummel [6], see James W. Franc and Mary Ann Hill, *Annotated Computer Output for Factor Analysis: a Supplement to the Writeup for Computer Programme BMDP4M*, Technical Report No. 8 (Los Angeles, MBDP Statistical Software, 1987).

- z_j = the "jth" standardized variable
 m = the number of factors common to all the variables
 U_j = the factor unique to variable a_j
 a_{ij} = factor loadings

The number of factors, m , as well as the contributions of the unique factors, should be small. The individual factor loadings a_{ij} for each variable should be either very large or very small, so that each variable is associated with a minimal number of factors.

Variables with high loadings on a factor tend to be highly correlated with each other, and variables that do not have the same loading patterns tend to be less highly correlated. Each factor is interpreted according to the magnitudes of the loadings associated with it. The original variables can be replaced by the factors with little loss of information.

Each case receives a score for each factor; these factor scores are computed as:

$$F^*_i = b_{i1}z_1 + b_{i2}z_2 + \dots + b_{im}z_m$$

where b_{ij} are the factor score coefficients.

Factor scores can be used in later analysis, replacing the original variables. These scores usually have less error, and are therefore more reliable measures, than the original variables. The scores express the degree to which each case possesses the quality of property that the factor describes. The factor scores have a mean and standard deviation of 1. As an example, in 1975 (see table 1) Qatar and the United Arab Emirates had by far the highest shares of output devoted to construction. At this time, construction accounted for a relatively low proportion of the production of Kuwait.

In summary, there are four main steps in factor analysis. First, the correlation or covariance matrix is computed. Second, the factor loadings are estimated (the initial factor extraction). Third, the factors are rotated to obtain a simple interpretation (making the loadings for each factor either large or small, not in between). Finally, factor scores are computed.

A key aspect of factor analysis is the concept of rotation. Factors are rotated to obtain a simple interpretation; in other words, the goal is to make the loadings for each factor either large or small, not intermediate. The common rotations are orthogonal and oblique. In orthogonal rotations, the factors are uncorrelated. In oblique rotation the scores can be correlated. However, the advantage of this rotation is that there is a greater tendency for each variable to be associated with the single factor. That is, in oblique rotations factors are formed that maximize the loadings of their component variables.

Computations were made using the BDDP Statistical package (1990). The data set used for the analysis was drawn from Arab Monetary Fund sources. It consisted of the national income accounts and sectoral output shares of member countries of the Arab Monetary Fund.

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Import shortages and the inflationary impact of devaluation in developing countries

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The literature on the impact of devaluation on export earnings and on the supply of tradable goods is inconclusive at both the theoretical and the empirical level.** At one extreme, devaluation is regarded as a universal stimulus, or as an essential element in a range of incentives, for export expansion and diversification into manufacturing production through export-oriented industrialization ([1], [2]). At the other extreme, it is argued that devaluation is more likely to be an ineffective policy tool for the expansion of exports of manufactured goods even in developed countries, let alone developing countries ([3], [4]). According to Kaldor, when inflation and disruption in the production of manufactured goods are caused by chronic shortages of foreign exchange, devaluation cannot resolve the problem easily, even though the exchange rate might be overvalued. In fact, instead of stimulating output, devaluation tends to add fuel to inflation, unless it is combined with the complete abolition of import restrictions and a deflationary policy sufficiently severe to make it possible to keep the exchange rate stable. In this case, however, industrial development through import substitution would have been sacrificed in the process, "and the scope for urban employment would have been partly diminished" ([4], p. 36).

Some have also argued that in most developing countries manufactured goods are "home goods" because they have not yet become exportable. Moreover, devaluation fails to stimulate domestic production of intermediate inputs on which exports of manufactured goods depend, but it will increase their prices and lead to inflation [5].

In between the two extreme views, there are some who believe that devaluation may not be effective in the short run, mainly because of low

*Secretariat of the United Nations Conference on Trade and Development (UNCTAD). The views expressed in this paper are those of the author and do not necessarily reflect those of the United Nations. The author is grateful to John Cody, secretariat of UNIDO, for his valuable comments.

**Unless otherwise stated, the exchange rate is defined in this study in terms of United States dollars per unit of currency, and devaluation is defined as the decline in the average annual value of currency in terms of dollars, covering both active devaluation and the appreciation of the dollar in relation to the foreign currency (or basket of currencies) against which the local currency is pegged or defined. Devaluations of less than 5 per cent are excluded.

short-run supply elasticities for the manufacturing sector in developing countries and the J-curve influence. Nevertheless, they maintain that the long-run supply elasticities are sufficiently high to allow a response of supply to devaluation.

Much of the confusion in the literature on devaluation is related to different, and often unrealistic, assumptions made about the nature and characteristics of developing countries by various scholars who follow traditional approaches to devaluation - the elasticity approach, the monetary approach and the absorption approach. One common weakness of such approaches is their lack of differentiation between various developing countries in terms of their level of development, stage of industrialization, and socio-economic and structural features. Another is the assumption of homogeneity and perfect substitutability of various goods. Thus they do not differentiate between intermediate, capital and final goods, and between importables and domestically produced goods including exportables. As a result, the demand elasticities for imports and domestically produced goods are assumed to be equal; so are the supply elasticities for domestic production of intermediate, capital and final goods. The implication of that differentiation is recognized only in the "structuralist approach" to devaluation ([5], [6]).

It has been explained elsewhere [7] that the impact of devaluation on exports and production of manufactured goods depends on the following:

- (a) The extent to which devaluation of the nominal exchange rate can be translated into real changes;
- (b) The impact of real exchange rate devaluation on relative prices, costs and profitability of tradable and home goods in general and manufactured goods in particular;
- (c) Supply response, in terms of both exports and output, to changes in relative prices caused by devaluation, through greater capacity utilization in the short run and through the expansion of productive capacity by reallocating resources to exportables in the long run;
- (d) The exchange rate policy of the competing countries, that is, whether real devaluation leads to price competitiveness *vis-à-vis* the competitor exports;
- (e) The "terms-of-trade effects" of devaluation.

On the basis of a sample of 58 developing countries that undertook a nominal devaluation of greater than 5 per cent between 1980 and 1987, and for which data are readily available, an attempt was made in that article to study the relation between the level of development and the extent to which nominal devaluation can be translated into real devaluation over the short and the long run. With per capita income being taken as a rough indicator of the level of development, the sample

countries were classified into the following four groups: countries with per capita income of greater than \$1,500; those with between \$1,500 and \$800; those with between \$800 and \$400; and those with less than \$400. The study led to the following conclusions. First, devaluation involved significant inflationary impact in most of the developing countries studied. For the first year following devaluation, the index of effectiveness of nominal devaluation* ranged from 30 to 74 for various per capita income groups, indicating that a nominal devaluation of 10 per cent leads to real devaluation of 3 to 7.4 per cent. As time passes, the effectiveness of devaluation declines. In the long run (the period between the year before the first devaluation and the year of the last devaluation), the index of effectiveness of devaluation declines, ranging from 30 to 59 for various per capita groups.

Second, in the short term the highest income group showed the highest degree of effectiveness of devaluation, and the lowest income group took the second position. As time passed, however, the effectiveness of the nominal devaluation eroded faster in the lowest income group as compared with the highest one, but it increased for the two middle income groups.

Third, in the long run, there appears an inverse association between the per capita income and the indices of effectiveness of devaluation for various income groups, excluding the third one. This group has shown the highest degree of effectiveness of devaluation both over time and in relation to other income groups in the long run.

The present article is the continuation of the above-mentioned study. The same sample countries as in the previous study have thus been chosen and the same income groupings applied. The purposes of this study are as follows: to argue that the assumption of homogeneity of goods, particularly imports and domestically produced goods, made in the traditional approaches to devaluation is very weak, particularly in the case of low-income countries (section A); to investigate, in the light of Kaldor's argument, referred to above, the impact of the shortage (availability) of imports on inflation, and the inflationary effects of devaluation, that is, the extent to which nominal devaluation can be translated into real devaluation (section B); and to examine the direct contribution of devaluation to inflation, influenced by the degree of import dependence (section C). Throughout this study, developing countries will be differentiated in terms of their level of development.

*This index, used by Edwards [8], is the percentage change in the real exchange rate divided by the percentage change in the nominal exchange rate multiplied by 100. The index of 100 implies that the nominal exchange rate is fully translated into the real exchange rate, and that of zero implies that the nominal exchange rate has not been translated into a real one at all.

In particular, it will be investigated whether the exceptional performance of the third income group mentioned above, and its relative success in translating nominal into real exchange rates, can be explained by the availability of imports.

The period studied is the same as in the previous study. It was chosen mainly because during this period a large number of developing countries repeatedly devalued their currencies, but many of them have refrained from doing so since 1987 because of the improvement in world demand conditions in 1988 and their disappointment with devaluation to promote exports.

The consumer price index is used as an indicator of inflation. The data applied are based on International Monetary Fund (IMF) and World Bank sources. Those related to lower-income countries, particularly data on the consumer price index, are not in all cases reliable. Nevertheless, they provide certain indications which have proved useful in this study.

A. Assumption of homogeneity of goods

The assumption of homogeneity of domestically produced and imported goods made in the traditional approaches to devaluation is a weak one, particularly for low-income countries. Imports and domestic products are not often substitutable in these countries; imports of many input items are complementary elements in the production process. In any country, some goods, for example certain natural resources, are "supply-determined"; their domestic production is limited by natural factors. For many developing countries, production of some other goods, such as capital and intermediate goods, is limited by technological factors. Hence they have to be imported to a large extent. Production of a large number of wage goods, particularly foods, is also limited by structural, natural and institutional factors. Hence, a shortage of imports of these goods would contribute to inflation. Further shortages of capital and intermediate goods contribute to inflation through their negative impact on the production process, that is, on the utilization of existing capacity and its expansion. In fact, as shown elsewhere [7], in many developing countries investment has been negatively affected by the shortage of imports of capital goods from 1980 to 1987.

It is sometimes argued that devaluation is required to remedy overvaluations of the local currency caused by inflation, and to maintain competitiveness in the international market. If such a remedy is also accompanied by the removal of import restrictions, it is further claimed that inflationary pressure could be reduced.* By contrast, some scholars

*See Diaz Alejandro [5], pp. 15-17, for a critical discussion of these issues as well as related references.

believe that when inflation is caused by the shortage of imports, devaluation would add fuel to inflation, as mentioned earlier [4]. Inflation then requires new devaluation, and a devaluation-inflation spiral is set in motion. In fact, Kaldor claims that countries that were compelled to restrict imports for balance of payments reasons, as distinct from protectionist reasons, suffered from inflation in the 1970s and early 1980s.

B. The shortage of imports

Table 1 provides data on consumer price indices, as an indicator of inflation, for the period 1980-1987, together with indicators of availability of imports for the group of sample countries. The countries included in the table are ranked according to their rate of inflation. The following three indicators of availability of imports are used for the purpose of the analysis: average annual growth rate of the import volume from 1980 to 1987 (Mg); its changes as compared with that of the 1970s (Dmg); and the contribution of imports to the rate of growth of domestic supply (S), taking GDP as an indicator of domestic supply. The last indicator is the product of the rate of growth of import volume multiplied by the imports-to-GDP ratio. This indicator is added because the rate of growth of imports alone is not sufficient for the analysis. The degree of dependence on imports is also important. Given other factors, the higher such dependence, the higher the inflationary impact of the shortage of imports. The degree of dependence on imports is influenced by the average propensity to import, the ratio of imports to GDP, and the price elasticity of imports. The imports-to-GDP ratio determines the impact of import shortages on total supply, and the price elasticity of imports is one of the most important factors determining the impact of supply shortages on prices. The price elasticity of imports depends on the type of imports (luxury items *vis-à-vis* necessities and on the strategic importance of imports in terms of their final use or their use as an intermediate input. It also depends on the ability - natural and technical - of the country to develop substitutes for imports, or its ability to do without them. The level of development influences the technical ability to develop substitutes for imports. It is thus often assumed that the lower the level of development, the lower the price elasticities of demand for imports. The system of distribution, the degree of mark-up pricing and profiteering also affect the inflationary impact of supply shortages. In any case, these factors are difficult to measure and mostly involve an indirect contribution of import shortages to inflation. Hence, only an index of the contribution of imports to supply availability is employed in the present analysis.

Table 1. Indicators of inflation and availability of imports in the group of sample countries or areas, 1980-1987

Country or area and per capita income level	Consumer price index <i>a/</i> (1987)	Indicators of availability of imports		
		Mg <i>b/</i>	Dmg <i>c/</i>	S <i>d/</i>
<i>Greater than \$1,500</i>				
Brazil	77 258	-6.2	-12.9	-0.58
Argentina	43 970	-6.5	-12.6	-0.65
Mexico	4 625	-1.8	-11.9	-0.22
Yugoslavia	2 880	-0.17	-6.3	-0.04
Uruguay	1 836	-2.3	-7.2	-0.21
Costa Rica	500	-1.5	-6.7	-0.65
Venezuela	242	-2.8	-11.5	-0.64
Trinidad and Tobago	214	-6.1	-1.4	-2.4
Hong Kong	169	9.9	0.9	9.1
Gabon	168	-0.4	-11.3	-0.13
Republic of Korea	149	9.8	-1.3	4
Cyprus	143	2.8	-1.7	1.8
Fiji	140	-3.4	-5.4	-1.8
Malaysia	124	0.4	-5.3	0.23
Seychelles	125	5.4	-6.2	0.31
Malta	119	0.1	-4.6	0.1
Average <i>e/</i> , <i>f/</i>	-	-0.17	-6.2	+0.52
<i>\$1,500-\$800</i>				
Nicaragua	71 972	-1.2	-7.5	-0.46
Peru	11 149	0.4	-4.6	0.09
Turkey	955	9.3	1.1	1.52
Ecuador	538	0.1	-8.3	0.02
Colombia	402	-2.8	-5.1	-0.43
Chile	376	-2.7	-8	-1.13
Paraguay	334	-5.6	-10.8	-1.36
Dominican Republic	269	-0.5	3.2	-0.15
Jamaica	264	3.1	6.9	1.7
Guatemala	221	-2.1	-7.9	-0.5
Botswana	203	1.6	-13.6	1.2
Congo	177	3.8	-4.6	2.63
Mauritius	158	4.6	-2.4	0.25
Cameroon	155	0.8	-5.2	-0.98

continued

Table 1 (continued)

Country or area and per capita income level	Consumer price index <i>a</i> / (1987)	Indicators of availability of imports		
		Mg <i>b</i> /	Dmg <i>c</i> /	S <i>d</i> /
Côte d'Ivoire	148	-2.4	-10.4	-0.22
Thailand	133	2.6	-2.3	0.55
Average <i>c</i> /	-	0.6	-5.3	0.17
<i>\$800-\$100</i>				
Ghana	1 583	-1.2	0	-0.06
Guyana	340	-4.8	-1.7	-3.8
El Salvador	327	1.2	-1.4	0.38
Nigeria	274	-13.7	-34.4	-0.31
Philippines	263	-1.3	-3.8	-2.7
Indonesia	184	0.9	-12.3	0.21
Morocco	179	-0.4	-6.2	-0.14
Senegal	178	1.5	-0.4	0.78
Mauritania	177	3.3	-3.7	2.51
Average <i>c</i> /	-	-1.6	-7.1	-0.33
<i>Less than \$100</i>				
Sierra Leone	3 911	-14.2	-14.3	-4.8
Zaire	1 714	-1	5.6	-0.33
United Republic of Tanzania	642	0.5	-2.3	0.11
Sudan	588	-6.5	-8.7	-1.63
Zambia	548	-5.7	-0.2	-2.34
Gambia	364	0.3	-6.4	0.23
Madagascar	328	-2.7	-3	-0.7
Lesotho	254	-2.6	-15	-3.5
Sri Lanka	221	5.3	2.8	2.6
Bangladesh	213	3	-33.9	0.58
Kenya	205	-3.2	-7.1	-1.1
Nepal	204	6.9	-1.9	1.32
Central African Republic	199	-3.5	-3.7	-1.3
India	184	4.8	-2.4	0.48
Burundi	166	3.8	-1.7	0.87
Pakistan	153	2.2	-1.4	0.51

continued

Table 1 (continued)

Country or area and per capita income level	Consumer price index <u>a/</u> (1987)	Indicators of availability of imports		
		Mg <u>b/</u>	Dmg <u>c/</u>	S <u>d/</u>
Togo	144	-7	-20	-3.6
Niger	130	-0.5	-13	-1.8
Average <u>e/</u>	-	-1.1	-7.7	-0.8

Sources: UNCTAD Data Bank, which is based on IMF sources for consumer price index data and the World Bank for imports and GDP.

a/ Countries in each income group are ranked in descending order of their consumer price index.

b/ Average annual growth rate of import volume.

c/ Difference between the average annual growth rates of import volume (imports at constant 1980 prices) during the periods 1970-1980 (inclusive) and 1980-1987.

d/ Mg multiplied by the ratio of imports to GDP.

e/ Simple averages.

f/ Excluding Hong Kong.

According to the table, first of all, the shortage of imports during the 1980s is evident from all three indicators of availability of imports in almost all countries of the sample, particularly in relation to the 1970s. All countries and areas, with the exception of Jamaica, Hong Kong and Turkey, have been suffering from slower import growth (see values of Mg). Moreover, in most cases the average annual growth rate of imports was negative during the 1980s.

Secondly, no significant econometric association between availability of imports and the consumer price index for the sample countries as a whole could be found, even though Mg showed a better coefficient of determination (R^2) than Dmg and S (see annex table 5). Nevertheless, within various income groups the results are different. For the lowest income group (group IV) the association between the consumer price index and availability of imports is rather strong at the 99.5 per cent significance level (see the values of R^2 and t' in table 5). The first income group takes the second position, although for this group the value of R^2 is meaningful only at the 90 per cent significance level. For the other two groups little association was found between the variables concerned.

The lack of association between availability of imports and inflation in some of the sample countries such as Côte d'Ivoire, Fiji, Guatemala,

Kenya, Morocco and Togo is very likely to be the result of the way the consumer price indices are constructed in these countries. In Indonesia, the achievement of low inflation despite import shortages is to a large extent due to food import substitution facilitated by substantial investment in the agricultural sector in the 1970s ([7], [8]). Nevertheless, there still remain a number of countries where inflation prevailed despite a relatively high rate of import growth. This is not unexpected, since import shortages are not the only cause of inflation. In most cases, however, the inflation rate is relatively low, and imports have been more available, or less scarce.

The sample leaves out a large number of countries and areas that did not devalue their currencies. These countries and areas, such as the oil-exporting countries of North Africa and Western Asia, Singapore and Taiwan Province, also had more abundant, or less scarce, imports, and did not experience a high rate of inflation. It is very likely that most such countries are among the first three income groups. As a result, the sample is not unbiased. Further research is however required on this particular point. What is clear from table 1 is that among the total number of 36 countries where the consumer price index doubled over the period concerned, only 11 (30 per cent) showed positive import growth rates, and 7 (20 per cent) showed annual average import growth rates of more than 1 per cent. The countries with positive import growth rates included none of the top 8 in the first income group, 5 of the top 11 in the second income group, 1 of the top 5 in the third income group, and 5 of the top 12 in the last income group.

Thirdly, the lowest income group has on average suffered more from import shortages than the highest income group, and the second income group has been in the most favourable position compared with other groups, in terms of availability of imports. Hence, the relative shortage of imports in the lowest income group can be counted among the factors responsible for the ineffectiveness of nominal devaluation explained at the beginning of this paper.*

The translation of nominal devaluation into real exchange rate devaluation has been the most difficult in the case of the lowest income groups. Countries in the last income group must have suffered from the inflationary impact of import shortages for yet another reason, namely their lower import price elasticities. As mentioned earlier, there is usually a direct relationship between the level of development and such elasticities.

Fourthly, the increase in the effectiveness of nominal devaluation over time in the third income group cannot be explained by the degree of availability of imports; the majority of countries in this group also suffered severely from import shortages. It can be explained, however,

*See also Shafaeddin [7] for details.

by the lack of association between imports and inflation, if the results of the present econometric analysis is correct.

Finally, in all countries in which the nominal devaluation has been more effective in the long run* (except Argentina, Ghana, Philippines, Zaire and Zambia), the growth of imports was positive from 1980 to 1987. In the case of Ghana, the Philippines and Zaire, although the import growth rate has been negative, the import constraint has not been as severe as in many other countries. In fact, Ghana has been enjoying considerable import expansion since 1984. The volume of imports increased by an average annual rate of over 10 per cent from 1984 to 1987,** in contrast to an annual decline of 16.4 per cent from 1980 to 1983.

In short, almost all countries of the sample suffered from import shortages in the 1980s as compared with the 1970s. Many of them also suffered from negative import growth rates in the 1980s. For the last income group, shortages of imports have severely affected the inflation rate and their ability to translate nominal devaluation into real exchange rate devaluation. For the first income group, the association between import shortages and inflation is weaker; for other groups, it is insignificant. Further research is needed, including countries (mainly in the higher income groups) that enjoyed high import growth rates but were left out of the sample because they did not devalue their currencies.

C. Direct contribution of devaluation to inflation

While the shortage of imports primarily contributed to inflation in many developing countries in the 1980s, devaluation likewise fuelled inflation. It has already been shown that in the majority of developing countries that attempted devaluation in the 1980s, the first such attempt was followed by the acceleration of inflation [9]. The direct inflationary impact of devaluation during the period 1980-1987 will now be assessed.

Assuming no change in import restrictions for the time being, the direct contribution of devaluation to inflation depends on the rate of devaluation and the average propensity to import, that is, the ratio of imports to GDP. Two indicators are employed for this purpose, as shown in table 2. D_1 is the product of the rate of devaluation and the ratio of imports to GDP, and represents the direct contribution of devaluation to

*These countries are as follows: Argentina, Cyprus, Malaysia, Malta and the Republic of Korea in the first income group; Botswana, Colombia, Ecuador, Jamaica, Mauritius, Thailand and Turkey in the second income group; Ghana, Indonesia, Nigeria and Philippines in the third income group; and Zaire and Zambia in the fourth income group (see Shafaeddin [7], table 3, for more details).

**Based on the same sources as table 1.

inflation in absolute terms. C is the relative contribution of devaluation to inflation, and is the product of D_i and the consumer price index. $C = 100$ implies that inflation was entirely caused by devaluation, and $C = 0$ means that devaluation played no role. For practical reasons devaluation in this section is defined as the increase in the value of currency per United States dollar.

According to table 2, for the various groups concerned, there is on average a positive association between the level of income and D_i (direct contribution of devaluation to inflation), but an inverse relationship between the level of income and C (the relative contribution of devaluation to inflation). In other words, the higher the level of income, the higher the absolute rate of increase in domestic prices caused by devaluation. Despite this, at lower levels of development devaluation is responsible for a higher proportion of domestic inflation.* If countries with hyperinflation are excluded,** the relationship between D_i and the level of income is modified slightly, and that between C and the level of income becomes unclear. However, since the countries concerned, particularly Argentina and Brazil, have suffered severely from import compression, there is little justification for their exclusion.

D_i for various income groups declines with the level of development not only because the average rate of devaluation so declines, but also because the average propensity to import so declines. The relationship between the level of development and the relative contribution of devaluation to inflation is however more difficult to explain. One possible explanation for the lower C in the higher income group is that in this group "other factors", including the indirect contribution of devaluation itself to the rate of inflation, have played a more important role than its direct contribution. It is very likely that the higher the level of development, the higher the indirect contribution of devaluation to inflation. At a lower level of development, the size of the modern sector is small, workers are not often organized, and trade unions are often lacking or weak. By contrast, at a higher level of development the size of the industrial sector is relatively large, workers are more organized and pricing on a cost mark-up basis prevails. In fact, in a number of Latin American countries included in the highest income group, notably Brazil, there exists a system of wage indexation.

In measuring the direct contribution of devaluation to inflation it has been so far assumed that there have been no changes in import restrictions. Obviously, even when such changes occur, the direct contribution of devaluation *per se* as measured above, would not be changed since a

*However, if Lesotho, where import figures include significant re-exports, and Zambia, whose consumer price index data seem very doubtful are excluded, the relative contribution of devaluation to inflation declines significantly for the lowest income group.

**Argentina and Brazil in the first income group, and Nicaragua and Peru in the second.

Table 2. Contribution of devaluation to inflation in various groups of sample countries, 1980-1987

Indicators <i>g</i>	Per capita income groups						
	Greater than \$1,500		\$1,500-\$800		\$800-\$400	Less than \$400	
	All sample countries	Excluding Brazil and Argentina <i>b</i> /	All sample countries	Including Peru and Nicaragua <i>b</i> /		All sample countries	Excluding Zambia and Lesotho
(1) Rate of devaluation	6 722	1 128	58	285	771	528	569
(2) Imports-to-GDP ratio <i>g</i> /	36.9	41.8	34.6	35.3	33.6	38.4	32.2
(3) $D_1 g_j = (1 \times 2) = 100$	709	203	144.3	72.8	98.1	79.6	45.2
(4) Rate of inflation	10 076	905	5 371	210	316	465	485
(5) C = relative contribution of devaluation to inflation	26.4	35.1	32.1	45.6	39	47.5	36.8

Source: Annex table 4.

a/ All indicators are simple averages of the relevant values for individual countries.

b/ Countries with hyperinflation.

c/ Average for the period 1980-1982.

d/ Direct contribution of the increase in overall prices due to devaluation.

decline in import restrictions acts only as an offsetting mechanism. Nevertheless, since import liberalization and devaluation have often been undertaken jointly as elements of a policy package, it would be interesting to examine their impact. Such an examination, however, would require a major effort. Moreover, comprehensive import price indices are unfortunately not available. In table 3 the scanty data provided by a few countries on import price, domestic supply and consumer price indices for 1987 are compared with those of 1980. Except for Peru and Sri Lanka, the indices of import prices are shown to have increased faster than both domestic supply and consumer prices, indicating that import price rises (measured in terms of domestic currency and caused partially by devaluation) have contributed to domestic inflation more than other factors.

Table 3. Indices of various prices for a number of developing countries in 1987 (1980 = 100)

<i>Country</i>	<i>Imports</i>	<i>Domestic supplies</i>	<i>Consumer prices</i>
Argentina	21 426 <u>a</u> /	18 811 <u>b</u> /	4 397
Peru	4 773	8 198	11 149
Colombia	449	421	402
Chile	447	433	376
Venezuela	339	303	242
Indonesia	218	200	184
Sri Lanka	153	187	221

Source: United Nations Monthly Statistical Bulletin, November 1989.

a: Manufactured products only.

b: Agricultural products, including exports.

D. Conclusions

It has been argued in this paper that the assumption of homogeneity of goods, particularly imports and domestically produced goods, made in the neoclassical approaches to devaluation is very weak. An attempt was then made, in the light of Kaldor's argument [4], to investigate the impact of import shortages on the inflationary effects of devaluation, and thus the extent to which nominal can be translated into real devaluation. Such an analysis has shed some light on the heterogeneity of developing

countries as a factor in determining their level of development. A sample of 58 developing countries for which data were available and which undertook devaluation by greater than 5 per cent between 1980 and 1987 was chosen. Taking per capita income as a rough indicator of the level of development, countries were classified into four income groups (see table 1). It was concluded that for the lowest income group, and to some extent the first income group, Kaldor's argument on the role of imports and the inflationary impact of import shortages was confirmed. Within these groups there was an inverse relationship between the availability of imports, on the one hand, and the rate of inflation and the inflationary impact of devaluation, on the other. Further research is required on the other two groups where a significant association was not found.

For various income groups there appeared, on average, a positive association between the level of income and the direct contribution of devaluation to inflation in absolute terms (D_1). This was mainly attributed to the lower rate of devaluation and the lower import-to-GDP ratio at lower levels of development. By contrast, an inverse association was found between the level of income and the relative contribution of devaluation to inflation. In other words, at a lower (higher) level of development, devaluation was found to have been responsible for a higher (lower) proportion of domestic inflation. One explanation provided for the lower (higher) relative contribution of devaluation to inflation in the higher (lower) income group was that "other factors", including the indirect contribution of devaluation to the rate of inflation, played a more (less) important role than the direct contribution of devaluation. The indirect contribution of devaluation to inflation tends to be higher at a higher level of development because of the larger size of the modern sector and the stronger power of the labour force. Over the long run, the effectiveness of repeated devaluation has been weaker in most lower-income countries because of lower production flexibilities, the severity of import restrictions and a higher relative contribution of devaluation itself.

Finally, further research is required on the heterogeneity of developing countries as a factor in determining their structural and institutional features and the inflationary consequences of devaluation.

Annex

STATISTICAL TABLES

Table 4. Contribution of devaluation to inflation in the sample countries and areas, 1980-1987 (Percentage)

Country or area	Rate <i>a</i> / of devaluation (1980-1987) (1)	M/GDP <i>b</i> / (1980-1987) (2)	$D_1 \zeta / =$ (1) x (2) (3)	Increase in CPI <i>d</i> / (1980-1987) (4)	C <i>e</i> / 3-4 (5)
<i>Greater than \$1,500</i>					
Cyprus	36.2	64	23.1	43	54
Venezuela	236.7	22.9	54.2	142	38
Malta	--	90.3	--	19	--
Hong Kong	57	92.1	52.4	69	76
Yugoslavia	2 890	24.1	696.4	2 780	25
Gabon	42.2	32	13.5	68	20
Argentina	1 071.8	10	107.1	43 870	0.24
Republic of Korea	35	40.3	14.1	49	29
Uruguay	2 391	19	454	1 736	26
Brazil	73 937	9.3	6 876	77 158	8.9
Fiji	51.9	53	27.5	40	11
Malaysia	15.6	57.8	9	28	2.5
Costa Rica	720	43	180.6	482	37
Mexico	5 905	12	708.6	4 525	15.6
Average <i>f</i> /	6 722	36.9	709	10 076	26.4
Excluding Argentina and Brazil	1 125.2	41.8	203	905	35.1
<i>\$1,500-\$800</i>					
Paraguay	336.1	24.2	81.3	234	34.7
Mauritius	67.2	55	37	58	21
Peru	4 828	22	1 062.2	11 040	9.6
Chile	463	25	115.8	276	41.9
Colombia	413	15.4	63.6	302	21
Turkey	1 025	16.4	168.1	855	20
Ecuador	781	23.1	180.4	438	41.1
Jamaica	208	53.4	111.1	164	68

continued

Table 4 (continued)

Country or area	Rate <i>a</i> / of devaluation (1980-1987) (1)	M/GDP <i>b</i> / (1980-1987) (2)	$D_1 \zeta =$ (1) x (2) (3)	Increase in CPI <i>d</i> / (1980-1987) (4)	C <i>g</i> / 3:4 (5)
Cameroon	42.2	27.2	11.5	55	6.3
Congo	42.2	69.2	29.2	77	38
Botswana	116	72	83.5	103	81
Côte d'Ivoire	42.2	41	17.3	48	36
Guatemala	150	22	33	121	27
Dominican Republic	283	29	82.1	169	49
Nicaragua	599	38	227	71 972	3
Thailand	26	21	5.5	33	17
Average	589	34.6	144.3	5 371	32.5
Excluding Nicaragua and Peru	285	35.2	72.8	210	45.6
<i>\$800-\$400</i>					
El Salvador	100	32	32	227	14
Morocco	112	34	38.1	79	48
Senegal	42.2	52	22	78	28
Philippines	173	24	41.5	165	25
Guyana	283	79	223.5	240	93
Nigeria	549	20	110	174	63
Indonesia	186	23	37.3	84	44
Ghana	5 491	5.1	280	1 483	19
Average	771	33.6	98.1	316	39
<i>Less than \$400</i>					
Sri Lanka	78	49	38.2	121	32
Central African Republic	42.2	38	16	99	16
Sudan	400	25	100	488	21
Kenya	122	34	41.5	105	40
Togo	42	52.4	22.1	44	50
Pakistan	132	23	30.4	53	57.4
Sierra Leone	2 841	34	966	3 811	25.3
Niger	42	35	14.7	30	49
India	65	10	6.5	84	7.7
Burundi	37	23	8.5	66	12.9

continued

Table 4 (continued)

Country or area	Rate <u>a</u> / of devaluation (1980-1987) (1)	M ₁ /GDP <u>b</u> / (1980-1987) (2)	D ₁ c/ = (1) x (2) (3)	Increase in CPI <u>d</u> / (1980-1987) (4)	C <u>e</u> / 3-4 (5)
Madagascar	405	26	105.3	228	46.2
Zambia	1 105	41	453	448	101
United Republic of Tanzania	681	21	143	542	26
Lesotho	193	133	256.6	154	166
Bangladesh	100	19.3	19.3	113	17.7
Nepal	81	19.1	14.4	104	15
Zaire	4 066	33.3	1 354	1 614	84
Gambia	30 802	75	231.2	264	88
Average <u>g</u> / (569)	578 (569)	38.4 (32.2)	79.6 (45.2)	465 (485)	47.5 (36.8)

Source: UNCTAD data bank, which is based on IMF sources for the consumer price index and World Bank sources for other figures.

a/ In terms of United States dollars.

b/ Ratio of imports of goods and services to GDP.

c/ Increase in domestic prices caused by devaluation.

d/ Consumer price index.

e/ Relative contribution of devaluation to inflation.

f/ Excluding Malta.

g/ Figures in parentheses exclude Lesotho and Zambia, whose data on consumer prices and the imports-to-GDP ratio appear doubtful or inflated by re-exports.

**Table 5. Econometric analysis of the relation between impts and the consumer price index (x)
for various per capita income groups**

<i>Item</i>	<i>C</i>	<i>S_y</i>	<i>R²</i>	<i>Number of observations</i>	<i>Degree of freedom</i>	<i>x coeff. (B)</i>	<i>S_B</i>	<i>t² = B/S_B</i>
Mg a/ b/	3 085	13 544	0.024	59	57	-445.4	377.6	-1.1796
Dmg b/	2 070.5	13 637	0.0105	59	57	-188.6	243.1	-0.7758
S b/	3 259	13 705.5	0.00053	59	57	-115.5	664.8	-0.17374
Mg								
Group I	5 588	18 538	0.122	16	14	-1 328.4	952	-1.3958
Group II	5 883.1	18 406	0.018	16	14	-666.9	1 321.7	-0.5042
Group III	384.3	483.3	0.0012	9	7	-3.13	33.7	-0.9288
Group IV	442.5	731.8	0.396	18	16	-109.6	33.8	-3.2426
Groups III and IV	408.6	695.6	0.245	27	25	-76.1	26.8	-2.8395

Note: Calculated by the author on the basis of table 1.

a/ The notations are the same as in table 4.

b/ All countries.

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Managerial inefficiency in small manufacturing businesses in Saudi Arabia: a constraint upon economic development

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A major feature of recent literature on economic development in both developed and developing countries is the substantial role which small businesses, particularly manufacturing businesses, can play in the development process. In the developed world small businesses account for over 90 per cent of firms and typically between 30 and 40 per cent of total employment; in the developing world the focus is more acute, with the proportion of total employment within small businesses normally between 60 and 80 per cent ([1] and [2]).

If economic development is to take place, it must embrace the increasing contribution of small businesses. The Bolton Committee in the United Kingdom was perhaps the most authoritative body in recent times to confirm this. Not only are small businesses the seed-corn of future large businesses, they are more flexible and can adjust production more quickly to market change; and they are a source of innovation and provide opportunities for those who wish to initiate their own business. They produce various specialized products and services which cannot be produced economically in large quantities, and they allow larger firms to concentrate on the main activities of their business by providing spare parts and other services to them [3]. In relation to developing countries, the importance of small businesses as a source of capital formation, particularly in an environment where investment opportunities are very limited, has been emphasized [4].

There is general acceptance therefore that small businesses can contribute significantly to the growth and expansion of the economies of both developed and developing countries. This, in turn, justifies the necessity of promoting small businesses in order to enable them to contribute effectively to the development process.

The emphasis of research in both developed and developing economies has been upon the identification and extent of the small business finance gap. Much evidence has been accumulated over the years on the inability of small businesses in most sectors of the economy

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to finance themselves either from internal or external sources. This has led to a criticism of financial systems which fail to provide institutional finance over the short and long term to small businesses for establishment, expansion, relocation, working capital, import finance or modernization.*

This paper examines a neglected aspect of the economic development process in developing economies - the existence of managerial inefficiency in small manufacturing businesses, with a case-study focusing on Saudi Arabia. Management, by definition, is responsible even in small businesses for bringing together factors of production; typically it is also, in the context of Saudi Arabia and other developing economies, the owner of the small business and therefore the risk-taker.

There is a wealth of evidence that a small business finance gap does exist in developing economies and Saudi Arabia is no exception to this, despite the excessive liquidity resulting from the oil boom of the 1970s [12]. But the reason for this may be, not the inability or blatant unwillingness of financial institutions to provide finance, but the reluctance of management, or indeed their inability, to apply for finance from commercial banks. This inability may be reflected in the general ignorance of management of how to structure a loan application, how to gather the necessary financial information over a period of time, or how to present a feasibility study to satisfy the financial institution of its ability to repay the loan.

Thus, in assessing managerial inefficiency, the evidence will have some bearing upon the reasons for the small business finance gap in Saudi Arabia. But the existence of managerial inefficiency will be more far-reaching than this, in that it will reflect the extent of the contribution that small, manufacturing businesses can make to the development process in the context of Saudi Arabia.

A. The manufacturing sector in Saudi Arabia: the background

The primary objective of industrial development in Saudi Arabia is to liberate the economy from its overwhelming dependence on crude oil as a main source of national income, in order for it to become a diversified industrial economy. The industrial strategy has two directions: first, to implement manufacturing projects in which Saudi Arabia has a comparative advantage, second, to develop industries that offer import substitution.

*For more details on small business financing gap in developing countries including Nigeria, Sudan, Greece, Philippines and Sierra Leone, see [5]-[11].

To achieve these objectives the Government has adopted two major strategies: first, it has established, in collaboration with foreign companies, basic industries utilizing crude oil and natural gas, and secondly, it has encouraged the private sector, through a wide range of incentives, to set up non-hydrocarbon-related industries.

Accordingly, the structure of industry consists of oil-related industries which are owned by the Government and foreign companies and non-oil industries which include of factories regulated by the Ministry of Industry and Electricity (entitled to obtain interest-free loans from the Saudi Industrial Development Fund in addition to other non-financial incentives) and factories and workshops regulated by the municipalities, having no access to financial and non-financial incentives [13].

The oil-related industries tend to be large-scale industries in which Saudi Arabia has comparative cost advantages resulting from reserves of crude and natural gas. There is very little small business activity in this sector. In contrast, most small manufacturing businesses are concentrated in the non-oil-related industries.

Several measures were adopted by the Government of Saudi Arabia during the 1950s and 1960s to encourage the domestic private sector and foreign investors to set up non-oil industries. These measures included, in particular, the issuing of the Regulation for the Protection and Encouragement of National Industries, the promulgation of the Foreign Capital Investment Regulations in 1964 and the Company Law in 1965, and the establishment of the Industrial Studies and Development Centre in 1967 [14].

Despite these measures obstacles existed which prevented the emergence of large-scale non-oil industries until the mid-1970s. These included the absence of financial facilities necessary for the establishment of industrial projects, lack of raw materials, a skilled labour force and the necessary physical infrastructure, and the preference of Saudi Arabian nationals to invest in property rather than in industrial projects; in addition, the domestic market, with a small population and low average income levels, worked against the expansion of non-oil industries. However, this gave small factories and workshops an opportunity to extend throughout the country, since their establishment required neither large amounts of capital nor highly skilled labour nor a large market place. Accordingly, businesses employing less than 10 persons accounted for 96.5 per cent of the total industrial concerns by 1971 [15].

The Government offered various financial and non-financial incentives in the mid-1970s to encourage the private sector to set up non-oil industrial projects producing import substitution goods directed mainly at the domestic market. These included food, beverages, dairy, chemical, metallic and non-metallic products. Government incentives included the provision of medium- and long-term interest free loans of up to 50 per cent of the total cost of the project with a repayment holiday of between

one and two years, exemption from custom duties on raw materials and machinery used in production, preference of national products in government contracts, distribution of land in various industrial cities at nominal rent, subsidized prices for electricity and water and the imposition of tariffs on similar foreign products. The latter was possible given the ability of national factories to provide at least 70 per cent of the market demand ([13], pp. 21-29).

However, these incentives were confined to factories whose invested capital exceeded 1 million Saudi Arabian riyals and had an industrial licence from the Ministry of Industry and Electricity. This increased the profitability of these factories and hence the contribution of internal funds as a source of finance.

The response of the private sector to these incentives is shown in the number of factories and the contribution of the manufacturing sector to total GDP and to non-oil GDP. Table 1 indicates that the number of factories operating in the country up to 1987 reached 2,016, covering all economic activities. Of these, 31 per cent were small according to the definition adopted in this study (employing less than 30 persons and with invested capital between 1 million and 5 million Saudi Arabian riyals).

Despite the industrial development which has taken place since the mid-1970s, small factories and workshops continue to play a dominant role in some industries. The census of private establishments conducted in 1976 and again in 1981 indicated that 92.8 per cent and 91.2 per cent, respectively, of industrial concerns employed less than 10 people.

Many factors support and facilitate the continued existence of small factories and workshops. These include the market size, high transport costs and frequent changes in the nature of products. The cost of transport and the availability of raw materials throughout the country have defined the market size for products like blocks, bricks, tiles, marble and ready-mixed concrete. Table 2 shows that 76 per cent of factories producing building materials are small (employing less than 10 persons and with invested capital of less than 1 million Saudi Arabian riyals).

The products of some industries are subject to frequent changes resulting from the development in consumer tastes and preferences; small concerns are often more flexible in adjusting to these changes. Industries which exhibit this tendency are furniture, clothes, shoes and certain types of building materials.

From 1973 to 1980, Saudi Arabian society was more exposed to a Western way of life, especially with the inflow of expatriate labour. This, coupled with high purchasing power, brought about rapid change in taste and fashion. Thirty-four per cent of small factories and 98.6 per cent of workshops are engaged in manufacturing clothes, leather and textiles.

After 1982, the growth rate of value added in the manufacturing sector started to decline. Indeed, until recent years its growth rate has been negative. This was due partly to the decline in government

Table 1. Number of factories by industry, employment and capital size a/

Industry	Small factories b/			Medium- and large-scale factories c/	Total factories	Percentage of small factories in total
	Saudi Arabian	Joint ventures d/	Total			
Foodstuffs	88	11	99	280	379	26.0
Textiles and ready-made garments	12	2	14	27	41	34.0
Leather products	--	--	--	4	4	--
Wood products	15	5	20	46	66	30.3
Paper, printing and publishing	45	2	47	74	121	38.8
Chemical products	50	13	63	237	300	21.0
Pottery, chinaware, glass and ceramics	2	0	2	27	29	7.0
Building materials	164	3	167	263	430	38.8
Metal products	109	32	141	271	412	34.0
Other	48	21	69	165	234	23.4
TOTAL	533	89	622	1 394	2 016	30.9

Source: Ministry of Industry and Electricity, *The List of National Factories Licensed Under the Statute of Protection and Encouragement of National Industries and Foreign Investment Code up to 1987* (Riyadh).

a/ These factories are licensed under the Statute of Protection and Encouragement of National Industries and the Foreign Capital Investment Code.

b/ Small factories are those in which invested capital ranges between 1 and 5 million Saudi Arabian riyals, and employment between 10 and 30 persons.

c/ Medium- and large-scale factories are those in which invested capital is more than 5 million Saudi Arabian riyals and more than 30 persons are employed.

d/ With Saudi Arabian and foreign capital invested in the company.

Table 2. Number of establishments by industry and employment size, 1976-1981

Industry	Employment							Total	Total for 1-9 employees only	Percentage of establishments employing less than 10 persons
	1	2-4	5-9	10-19	20-49	50-99	100+			
Food, beverages and tobacco										
1976	342	994	250	77	25	6	9	1 703	1 586	93.0
1981	445	1 121	339	149	69	22	26	2 171	1 905	87.7
Textiles, clothing and leather										
1976	1 733	1 867	124	17	10	1	-	3 752	3 752	99.3
1981	2 142	4 846	923	93	12	3	2	8 021	7 911	98.6
Wood, wood products and furniture										
1976	629	677	179	74	27	3	2	1 591	1 485	93.3
1981	372	831	507	214	48	9	4	1 985	1 710	86.1
Paper products and printing										
1976	36	40	28	27	23	9	6	169	104	61.5
1981	143	174	116	100	47	13	15	608	433	71.2
Chemical, petroleum and plastic products										
1976	578	376	63	21	19	5	8	1 070	1 017	95.0
1981	26	28	32	33	43	15	18	195	86	44.0

continued

Table 2 (continued)

Industry	Employment							Total	Total for 1-9 employees only	Percentage of establishments employing less than 10 persons
	1	2-4	5-9	10-19	20-49	50-99	100+			
Bricks, blocks, cement and glass										
1976	234	700	680	233	82	11	10	1 950	1 614	82.8
1981	146	942	817	371	130	47	47	2 509	1 905	76.2
Basic metals										
1976	19	59	14	2	3	1	--	98	92	93.9
1981	19	95	46	19	12	2	4	197	160	81.2
Metal products, machinery										
1976	664	917	342	136	59	13	6	2 137	1 923	90.0
1981	1 476	3 078	1 205	491	200	69	60	6 579	5 759	87.5
Other										
1976	298	239	44	11	5	--	--	597	581	97.3
1981	172	121	9	7	5	2	1	317	302	95.3
Total										
1976	4 533	5 869	1 724	598	253	49	41	13 067	12 126	92.8
1981	4 941	11 236	3 994	1 477	566	182	177	22 573	20 171	89.4

Source: Central Department of Statistics, Ministry of Finance and National Economy of Saudi Arabia, *Census of Private Establishments* (Riyadh, 1981), p. 109.

spending, completion of most infrastructure projects and the departure from Saudi Arabia of many foreigners, especially construction sector workers.

B. Methodology

Unfortunately, there is no universally accepted definition of what constitutes a small business. The social and economic structure of each country differs. Accordingly, the definition of a small business in each country embraces different criteria which best suit its structure. The relevant statistical data is not necessarily available in all countries; definitions are therefore often adopted within the constraints set by data availability ([2] and [16]).

Consequently, two approaches can be adopted in defining small businesses.* The first one stresses the distinctive differential features of small and large businesses in terms of such factors as management, ownership, employment and market share. The second approach emphasizes the role of statistical criteria in forming the definition, and the range of each selected criterion determines the size of the business. These criteria include such variables as the number of employees, the annual turnover, profits, output and capital invested. Whether the definition is on a qualitative or a quantitative basis, it must be applicable, unambiguous and appropriate for the purpose of any investigation [18].

In the case of the manufacturing sector in Saudi Arabia, identification of small businesses by number of employees and level of invested capital is possible by consulting official data.** For the purpose of this study, therefore, a small manufacturing business is defined as having less than 30 employees and an invested capital of less than 5 million Saudi Arabian riyals. This definition embraces manufacturing firms which are registered with the municipalities and with the Ministry of Industry and Electricity.

The investigation outlined in this paper was part of a much broader investigation of most small businesses in Saudi Arabia, with a much wider coverage of factors influencing small business development than managerial inefficiency. The methodology adopted, after the identification of small businesses in the manufacturing sector, was to produce an unbiased sample of small businesses and to conduct a pilot study based upon interviews; the results of these in turn determined the nature of a more comprehensive questionnaire and interview study.

*For more details about the inconsistency in international statistics on small firms, see [2], [3], [4] and [17].

**For a more detailed explanation of how random samples were obtained, please contact either of the authors.

The main objectives of the pilot study were to establish a better understanding of the problems involved in small businesses in Saudi Arabia, to identify new, relevant factors judged to have a great bearing on small business development, to test the response of firms to certain questions which are considered in both developed and developing countries as being of a highly confidential nature, and to become acquainted with the best approach to the conduct of interviews and most suitable ways of distributing and collecting questionnaires. As far as the authors are aware, this is the first survey undertaken of small businesses in Saudi Arabia.

Four major conclusions emerged from the pilot study :

(a) It was apparent that lack of finance was only one factor limiting the development of small business;

(b) The lack of management sophistication appeared to limit not only the ability to approach sources of institutional finance and to secure such financing, but the general development of the business. It therefore gained much more importance than was originally intended in the broader study of small businesses in Saudi Arabia;

(c) The pilot survey revealed that accounts were not readily available in small businesses in Saudi Arabia. It was therefore impossible to conduct the kind of case-study approach adopted in other developing countries, based upon accounting ratios ([9] and [11]). A more general approach was adopted on the basis of the distribution of a large number of questionnaires, accompanied by follow-up interviews;

(d) The nature of interview techniques was also determined by the pilot study. It was found that structured interviews were not suitable for the case of small businesses in Saudi Arabia, mainly because of the limited educational background of the majority of small business managers. As a result, an unstructured approach was used in interviewing managers, which allowed for more flexibility and as little use of accounting and economic terminology as possible. The apparent shortcomings of entrepreneurs in small businesses clearly limited the sophistication of the questionnaire and interview approach in this study.

The major investigation which followed the pilot study consisted of a questionnaire survey of 412 small firms within the manufacturing sector; of these, 222, or 53.9 per cent, were completed, collected and analysed. The breakdown of these by product group is contained in table 3.

Table 3. The manufacturing sector sample

<i>Sector</i>	<i>Number of questionnaires distributed</i>	<i>Number of questionnaires returned</i>	<i>Percentage of total questionnaires returned from each industrial class a/</i>	<i>Percentage of total questionnaires collected and analysed for all industrial classes b/</i>
Building materials	143	64	44.8	28.8
Aluminum products	57	27	47.7	12.2
Wooden products	62	33	53.2	14.8
Chemical products	30	17	56.7	7.7
Iron products	79	52	65.8	23.4
Other	41	29	70.7	13.1

a/ Ratio of total questionnaires returned from each industrial class to total questionnaires distributed to each industrial class.

b/ Ratio of total questionnaires returned from each industrial class to total questionnaires collected and analysed for all industrial classes.

C. Measuring managerial efficiency: the survey results

There is, as yet, no widely accepted definition of managerial efficiency; nevertheless, there is sufficient agreement in literature relating to management that it is possible to identify a number of key indicators of managerial efficiency within both small and large firms. The study focuses upon two aspects of management: first, the management of finance and financial flows within the firm, and, secondly, the willingness of the owner-manager of the small firm to delegate responsibility to those with greater managerial expertise in specific areas.

In relation to financial management it is argued that efficiency is indicated, amongst other things, by the following:

(a) The existence of financial records such as bank accounts and statements and sales, purchases, cash and payroll records;

(b) The preparation of annual budgets estimating sales, purchases, production, net cash flows and profits;

(c) The establishment of the business on the basis of a feasibility study or business plan;

(d) The existence of separate bank accounts in the name of the business.

The importance of financial planning and budgeting for small business has been expressed ([19], p.44) as follows: "In today's rapidly changing environment small businesses are crucially vulnerable. They themselves can do little to influence that environment but must react quickly to, or even anticipate, changes in it if they are to survive, never mind prosper. This is why policy and planning are so important." It is particularly important in Saudi Arabia where the volatility of the oil sector has brought wide fluctuations in economic activity in recent decades.

The above indicators are by no means exhaustive, but according to the pilot study were at least testable in the context of small manufacturing businesses in Saudi Arabia.

The results shown in table 4 are fairly conclusive, even given the different response rates to questions from the 222 respondents to the full survey. Less than 20 per cent of firms established the business on the basis of a feasibility study, less than one third kept financial records for the business, less than one fifth prepared annual budgets, and almost one third did not keep a bank account exclusively in the name of the business. The consequence of these results is that the typical small manufacturing business in Saudi Arabia is not able to assess the level of its assets or liabilities, cannot determine whether it is solvent, cannot estimate the level of profitability, cannot determine the distribution of profit, and cannot ascertain how finance has been raised or used.

Table 4. Indicators of financial flow management

<i>Type of respondent</i>	<i>Frequency</i>	<i>Valid percentage</i>
A1 Respondents who did not establish business on the basis of a feasibility study	176	81.1
A2 Respondents who did establish business on the basis of a feasibility study	41	18.9
B1 Respondents who keep financial records	39	32.2
B2 Respondents who do not keep financial records	82	67.8
C1 Firms that have separate bank accounts for the firm	150	69.1
C2 Firms that do not have a separate bank account	67	30.9
D1 Firms that prepare annual budgets	19	16.5
D2 Firms that do not prepare annual budgets	96	83.5

Equally revealing, particularly in terms of how low managerial efficiency could be counteracted, were the conclusions emerging from

interviews which followed the survey. In particular, these indicated the following:

(a) Business plans were not used either because insufficient information was available to draft a plan, or managers felt the business was too small to warrant a plan, or they were regarded as unnecessary or irrelevant because the Government did not require business plans to be produced. Whatever the reason, there was almost total absence of forward planning in most small manufacturing businesses;

(b) The major reason for the absence of accounting records in small businesses is management's lack of understanding of the role of accounting in decision-making and in obtaining institutional credit. This can be attributed to many factors, including the following: small businesses in Saudi Arabia are not required to file accounting statements; there is an inability or unwillingness to employ a qualified accountant for cost and secrecy reasons; and the lack of confidence of commercial banks in some accounting and auditing firms discourages them from requiring or emphasizing accounting statements in loan applications. This lack of confidence is partly due to the absence of national standards for accounting and auditing. However, these findings are not peculiar to Saudi Arabia. This situation is similar in both developed and developing countries to varying degrees. For example, the Bolton committee observed that: "Cost control and costing data are often so poor that management frequently learns of an impending crisis only with the appearance of the annual accounts or following an urgent call from the bank manager. In less serious cases, lack of costing data may make it impossible to gauge the effects on profits of different levels of activity or courses of action, especially where there is variable product mix. Credit control and stock control information is often inadequate" ([3], p. 113; [20] and [21]). The entrepreneur's lack of understanding of accounting and its role in decision-making has been attributed to the poor quality of accounting and financial control systems in small businesses. Many owners of small businesses have shown an aversion to accounts of any sort, because the accounts rarely seem to tell them very much and hardly ever seem to have much relevance to current operations. The terminology of the accountant is precise and meaningful to the profession, but is frequently obscure and misleading to the layman, and many owners of small businesses are simply overawed.

A second focus of the survey related to the extent of the sharing of managerial responsibility in small firms and the use of specialized expertise. This would not be so important in terms of managerial efficiency, if the owner-manager was sufficiently educated and experienced in a broad range of management skills, which was decidedly not the case in Saudi Arabia. The survey did attempt to identify the educational level of the respondents, but only 13 per cent of them were prepared to detail

their educational background; this may well reflect a lack of basic education; indeed, of the 30 respondents who did provide details, 13 had not gone beyond an elementary school certificate. As table 5 shows, it was convincingly apparent that the owner-manager of small firms did not establish the firm on the basis of experience in related business areas; only 16 per cent regarded the main reason for undertaking the business as experience-related; nearly 80 per cent of owners-managers entered the business primarily because of a perceived high demand for its products. Follow-up interviews provided a more complex motivational picture than that resulting from the survey. In general, entrepreneurs who established businesses before the 1973 oil boom, having secured most of their start-up capital from relatives and friends, strove to meet family needs and obligations and to repay the loans. Those who started in business after 1973 were mostly motivated by the high returns available in the private sector. They did not strive to achieve success as their counterparts had done before 1973, for two main reasons. First, the buoyant economic conditions prevailing during the period 1973-1982 safeguarded most small business. Government action to accelerate the diversification process, given the low absorptive capacity of the economy, allowed even inefficient businesses to succeed and prosper. Second, failure to repay debt would not affect the financial position of the lender (friends, relatives) in the new economic climate. The period was marked by, for example, government interest-free loans which could be converted into grants in certain circumstances, and commercial bank loans which need not be repaid wholly or partially if the borrower chose to use religion as an excuse for an unwillingness or inability to repay (there was no regulation to force borrowers to fulfil their obligations in a loan contract).

Table 5. Main reasons for going into business

<i>Response</i>	<i>Frequency</i>	<i>Valid percentage</i>
Experience in the field of business	27	15.6
High level of demand for the products of the business at the time of the establishment	138	79.8
Death or retirement of previous owner	3	1.7
Low risk and easy to manage	2	1.2
Lack of competition	3	1.7
Easy supply of raw materials	--	--
TOTAL	173	100.0

The survey also revealed that, as in other developing economies, one of the common characteristics of small businesses in Saudi Arabia is that the owner is also the manager of the business. According to the sample, 87.7 per cent of small businesses operating in the manufacturing sector are managed by their owners. This owner-manager structure, when accompanied by inadequate experience and education, and by resistance to or awareness of management advice, often shows itself in a large volume of accumulated stock, inability to compete with similar foreign products and failure to utilize the full production capacity of the factory. Indeed, in this latter respect, 39 per cent of small businesses interviewed were operating at 60 to 70 per cent of full production capacity, and yet were still accumulating excessive stock levels.

There is very strong evidence that the deficiencies associated with single-person management are due to the inability of the owner-manager to cope with all aspects of management [22].

Typically, the survey showed that small concerns in Saudi Arabia are family businesses, where the oldest member is the founder and the manager. Usually one or two of his sons or brothers help to operate the business. When he dies, or retires, the oldest member of the family succeeds him. In recent years there has been a tendency for experienced families to send the potential successor abroad for higher education or training to ensure the family hierarchy. All this reinforces the reluctance of the owner-manager to employ a qualified outsider and the unwillingness to delegate responsibility and authority to any family member except the oldest or the potential successor, despite the qualifications and the availability of other members who are more qualified for the job in terms of experience and education. This managerial practice, which is not consistent with modern management techniques, is based on the traditions of Saudi Arabian society which show great respect for age. The reluctance to employ outsiders is based partly on the belief of the owner-manager that the success of a small business depends to a large extent on secrecy and loyalty, and that these can only be maintained by family members.

D. Conclusions

The recommendations arising from this study are almost self-evident in the context of Saudi Arabia. Developing countries are normally constrained in the pace of their economic development by the shortage of finance and capital. In Saudi Arabia the shortage of finance was clearly not a problem after the oil boom of the early 1970s, and yet economic development was still constrained. The development problem then became one of labour shortage; the present study focused on one aspect of that shortage - the absence of managerial efficiency in small businesses in the manufacturing sector. Hence, even when liquidity exists, the

ability to utilize that liquidity is somewhat restricted in some sectors of the economy. The literature has tended to blame the immaturity of financial institutions in developing economies and their failure in particular to fund small businesses. Indeed, the present study began in anticipation that its conclusions would be precisely the same, even in Saudi Arabia. But clearly not all the blame for small-business financial shortfalls even in a financial surplus economy can be shouldered by the commercial banks, nor by the semi-governmental financial institutions.

The study showed clearly that severe management deficiencies in small businesses in Saudi Arabia not only limited the volume of demand for bank loans, but also prevented small businesses in general from making convincing applications for funding. The solution is not simply to change the nature of the financial institutions; perhaps more significantly, it is to provide the necessary education and training in management skills, and to establish appropriate regulations relating to accounting standards and the information required for the successful application for, and utilization of, funds for small-business development. But this deficiency in management skills is even more far-reaching, in that it not only contributes to the "finance gap", but also to the general inability of small businesses to contribute fully to the development process in Saudi Arabia.

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Privatization in an African context: the case of the United Republic of Tanzania

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Privatization is firmly on the declared policy agenda of many African countries. However, few of them have made any significant progress in this direction. A major reason for this has been the lack of a realistic assessment of the requirements and capabilities needed to carry out successful privatization - terms of financial support, policy initiatives, investment promotion and most importantly, human resource development. This paper is a first attempt to highlight these issues - particularly the relationship between rehabilitation and privatization - in the specific context of a country case-study rather than in the abstract.

The United Republic of Tanzania presents some interesting challenges to policy makers concerned with developing strategies for rehabilitating and regenerating African agricultural processing and manufacturing capacity. Between 1967 and 1986, the Government of the United Republic of Tanzania pursued a strong interventionist industrialization policy. This included nationalization of the majority of existing productive capacity and State promotion, financing and management of new large-scale projects. Until the adoption of the Economic Recovery Programme in June 1986, the private sector was crowded out of official thinking, access to loan capital and foreign exchange allocations. Moreover, the majority of new State investment initiatives were financed through official loans from bilateral and multilateral agencies. Foreign lending agencies must, then, accept some of the responsibility for the subsequent performance of many of these investments.***

The Government is now seriously considering privatization as a means of galvanizing industry and agricultural processing into

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***Total foreign assistance flows to the United Republic of Tanzania were 764.4 million United States dollars (US\$) in 1987 compared with total export earnings of around US\$ 350 million. Bilateral technical assistance amounted to US\$ 226.4 million, and principal donors were Sweden (24.4 per cent), Denmark (12.2 per cent), Finland (11.1 per cent), Norway (9.7 per cent), Federal Republic of Germany (6.8 per cent) and Japan (6.6 per cent). Capital assistance amounted to \$US 492 million, and principal donors were the World Bank (20.5 per cent), Sweden (10.4 per cent), Netherlands (9.1 per cent), the International Monetary Fund (8.9 per cent), Norway (7.3 per cent) and Japan (6.9 per cent).

regeneration. However, at present there are particular difficulties for liberalization and privatization policies.

A. Barriers to economic liberalization and privatization in the United Republic of Tanzania

In order to assess the true potential for privatization in the United Republic of Tanzania, it is important to have a clear understanding of current barriers to both economic liberalization and privatization. Many barriers stem from the socialist programme adopted in the Arusha Declaration of February 1967 and its resulting implications for ownership and control of industry, in particular the discouragement of privatized enterprises, non-individual ownership of land, subsidization and support of inefficient public enterprises, compression of public sector salaries and the collapse of work incentives, public sector retrenchment, and the negative attitude of trade unions towards liberalization and privatization.

B. The Arusha Declaration: background to the socialization programme

Until independence in 1961, Tanganyika was administered by the colonial government of the United Kingdom of Great Britain and Northern Ireland with relatively little intervention in economic matters. Unlike its neighbour, Kenya, which was governed very much as a European settler political economy with various economic privileges carefully parcelled out amongst settler and foreign business interests, Tanganyika had a relatively shallow State structure. The United Kingdom had never intended it to be a settler economy, so there was no pressing need to create an elaborate system of internal redistribution. Such economic development that did occur was largely the product of private initiative, particularly by migrants from South Asia. Foreign investments were generally managed as an adjunct of regional operations headquartered at Nairobi. Thus the brewery, the cigarette factory, the cement works, the oxygen plant, a major shoe manufacturer and the metal can plant, among others, were incorporated as subsidiaries of Kenyan-based operations. Even five years after independence, only 10 per cent of parastatal assets were in manufacturing, while the majority were in mining and electricity with scattered investments in financial services, tourism and plantation agriculture. The First Five-Year Plan (1964-1969) assumed a private investment share of 75 per cent of the industrial sector albeit with the anticipation of a substantial public sector investment programme.

The first interventionist programme, moderate by the standards of the 1960s, was superseded by the publication of the Arusha Declaration

of February 1967 which heralded the adoption of a full socialist programme of economic development. The influence of thinking in the former Union of Soviet Socialist Republics and in China of the 1950s and 1960s on the economic development policy of the United Republic of Tanzania is reflected in the emphasis on self-reliant industrialization. It is sometimes forgotten that the Arusha Declaration also called for greater emphasis on rural development though, in the event, priority was assigned to industrial self-reliance. A process of substantial resource transfer to the manufacturing sector was started in 1967 relying on public investment in State-owned enterprises. This policy continued until the economic crisis of the early 1980s. The manifest absence, in 1967, of an educated and skilled industrial class or indigenous technological capabilities embodied in a capital goods industry does not seem to have deterred policy makers. Indeed, policy makers seem to have simply assumed that the expansion of the public sector would stimulate the creation of these missing social formations, and, moreover, that there would be no significant efficiency losses while they were being created.

C. Ownership and control of industry

An attraction of State ownership was the expectation that profits would no longer go to private sector shareholders, most of whom were either non-indigenous residents or residents abroad, but would be available for domestic investment. In an attempt to ensure that accumulation was restricted to the State and that there would be no conflict between private and public interests, the Government introduced a Leadership Code. This officially forbade public employees from having second sources of income from private businesses or from renting property. The economic development strategy of the United Republic of Tanzania thus became sharply distinct from that of Kenya, which was pursuing a vigorous policy of attracting foreign investors through joint venture arrangements with government development finance institutions. Kenyan civil servants were openly encouraged by President Jomo Kenyatta to have sideline businesses.

The subsequent economic history of the United Republic of Tanzania has demonstrated that far from generating a reinvestable surplus, State-owned enterprises have been net consumers of resources - 7.8 billion Tanzanian shillings (T Sh) between 1981/82 and 1985/86, if corporate taxes are deducted from current account transfers.*

*State-owned enterprises would have, in all probability, paid the same taxes if they had been privately owned. The World Bank estimates a net transfer on the current account of only T Sh 991 million in the five years between 1981/82 and 1985/86 ([1], pp. 11-13).

There has been a significant shift in the composition of imports towards intermediates and capital goods, with the share of consumer goods in imports declining from around 30 per cent in 1970 to below 20 per cent in the 1980s. However, this trend reflects increased import dependency and probably hides considerable repressed demand for imported consumer goods. According to the World Bank, imports minus exports as a percentage of GDP have been above 9 per cent for 11 of the past 15 years; it was 10.5 per cent in 1985 and 14.5 per cent in 1986 [1]. Value added and production in the manufacturing sector, where investments by parastatals have been concentrated, actually declined between 1976 and 1986, from T Sh 3.1 billion to T Sh 1.0 billion (in 1976 prices), a decline of 68 per cent. In addition, the composition of output has not changed significantly towards capital and intermediate goods production, despite heavy investment in chemicals, fertilizers, rubber, plastics and metals.

D. The politics of manufacturing under government licence and the discouragement of private enterprise

While the economic consequences of the development policy of the United Republic of Tanzania between 1967 and 1986 may have been poor, the experience might be expected to have stimulated the search for alternatives. Unfortunately, a programme of nationalization also has its social impact. One of its effects is to discourage, and in extreme cases, criminalize private accumulation.* What was left of the private sector was suddenly placed at a disadvantage relative to the public sector over a whole range of business relationships. This is of particular importance in countries such as the United Republic of Tanzania, where the Government is pursuing a policy of industrialization through import substitution. Under these conditions, investors rely on the domestic market and a wide range of licences negotiated with the Government for their profitability - from quotas on competing imports and favourable treatment by the price controller to import licences and foreign exchange allocations for the purchase of essential inputs. Overnight, hard-won concessions may be lost to the public sector, which, by definition, usually has superior political support. People are encouraged to believe that private ownership is suspect, and if anyone is clever enough to accumulate capital, the State is liable to expropriate it. This in turn discourages entrepreneurial investment. As might be expected, there are very few

*The Leadership code was introduced to prevent leaders from having two incomes. This meant members of the managerial and civil service elite were not supposed to participate in any private business. It was never very successful, but it resulted in a stigma being attached to private-sector activity. Officials who broke the Code were forced to employ all sorts of indirect means in pursuing their sideline interests.

local industrialists today in the United Republic of Tanzania. Equally, there are very few civil servants who have any experience of negotiating with private-sector business interests - local or foreign.

E. The disruption of agriculture: villagization and non-individual ownership

Another argument advanced in support of the Arusha Declaration and, in particular, the policy of villagization or *ujamaa vijijini*, was that the traditional land-holding systems of communal farming prevalent in the United Republic of Tanzania did not involve individual ownership of land. Cultivation was a person's right within the vicinity of the home village. Therefore, it was argued, greater efficiency could be achieved in agricultural production with little social disruption by the expedient of moving the dispersed rural population into villages with new communal land-holdings, now designated by the State. This concentration of the rural population was supposed to facilitate the delivery of extension and social services. On the contrary this policy led to a progressive decline in agricultural production in the 1970s - the annual growth rate of agricultural GDP declined from 2.4 per cent during the period between 1970 and 1975 to 1.0 per cent between 1976 and 1980.

The poor performance of parastatal marketing boards, expanded to rationalize the marketing and distribution of crops, exacerbated the social disruption caused by villagization by further undermining individual incentives. Fortunately farmers in the United Republic of Tanzania seem to be resilient. With a series of good harvests in the mid-1980s, the transfer of responsibility for crop purchases to primary cooperative unions and the licensing of private traders in agricultural produce, agricultural output increased sharply to an annual growth rate of 5.4 per cent between 1984 and 1987. The lesson from agriculture seems to be clear - centralized direction of production and marketing does not work well in a large country with a scattered population.

While there has been a retreat from forced villagization, all land is held on a leasehold basis from the State, for either 33 or 99 years. This would seem to be one barrier to the development of a freehold property market that could be used to provide collateral for industrial investments. In its favour, the land tenure system probably discourages overinvestment in land and reduces inflationary pressures. Another factor in the United Republic of Tanzania and in many other African countries that inhibits the development of an active property market is the complexity and political sensitivity of property law and its application. This often

discourages banks from accepting land titles as collateral for commercial loans.*

F. The political significance of State employees and reduced incentives for efficiency

Another result of State socialism was the creation of a major political constituency - the bureaucratic bourgeoisie - that is dependent on the State and its political leadership.**[2] The adoption of State socialism also justifies the incorporation of the trade union movement as a subordinate wing of the ruling party, achieved in 1964 in the United Republic of Tanzania.*** Paradoxically, one of the features of State socialism, namely the tendency of State institutions in the absence of a price mechanism to suck in scarce resources until physical limits are reached, has worked to undermine the dependency of employees on the State.

Under socialism, the paternalistic State cannot permit a State-owned enterprise to go bankrupt, so there is a tendency for financial constraints to be what Kornai refers to as "soft" [3]. In theory, more resources will always be found to underwrite the solvency of State institutions, so the rational manager continues to accumulate resources, human and material, until physical scarcities are encountered. In the United Republic of Tanzania shortages of imported inputs and machinery were invariably encountered before those of human resources. There were, however, often shortages of skilled and experienced workers, and attempts by managers to substitute inferior human capital resulted in additional inefficiencies.

G. Public sector salary compression and the collapse of work incentives

What has happened in the United Republic of Tanzania as in many other developing countries, has been severe compression of public sector wages in parallel with substantial expansion of the number of employees. Figure 1 demonstrates this effect graphically. By 1984, public sector

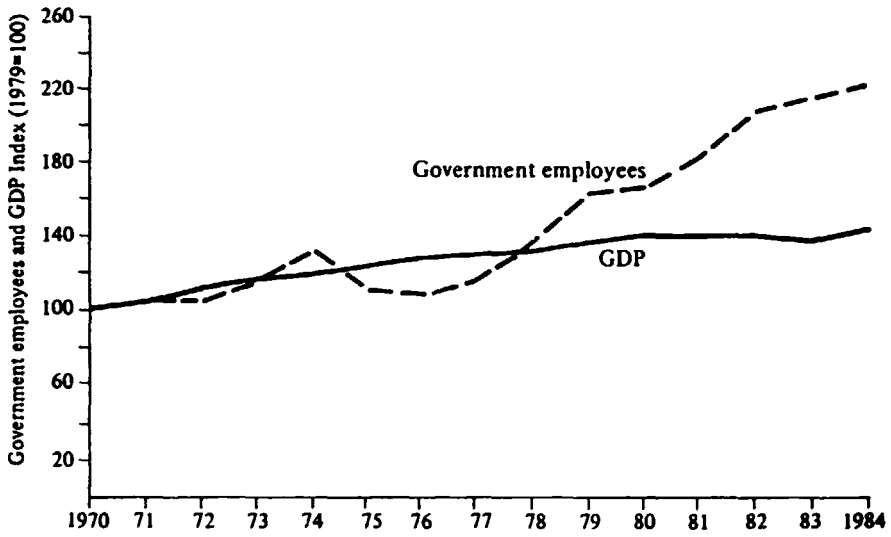
*Such is the case, for example, in Kenya and Zimbabwe, which otherwise have relatively well-developed financial institutions. Property and development companies make up a very important part of the smaller stock markets of South-East Asia and, although often of a very speculative nature, are successful in mobilizing private savings for industrial development.

**See G. Issa, [2] for a full account of this concept.

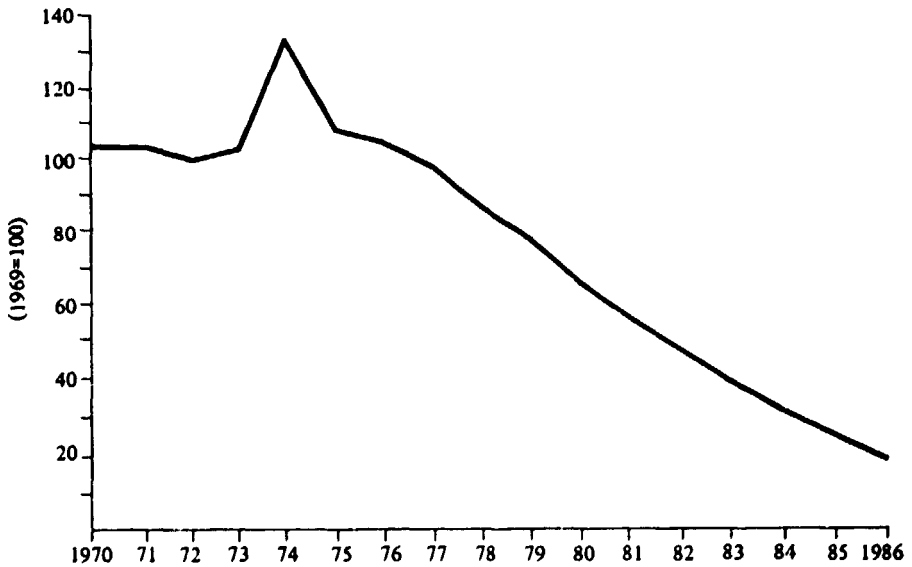
***The National Union of Tanganyika Workers (Establishment) Act 1964 abolished the independent Tanganyika Federation of Labour and reconstituted the trade union movement as an affiliated organization of the ruling Party, TANU, with nine industrial sections.

Figure I. Consequences of an import substitution policy

A. GDP and government employees, 1970–1984



B. Index of average public sector wages



Source: Tanzania Public Expenditure Review (Washington, D.C., World Bank, 1989), pp. 156–158

employment totalled some 302,000, or 77 per cent of formal sector wage employment. While employment in the public sector has increased at around 5 per cent per annum since 1970, the index of real average wages has declined from 100 in 1969 to 19 in 1986. The index for top salaries has declined even more dramatically, to six. Differentials have also been compressed sharply. A top salary that was nearly 30 times the minimum wage in 1969 was only about six times the minimum wage on the 1987/88 pay scale and four times after tax ([1], p. 55).

Unsurprisingly, the World Bank Public Expenditure Review of the United Republic of Tanzania found random evidence of attempts to compensate public employees for low pay through benefits in kind. Evidence was also found of attempts to supplement pay of more senior public employees with increased fringe benefits. Middle-level officials seemed to have suffered most over the last 10 years. As might be expected, many public servants have alternative sources of income, notwithstanding the Leadership Code. The World Bank Public Expenditure Review proposed a 30 per cent reduction in the number of staff on the payroll of both central and local government ([4], p. 20).

H. Public sector retrenchment and possible political resistance

Without substantial retrenchment, it is not clear how the efficiency of the civil service or parastatals of the United Republic of Tanzania can be improved, for there is no prospect of a rapid expansion of the government revenue base. Also, without sufficient supporting expenditures proper levels of efficiency cannot be obtained. Yet the ambitious plans of the Government for an expanding role for the private sector - particularly in the context of the successor to the Economic Recovery Programme, the Economic and Social Action Programmes launched in 1990 - imply increased competition for scarce managerial and technical skills and substantial increases in income inequality generally. Without adequate incentives, those public servants with scarce skills will leave to join the expanding private sector, or will increase the effort they put into income generation from secondary employment to achieve what they consider to be a reasonable income level. Clearly, privatization without retrenchment is also not viable. Doing nothing to reduce public sector employment and failure to increase wage levels will result in increased loss of talent, inefficiency and corruption, as those who remain seek to "tax" those who quit. Policy makers are thus caught between a rock and a hard place.

In considering possible forms of resistance to liberalization and privatization, it is also necessary to take account of political structures and processes in the United Republic of Tanzania. While a broad analysis of the political debate is beyond the scope of this article, and political factors may be very important, one arena in which argument and resistance may

be fierce is in the enterprise itself. It is here that the social consequences of retrenchment are going to be felt and where the losers and winners are going to be concentrated. While real wages may have declined very sharply over the last 10 years, some guaranteed income is better than no income and where primary employment often forms a basis of secondary sources of income. Primary employment provides a buffer to absorb the shocks of the more uncertain and competitive secondary labour market. Some argue, however, that because most people already have a "second line" in the private sector, there is very little ideological attachment to the public sector. The latter, in the popular mind, is synonymous with queues and shortages.

Public sector management is not insensitive to disparities in the labour market and will indulge valued skilled employees in various ways. For example, they may permit them to use the company's machine shop facilities to earn extra income carrying out work on behalf of private companies or individuals. Again where production in parastatal enterprises in the United Republic of Tanzania is subject to sharp fluctuations in capacity utilization, with periods of forced idleness due to shortages of energy, water, components or raw materials, management are probably only too willing to relieve the obvious hardship of their workers by turning a blind eye to secondary employment. In other words, public sector employment in the United Republic of Tanzania cannot be assumed to be the sole source of income of an individual employee. While those most wanted by newly privatized enterprises will probably have the widest range of secondary sources of income, the poorly educated, young, inexperienced and unskilled, and therefore most dispensable, workers will have few alternatives.* Moreover, the unskilled are also most likely to have been hired on the basis of the personal recommendations of influential politicians and officials.

I. Management retrenchment and management skills

The quality and skills of management undertaking specific privatization exercises will be an important factor in minimizing the political repercussions from the process of disposing of parastatals. The Government will have to place heavy reliance on particular enterprise management to oversee the transfer of assets and the restructuring of the labour force. Unfortunately, the public expenditure review of the World Bank is not very encouraging on the matter of the quality of parastatal

*In 1980, when the Bureau of Statistics last classified central government employees by whether they were "regular" or "casual" employees, over 14 per cent, or 31,000, were classified as "casuals".

management in the United Republic of Tanzania ([4], pp. 123-125):

"Enterprise management is weak as evidenced by the fact that a substantial percentage of managers cannot run their firms with a minimal level of financial discipline. In 1985/86, a third of the parastatals were delinquent in producing basic accounts and of those that did, three fifths were deficient; of those with clean audits, one fourth were making losses. Few Tanzanian parastatals carry out regular inventories of their assets, controls over use of credit and cash are weak, records on procurement and transactions with subsidiaries are often missing or incomplete, internal auditing procedures are often weak or non-existent, and allegations and proven instances of fraud, corruption and theft are common ... Good managers exist in Tanzania, but they appear few in numbers."

Apparently, 20 years after the Arusha Declaration and the creation of over 410 parastatals, the public sector management cadre is still very weak. Clearly, if the World Bank Public Expenditure Review is correct, a major management development programme is required in support of any privatization programme. A recent UNIDO rehabilitation survey of the United Republic of Tanzania also supports the World Bank findings about the weaknesses in enterprise management [5]. In addition to an absence of real managerial skills, the UNIDO survey found that many plants had a large number of vacancies in key management positions and at the intermediate level. This is particularly so with respect to production and accounting functions.

Alternatively, the management cadre may be more competent than the World Bank gives it credit for. Present behaviour could be a consequence of the prevailing system of incentives and level of managerial rewards. Being rational people, managers in the United Republic of Tanzania may have decided to devote their energies to other income-generating activities to the detriment of their primary employment. There is some evidence to suggest that the bureaucratic and hierarchical management structure in parastatals discourages initiative and decision-making. However, in the absence of reliable empirical evidence of public sector management motivation and time budgets, it would be foolhardy to make predictions as to the likely outcome of a radical change in the incentive system. More to the point, what evidence there is available does raise some very serious questions about the capacity and motivation of existing managers to carry through an effective privatization programme without substantial investment in management training and incentives.

J. Trade union attitudes to privatization

Every public corporation employing more than 10 workers has to have a Workers' Council that is serviced by JUWATA, the workers' organization affiliated to TANU. Any privatization or retrenchment proposal for a parastatal would have to be considered, at enterprise level, by the Workers' Council and debated within the Management Committee. The functions of the Workers' Council are formally limited to advising a Management Committee. Sixty per cent of committee members are drawn from senior management and outside appointees, and up to 40 per cent of members are workers' representatives elected by the Workers' Council. Parastatal management and government appointees normally command a majority on the enterprise Management Committee, but, with the prospect of serious retrenchment, some managers might be tempted to side with the workers' representatives or even organize the opposition.

Theoretically, JUWATA is bound to uphold the TANU policy of *Chama Cha Mapinduzi*. However, workers may sidestep institutions which do not receive their support. At present, the general opinion is that JUWATA is not a very significant organization at enterprise level, but it does provide a possible base for organizing opposition to major changes, particularly if policy reforms do not receive full backing from key Party members.* At least in formal terms the Arusha Declaration still forms the bedrock of government policy, and acts in various ways to inhibit the trend towards liberalization and privatization.

K. The textile industry: an example of the legacy of public ownership

Prior to independence in 1961 the United Republic of Tanzania had only one textile mill. The State holding company, TEXCO, established by presidential order in 1973 to "clothe the nation", has expanded its role and now has 14 subsidiary companies that own 18 mills. By 1988, of the total process capacities, between 85 per cent and 90 per cent lay in the public sector.

The strategy adopted by TEXCO reflected its mandate to supply the domestic market and to use locally grown cotton. Only one mill does not

*Some 7,000 civil servants were laid off between 1983 and 1985 without any major unrest, and this was at a time when the economy was in deep recession. By contrast, the United Republic of Tanzania today is experiencing real per capita economic growth largely as a result of improved agricultural output, so that the absorptive capacity of the rural economy should be much greater than in the mid-1980s. However, the World Bank Public Expenditure Review anticipates a reduction of 30 per cent of the public sector payroll of 291,841, that is, nearly 90,000 people, or over 10 per cent of the total formal sector labour force excluding the Armed Forces.

rely on domestically produced cotton. The local market was protected from foreign competition until 1986, when the Government acceded to popular pressure to allow imports. The consequential flood of very low-cost second-hand clothing with which no conventional garment maker could compete, even with a 60 per cent tariff protection, virtually destroyed the local ready-made clothing industry.

The small private sector responded to the increasingly liberal market after 1986, by altering their product mix. They began manufacturing both towels and bed linen and exporting some of these items together with knitted fabrics and garments, mainly T-shirts. By contrast, TEXCO companies have generally continued to supply the local market with khangas and kitenge cloth. While TEXCO companies are attempting to change their product range and orientation towards exports they are locked into past decisions by poorly maintained machines, very low productivity, weak management and working capital problems caused by low capacity utilization and by the need to service a large foreign debt burden. The total nominal annual capacity of textile industry in the United Republic of Tanzania is 49,000 tonnes of yarn and 278 million square metres of woven cloth. In 1988, annual utilization of capacity was 34 per cent in spinning, 17 per cent in weaving and 24 per cent in wet processing. The normal overall minimum level of capacity utilization that should be expected is 75 per cent in spinning and processing and 68 per cent in weaving. In short, utilization of national capacity was at a level that is financially unsustainable.

Part of the causes of the low level of performance were outside the control of mill management, in particular shortages of electrical power and water. However, capacity utilization statistics suggest that private sector managers were much more successful coping with the problems of operating than their public sector counterparts. Thus the private sector achieved 60 per cent utilization in spinning and processing, compared with around 18 per cent in the public sector. For weaving the public sector achieved only 13.5 per cent, while the private sector obtained 46 per cent. The *prima facie* case for privatizing the textile sector would seem to be very strong.

L. The move towards economic liberalization, privatization and the promotion of private investing

The path to economic liberalization has not been smooth. At the same time as the Party and a section of the Government has continued to assert its belief in national plans, the Government, with the Ministry of Finance as the lead Ministry, has been engaged in developing a progressive liberalization programme since 1982. To be sure, it has taken some time to build up the political and administrative momentum behind this reform programme, as evidenced by the protracted negotiations over

the structural adjustment programme with the International Monetary Fund and the World Bank from 1982 to 1985. However, the launch of the Economic Recovery Programme, in June 1986, and subsequent events would seem to indicate the ascendancy of liberalization and reformism over State control and socialism.

Despite the government espousal of the Economic Recovery Programme, industrial development policy was propounded through the TANU programme for 1987 to 2002, which was more or less a reiteration of the Basic Industrial Strategy of the period 1975-1978. The TANU programme proposed further development of basic industries such as the iron and steel, coal, chemicals, metal and engineering industries. In response, the Government produced the Second Union Five-Year Development Plan (1988/89-1992/93), but this seems to be already largely disregarded in the struggle for economic recovery. Nevertheless, there is some evidence of a continuing rearguard action, with the Ministry of Finance and the Bank of Tanzania identified as bastions of economic liberalism and the Party as defender of the principles of the Arusha Declaration. The formation of the Planning Commission, in July 1989, outside the Ministry of Finance but in the Office of the Union President, would seem to reflect the need to establish an arbiter between those who favour the public sector and those who favour the private sector. Further evidence of continuing debate about the direction of economic policy and its political sensitivity is provided in the 1990 Investment Promotion Policy.

M. The rediscovery of the virtues of private investment

The opening paragraph of the text of the Investment Promotion Policy quotes the Arusha Declaration of 1967 and "the nation's commitment to the policy of socialism and self-reliance, under which control of the commanding heights of the economy is vested to the public via the Government, parastatals and cooperative organizations". It continues with the words "During the whole period following independence, foreign investment had played a key role in the development of various sectors of the economy ...", almost as if the nationalization programme that followed from the Arusha Declaration had not been of any significance. Another paragraph reveals the government's recognition of the shift in bargaining power in favour of foreign investor interests at the expense of host Governments as a result of increased competition for inward investment. The United Republic of Tanzania, it would seem, has to make good for its post-independence history of nationalization, blocked compensation funds and dividends, and reticence towards foreign investors. In the 1990s, the Investment Promotion Policy promises that transparency and clarity of investment rules and regulations will characterize the new policy environment.

N. Import-substituting industrialization and indebtedness

In the debate about the failures of industrialization policy in the United Republic of Tanzania most attention has been focused on the role of public ownership and the quality of public sector management. Relatively little attention has been paid to the underlying policy of industrialization based on import substitution and the implications of that policy for liberalization and privatization. The limited available evidence on the private sector raises some rather disquieting questions about the supposed "liberality" of the policy environment in which the private sector operates.

The causes of illiberality in an economy pursuing industrialization through import substitution are straightforward. The dynamics of an import substituting industrialization policy are outlined in figure II. The diagram shows clearly the way in which an import-substituting policy creates its own shortages and pressures on the authorities to introduce discriminatory tariffs and, ultimately, rationing of import licences. These in turn encourage the growth of smuggling and corruption of licensing procedures.

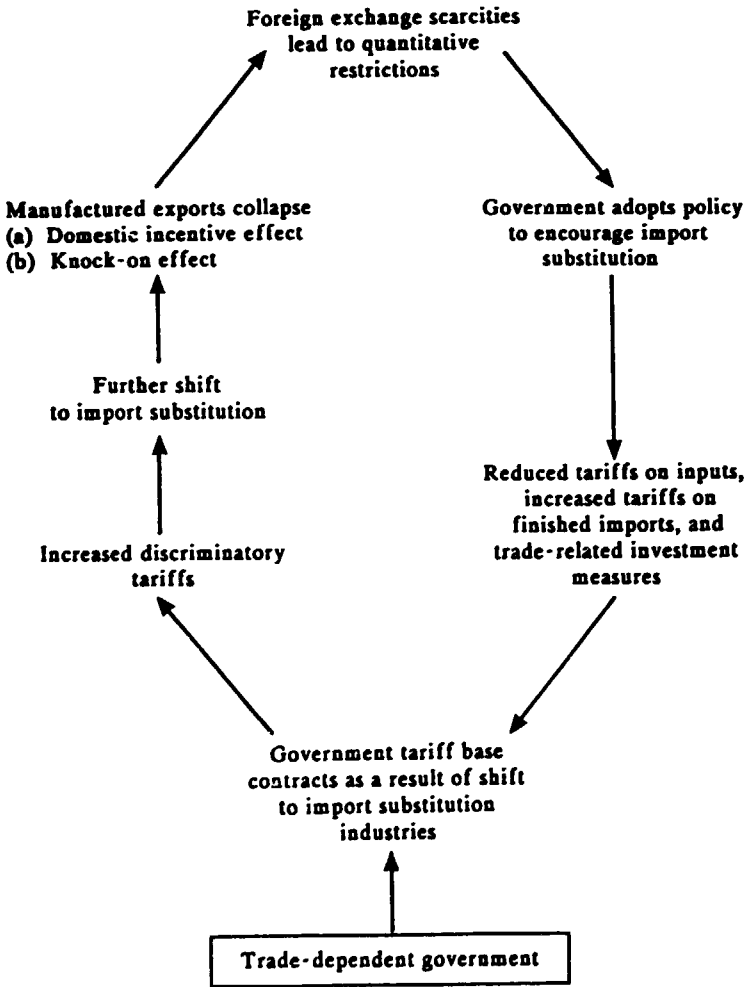
At present the Open General Licensing scheme financed under the structural adjustment programme is relieving the pressure on the authorities. It is a matter of conjecture as to how long the scheme is sustainable. If privatization proceeds on a significant scale, this implies substantial reinvestment in capital equipment and increased capacity utilization. While some of the re-equipment costs may be externally financed, the new private investment will also contribute to increased imports of raw materials and intermediates.

Moreover, the Government is going to find it extremely difficult to persuade local or foreign investors to buy public sector enterprises without offering some concessions on import protection. Once these are conceded, privatization merely means the transfer of monopolistic privilege from public servants to private citizens. While private firms may be expected to exploit these privileges with greater vigour than their predecessors, the fundamental structural problems of industrialization based on import substitution will remain. The only way such a policy can be sustained is through expanding the export base which is primarily agricultural or through increased donor support. While there may be some opportunities for the development of domestic-resource-based, export-oriented manufacturing industry, they are likely to be limited in the short to medium term.

O. Conclusions: policies, privatization and the resource gap

One of the main political factors that contributed to the initial popularity of the Arusha Declaration was the way it was presented as a

Figure II. Public service expansion and decline of real pay



solution to the problem of establishing national control of the "commanding heights" of the economy. The problem still remains. There are not enough indigenous entrepreneurs in the United Republic of Tanzania with the financial resources to take over more than a very small proportion of parastatal enterprises. Most enterprises that are successfully privatized will be joint ventures between private interests (local and foreign) and quasi-public portfolio investors such as the National Insurance Company - the State insurance monopoly - and the National Provident Fund and the development finance institutions. Foreign investors are likely to insist on some equity owned by nationals of the United Republic of Tanzania.

A more general question than that of privatization is how to open up the public sector to new capital investment in a way that reflects whether a project is truly bankable. Ownership is, in the context of the United Republic of Tanzania, an important but a secondary issue. Where profitability of an import-substituting parastatal depends substantially on government protection and licences, valuation of assets is in any case going to be very difficult. It is essential that the project appraisal process is shielded from political interference, yet existing institutions are organized for just that purpose, as all projects involving parastatals need ultimately to be approved by the Planning Commission. Experience in other African countries of lending by development finance institutions to the private sector is not very encouraging. Too often, public investment funds are squandered on "privately sponsored" white elephants.

Generalizing from the case of the United Republic of Tanzania, it is clear that in considering privatization as a strategy for economic regeneration the key issue from the point of view of the Government is one of finance. In the absence of any alternative way of rehabilitating industry, private share ownership is acceptable. If the financial requirements to turn an enterprise around are so large that the share of the State declines below 50 per cent, then, in present circumstances, loss of control is no longer an issue.

The priority is to develop mechanisms for refinancing illiquid but potentially viable firms and encouraging new private inward investment. This suggests that there is a need for a greatly enhanced role for the development banks to act as "honest brokers" between the public and the private sector. It also implies an enhanced technical and management consulting capacity, for successful rehabilitation depends on careful attention to technical factors, marketing and human resource development, as well as realistic financial provision. The United Republic of Tanzania is currently littered with derelict projects that have failed to take account of the totality of business enterprise. Ownership transformation, then, is only part of the process of revitalizing the economy. Without structural adjustment, old problems will merely change their form to reappear in their familiar guise of foreign exchange shortages, import quotas and inflation.

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Promotion of small- and medium-scale industry with imported labour: policy and prospects in the states of the Persian Gulf

*Ian Livingstone**

This paper deals with small- and medium-scale industry promotion in the rather special circumstances of the Persian Gulf States of Saudi Arabia, Kuwait, Bahrain, Qatar, United Arab Emirates and Oman, where a large proportion of the labour force is imported. While these countries are relatively rich in oil and gas (less so in the case of Oman), and have some large-scale petrochemical industries, they see it as a natural development that they should industrialize and broaden their industrial base by a wider mix of industries, including small- and medium-scale industries. While the economies are rich in capital, much of which has been invested externally on a regular basis, they are generally short of manual labour, which they have had to import for the most part from neighbouring countries. The fact that smaller-scale industry is particularly labour-intensive raises interesting issues of national costs and benefits which are worth exploring. This question has come under even closer scrutiny since the invasion of Kuwait, which is seen, rightly or wrongly, as having added extra political and social costs to imported labour. Despite regional unhappiness with such dependence, in Kuwait in particular, industrial development is still the desired goal, and the dilemma posed by the labour shortage remains.

Apart from some comment on this issue, the effectiveness of the range of measures that have been pursued for small- and medium-scale industry by the countries of the Persian Gulf, separately and collectively as members of the Gulf Cooperation Council (GCC), will be evaluated. First of all, however, the structure and development of industry in those countries and the position of small- and medium-scale industry within them will be analysed. This structure has evidently been disturbed in the case of Kuwait, and it remains to be seen how it will develop in the short and longer term.

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A. The growth and composition of manufacturing in the GCC States

Until as recently as 1980 manufacturing in the GCC States as a group amounted overall to less than 5 per cent of GDP (table 1), although there had been significant expansion during the 1970s in Bahrain. In the largest economy, Saudi Arabia, it accounted for 5 per cent. Since that time, however, there has been a steady increase in the share overall, to nearly 14 per cent in 1989, fairly evenly spread among the six States, although expansion was most rapid in the United Arab Emirates, where it grew to nearly 25 per cent, while the largest country, Saudi Arabia, accounted for over 56 per cent of manufacturing value added (MVA) in the six States, the United Arab Emirates accounted for as much as 21 per cent, and nearly one third of the increase since 1980. This increase, however, was strongly influenced by one dominant industrial sector.

A sectoral breakdown of MVA (table 2) shows an overwhelming importance of the petroleum, chemicals, rubber and plastics industry, accounting for a full two thirds of MVA. The capital-intensity of the dominant industry means that it accounts for only just over 13 per cent of those employed in manufacturing, which in any but a labour-scarce economy would have raised serious employment issues. The share of the industry in MVA varies around this high level, from 51 per cent in Kuwait to 84 per cent in Bahrain, with a major deviation in the case of Oman, at 33 per cent, giving the latter a rather different, less oil- and gas-dependent (and less rich) economy. The next highest industry in terms of MVA is construction, at 8 per cent overall: however, the size of this industry is directly determined by the level of available oil revenue and does not provide any independent contribution to manufacturing growth. This applies to part of the metal products industry also, making items related to construction, such as metal windows. In employment terms, the contribution across industries is much more even, with metal products and machinery standing out as contributing 25 per cent of the total.

The volatility in oil-dependent economies not only of the oil industry and of GDP as a whole, but of manufacturing and its separate branches, can be brought out in relation to the United Arab Emirates (table 3), in which, as noted above, manufacturing has been expanding at the fastest rate. Thus the value of manufacturing GDP increased by 133 per cent during the period 1980-1984 (80 per cent of this in the petroleum, chemicals and rubber industry) and then fell by one fifth in 1988, all accounted for by the same industry. However, when that industry fell in 1984-1988, there were significant slumps also in industries with code numbers 33, 34 and 36 in the International Standard Classification of All Economic Activities (ISIC). The most consistent growth was in the traditional, food, beverages and tobacco industry, with encouraging results also in metal products and machinery. Expansion in traditional

Table 1. MVA in the Persian Gulf States, at constant 1980 prices, relative to GDP, 1970-1988

Year and item	Bahrain		Kuwait		Oman		Qatar		Saudi Arabia		United Arab Emirates		Total	
	(million dollars)	(percentage of GDP)	(million dollars)	(percentage of GDP)	(million dollars)	(percentage of GDP)	(million dollars)	(percentage of GDP)	(million dollars)	(percentage of GDP)	(million dollars)	(percentage of GDP)	(million dollars)	(Percentage of GDP)
1970	76	3.2	876	2.4	0.8	0.0	43	0.7	4 118	7.0	24	1.6	5 138	4.8
1975	161	7.7	1 352	4.7	7.3	0.2	108	1.5	4 897	4.8	127	0.9	6 652	4.2
1980	557	14.7	1 615	5.6	45.2	0.8	258	3.3	7 739	5.0	1 131	3.8	11 345	4.9
1981	582	15.0	1 483	6.4	74.5	1.1	261	3.4	8 281	5.2	2 155	7.1	12 836	5.6
1982	563	13.6	1 812	8.8	109.2	1.4	285	4.2	9 063	6.4	2 496	8.9	14 358	6.8
1983	595	13.4	1 812	7.9	172.9	1.9	314	5.1	10 252	7.1	2 459	9.3	15 605	7.3
1984	591	12.6	1 777	7.5	244.2	2.3	375	4.8	10 090	7.5	2 604	9.4	15 681	7.5
1985	558	12.6	1 817	8.6	307.5	2.6	389	6.2	10 592	8.6	2 547	9.4	16 211	8.4
1986	557	13.6	1 853	10.5	500.5	6.0	394	8.0	11 012	9.8	2 866	13.6	17 182	10.2
1987 a/	596	14.4	1 947	9.5	836.4	9.6	462	8.6	11 725	10.4	3 394	16.8	18 960	11.0
1988 a/	659	16.0	2 028	9.3	1 218		550	9.9	12 488	10.9	4 076	20.3	21 019	11.9
1989 a/	696	16.6	2 078	10.7	1 674		623	11.5	12 925	12.3	4 911	24.8	22 907	13.7
Share of total (1989)	--	3.0	--	9.1	--	7.3	--	2.7	--	56.4	--	21.4	--	100.0
Share of increase (1980-1989)	--	1.2	--	4.0	--	14.1	--	3.2	--	44.9	--	32.7	--	100.0

Source: UNIDO.

a/ Expected value.

Table 2. Sectoral breakdown of MVA and employment in GCC states, 1984
(MVA: millions of United States dollars at constant 1980 prices)

ISPC code	Industry	Saudi Arabia		Kuwait		United Arab Emirates		Bahrain		Qatar		Oman		MVA total		EE total	
		MVA	EE	MVA	EE	MVA	EE	MVA	EE	MVA	EE	MVA	EE	GCC	(percentage)	GCC	(percentage)
31	Food, beverages and tobacco	682	16 555	150	9 177	(100)	5 271	32	(1 500)	15	1 437	(50)	(1 000)	(1 030)	7.5	34 940	11.2
32	Textiles, clothing and leather	292	22 472	127	8 079	(100)	9 092	--	--	15	1 865	(30)	(1 000)	(565)	4.1	42 510	13.6
33	Wood products and furniture	117	11 324	98	4 272	(70)	7 114	5	(1 000)	22	1 824	(30)	(1 000)	(340)	2.5	26 535	8.5
34	Paper, printing and publishing	137	7 044	81	3 846	(80)	4 350	6	(500)	18	1 187	(10)	(1 000)	(330)	2.4	18 825	6.0
35	Chemicals, petroleum, rubber and plastics	5 117	20 196	1 099	8 561	(1 860)	4 591	681	(4 000)	296	2 557	(100)	(2 000)	(9 115)	66.7	41 905	13.4
36	Construction	527	34 428	213	6 044	(250)	7 348	6	(2 000)	53	4 058	(30)	(2 500)	(1 080)	7.9	56 280	18.0
37	Basic metals	34	4 368	25	75	(30)	2 056	57	(1 000)	38	1 223	(20)	(1 000)	(205)	1.5	9 720	3.1
38	Metal products and machinery	317	51 538	328	11 653	(200)	8 843	26	(3 500)	44	1 259	(20)	(2 000)	(935)	6.8	78 795	25.2
39	Other manufacturing	34	1 175	6	968	(10)	249	0.1	(500)	3	0.84	(10)	(500)	(65)	0.5	3 475	1.1
	Total	7 227	170 000	2 087	52 675	(2 700)	48 814	813.1	(14 000)	504	15 494	(300)	(12 000)	(13 665)	100.0	312 985	100.0

Source: UNIDO estimates.

Notes: EE = estimated employment.

Figures in parentheses are rough estimates.

Table 3. United Arab Emirates: changes in the structure of manufacturing GDP, 1975-1988

ISIC code	Industry	Contribution to GDP (million dirhams at current prices)				Index of contribution to GDP (1980 = 100)			
		1975	1980	1984	1988	1975	1980	1984	1988
31	Food, beverages and tobacco	59	241	381	587	24	100	158	244
32	Textiles, clothing and leather	-	210	194	411	-	100	92	196
33	Wood products and furniture	52	148	232	151	35	100	157	102
34	Paper, printing and publishing	56	104	245	207	54	100	236	199
35	Chemicals, petroleum, rubber and plastics	30	2 168	6 683	4 500	1	100	308	208
36	Construction materials	39	831	922	520	5	100	111	63
37	Basic metals	54	263	622	612	21	100	237	43
38	Metal products and machinery	34	166	440	703	20	100	265	423
39	Other manufacturing	43	60	42	114	72	100	70	190
	Total manufacturing	369	4 191	9 761	7 805	9	100	233	186
	Other	39 266	107 279	94 782	79 736	37	100	88	74

Source: Statistical Department, United Arab Emirates..

industries such as food and textiles has occurred in part through the pursuit of conventional import-substituting policies.

B. The size distribution of manufacturing establishments in the Persian Gulf States

There is very wide variation in statistical practice when it comes to defining small, medium-scale or large industry, and even in the criterion to be used, whether numbers employed, or capital, or measures of output. All statistical offices in the Persian Gulf countries use numbers employed for classification purposes except for Oman, which uses capital. The range 1 to 9, in terms of numbers employed, may be used to refer to "micro-enterprises"; the range 10 to 49 may encompass "small enterprises" (excluding micro-enterprises), but with separate information supplied on the category 10 to 19, which may be seen as intermediate within these first two categories; the range 50 to 99 may be taken as "medium-scale industries", and 100 and above as "large industries". These last two categories are much less easy to deal with, since many firms with 50 to 99 employees could be quite capital- and technology-intensive and produce large value added, while firms employing over 100 may be labour-intensive, with limited capital and technology, and could much more appropriately be considered of medium size. The division is retained simply because of the need to speak consistently in terms of one criterion, numbers employed; the numbers in the range 50 to 99 should be seen rather as an index of changes in the medium-scale industry category.

Problems of perception in regard to scale appear to be particularly strong in Western Asia, where bankers, policy makers and others tend to view even firms employing 100 persons as small; this is perhaps due to the existence of very large enterprises, associated with petrochemicals, and the general affluence of the area. If the actual size distribution of manufacturing establishments is examined, however (table 4), the overwhelming proportion of establishments will be found to comprise micro-enterprises, except in the case of Bahrain: 90 per cent in Saudi Arabia, 83 per cent in Kuwait, 91 per cent in the United Arab Emirates and 85 per cent in Qatar. Within the micro-enterprise sector as defined, a large proportion falls in the range of 1 to 4 persons employed, indicating that this is very much what has been termed in other countries the "informal sector". Such enterprises do not provide corresponding proportions of employment in manufacturing, but the 39, 24, 35 and 29 per cent contributed, respectively, in Saudi Arabia, Kuwait, United Arab Emirates and Qatar are considerable. If the aim were essentially to create employment, this sector should certainly not be ignored; the question in the Persian Gulf States is therefore how far this was and is the prevailing objective.

Table 4. The size distribution of manufacturing establishments in the Persian Gulf States, excluding Oman

Country and year a/	Range of numbers employed and size distribution								Not specified	Total
	1-4	5-9	10-19	20-49	50-99	100-199	200-499	500+		
<i>A. Breakdown by number</i>										
Saudi Arabia (1981) b/										
E	16 177	3 994	1 477	566	182	177	--	--	--	22 573
N	35 633	25 176	19 491	16 285	12 083	47 419	--	--	--	156 087
Kuwait (1985)										
E	3 006	865	355	257	78	47	30	8	--	4 646
N	7 556	5 340	4 759	7 883	5 232	6 088	8 718	7 099	--	52 675
United Arab Emirates (1985)										
E	6 055	1 191	332	225	93	62	--	9	--	7 967
N	14 513	6 302	4 411	6 403	6 231	12 036	--	8 386	--	59 785
Bahrain (1988) c/										
E	21	52	41	60	18	23	--	--	--	215
N	68	405	565	1 859	1 082	6 113	--	--	--	10 092
			10-34	35-49						
Qatar (1986)										
E	1 298	375	209	31	28		--	5	18	1 978
N	2 953	2 354	3 345	1 270	1 800	142 911	--	3 756	--	18 389

Country and year ^{a/}	Range of numbers employed and size distribution									Total
	1-4	5-9	10-19	20-49	50-99	100-199	200-499	500+	Not specified	
<i>B. Breakdown by percentage</i>										
Saudi Arabia (1981)										
E	71.7	17.7	6.5	2.5	0.8	0.8	--	--	--	100
N	22.8	16.1	12.5	10.4	7.7	30.4	--	--	--	100
Kuwait (1985)										
E	64.7	18.6	7.6	5.5	1.7	1.0	0.6	0.2	--	100
N	14.3	10.1	9.0	15.0	9.9	11.0	16.6	13.5	--	100
United Arab Emirates (1985)										
E	76.0	14.9	4.2	2.8	1.2	0.8	--	0.1	--	100
N	24.7	10.7	7.5	11.7	10.6	20.5	--	14.3	--	100
Bahrain (1988)										
E	9.8	24.2	19.1	27.9	8.4	10.7	--	--	--	100
N	0.7	4.0	5.6	18.4	10.7	60.6	--	--	--	100
<i>10-34</i> <i>35-49</i>										
Qatar (1986)										
E	65.6	19.0	10.6 ^{d/}	1.6 ^{e/}	1.4	0.7	--	0.3	0.9	100
N	16.1	12.8	18.2 ^{e/}	6.9 ^{e/}	9.8	15.8	--	20.4	--	100

Source: National censuses of establishments or equivalent.

Note: E = number of establishments; N = numbers employed.

^{a/} In parentheses.

^{e/} Registered manufacturing establishments.

^{e/} Establishments with 35-49 employees.

^{b/} Private establishments.

^{d/} Establishments with 10-34 employees.

The biggest shares of employment are provided by large enterprises: 30, 41, 34 and 36 per cent, respectively in the cases of Saudi Arabia, Kuwait, United Arab Emirates and Qatar, even though they account for no more than 1 to 2 per cent, of the number of establishments. In the case of Saudi Arabia, moreover, the relative importance of large-scale establishments is substantially under-estimated because the data for Saudi Arabia pertain only to the private sector, and virtually all public enterprises in the country are large.

A feature of industrial structure in the Persian Gulf States to which attention may be drawn is the low representation of medium-scale establishments. The data for the different countries in table 4 cannot be amalgamated, since they refer to different years, but it may be noted that medium-scale establishments altogether account for only about 400 out of 32,000 in the table, approximately 1.2 per cent. Small to medium-scale enterprises (excluding micro-enterprises) account for 28 to 35 per cent of the total, of which medium-scale enterprises are a small proportion, 7 to 11 per cent. The pattern is essentially one of large numbers of micro-enterprises or informal-sector enterprises, each employing a few people, and a small number of important large enterprises, with a gap in between.

Bahrain shows a very different size distribution from the other countries, though the difference is partly statistical: the data refer to registered manufacturing establishments only, and show a very small proportion of micro-enterprises. There is a much larger proportion of employment in large enterprises: while the 60 per cent in the table is partly misleading, the ratio of this employment that in the range of 10 to 99 employees is 1.74, compared with 0.99 in Saudi Arabia, 0.34 in Kuwait, 0.71 in the United Arab Emirates and 0.45 in Qatar. Bahrain has been relatively successful in establishing a number of large enterprises.

The data for Oman are not comparable, for the reasons given above. Nevertheless, an examination of the size distribution on the basis of capital invested (table 5) shows a clear preponderance of small establishments, the lowest three categories in 1987 accounting for 86 per cent of the establishments and less than 18 per cent of the estimated capital invested. There is the same relative importance of large enterprises, the largest 53 establishments (less than 2 per cent) accounting for over 57 per cent of capital investment (leaving 25 per cent for the middle categories). There has been a considerable increase in the number of large enterprises and the number of small establishments, less so in the middle categories, with corresponding increases in capital invested, which more than doubled between 1980 and 1987.

A sectoral breakdown of MVA and employment in all six States was given above for 1984. MVA is the most direct measure of value to the economy, especially in the Persian Gulf States, where employment is not an important objective. It is worth, however, looking at the contribution of forms of different sizes to employment in the various sectors (table 6).

**Table 5. Oman: distribution of registered manufacturing establishments
by size of capital invested, end 1980 and end 1987**

Minimum amount of capital invested a/		Manufacturing companies registered				Estimated share of capital invested	
		Number		Percentage			
Thousand dollars	Thousand Rials Omani	1980	1987	1980	1987	1980	1987
45.2	2	250	1 136	25.4	38.9	1.6	3.3
13	5	216	700	21.9	24.0	3.0	4.4
26	10	354	690	35.9	23.6	11.5	10.0
65	25	74	148	7.5	5.1	5.2	4.6
130	50	30	93	3.0	3.2	13.0	5.8
260	100	43	100	4.4	3.4	14.0	14.6
650	250	11	29	1.1	1.0	7.7	9.0
1 300	500	3	8	0.3	0.3	4.2	5.0
2 600	1 000	1	7	0.1	0.2	2.8	8.7
5 200	2 000	--	2	--	0.1	-	4.2
7 800	3 000	1	1	0.1	0.1	6.5	2.9
10 400	4 000	--	--	--	--	--	--
13 000 and over	5 000	3	6	0.3	0.2	30.6	27.5
Total		986	2 920	100	100	100	100
Total estimated capital (thousand rials Omani)						53 840	120 200

Source: Statistical Year book, 1986 (Muscat, 1986).

a/ Figures indicate minimum amount in range of values up to minimum value in next size range.

**Table 6. Size distribution of manufacturing industry
in five Persian Gulf States
(Percentage)**

Country, year and industry	Breakdown of establishments by numbers employed						Total
	1-4	5-9	10-19	20-49	50-99	100+	
<i>Saudi Arabia (1981) a/</i>							
Food, beverages and tobacco	2.2	1.4	1.3	1.3	0.9	3.5	10.6
Textiles, clothing and leather	9.0	3.5	0.7	0.2	0.1	0.3	14.4
Wood products and furniture	1.7	2.1	1.8	0.9	0.4	0.4	7.3
Paper, printing and publishing	0.4	0.5	0.9	0.9	0.5	1.9	5.1
Chemicals, petroleum, rubber and plastics	0.1	0.1	0.3	0.8	0.6	3.3	5.3
Construction materials	1.9	3.4	3.1	2.4	1.9	9.4	22.1
Basic metals	0.2	0.2	0.2	0.2	0.1	0.5	1.6
Metal products and machinery	6.4	5.0	4.2	3.7	3.0	10.8	33.0
Other manufacturing	0.3	--	0.1	0.1	0.1	0.1	0.8
Total manufacturing	22.8	16.1	12.5	10.4	7.7	30.4	100
<i>Kuwait, 1985</i>							
Food, beverages and tobacco	1.4	1.0	1.4	1.4	0.9	11.5	17.4
Textiles, clothing and leather	8.2	4.5	1.3	0.8	--	0.5	15.3
Wood products and furniture	1.3	1.1	1.1	2.2	1.3	1.1	8.1
Paper, printing and publishing	0.1	0.2	0.6	1.6	1.4	3.4	7.3
Chemicals, petroleum, rubber and plastics	0.1	0.1	0.5	2.0	2.1	11.5	16.3
Construction materials	0.1	0.3	1.5	3.5	1.0	5.1	11.5
Basic metals	--	--	--	--	0.1	--	0.1
Metal products and machinery	2.6	2.1	2.4	2.4	3.2	8.5	22.1
Other manufacturing	0.8	0.8	0.2	0.1	--	--	1.8
Total manufacturing	14.3	18.6	10.1	7.6	5.5	41.6	100
<i>United Arab Emirates, 1985</i>							
Food, beverages and tobacco	1.3	0.6	0.7	1.2	1.4	3.2	8.4
Textiles, clothing and leather	15.3	4.7	1.2	0.6	0.2	--	21.9
Wood products and furniture	3.5	1.3	0.8	0.9	1.0	0.5	8.0
Paper, printing and publishing	0.3	0.3	0.7	1.4	1.4	3.1	7.3

continued

Table 6 (continued)

Country, year and industry	Breakdown of establishments by numbers employed						Total
	1-4	5-9	10-19	20-49	50-99	100+	
Chemicals, petroleum, rubber and plastics	0.1	0.2	0.4	1.7	1.4	11.6	15.4
Construction materials	0.9	1.1	1.8	2.5	2.6	5.5	14.5
Basic metals	--	--	--	--	0.1	2.4	2.5
Metal products and machinery	2.8	2.2	1.9	3.2	2.4	8.4	21.0
Other manufacturing	0.4	0.2	0.1	0.1	0.2	--	1.0
Total manufacturing	24.7	10.7	7.5	11.7	10.6	34.7	100
<i>Qatar</i>							
Food, beverages and tobacco	1.7	1.2	2.0	0.7	2.0	1.9	9.5
Textiles, clothing and leather	10.0	6.1	3.1	0.5	--	--	19.7
Wood products and furniture	2.1	1.7	3.6	1.3	2.0	2.9	13.6
Paper, printing and publishing	--	0.2	0.6	1.5	1.6	1.4	5.3
Chemicals, petroleum, rubber and plastics	0.1	0.3	0.6	0.8	1.4	14.0	17.3
Construction materials	0.6	1.7	4.3	1.4	1.3	7.7	17.0
Basic metals	--	--	--	--	--	6.4	6.4
Metal products and machinery	1.5	1.5	3.9	0.7	1.5	1.9	11.0
Other manufacturing	0.1	--	0.1	--	--	--	0.2
Total manufacturing	16.1	12.8	18.2	6.9	9.8	36.3	100
<i>Bahrain (1988) b/</i>							
Food, beverages and tobacco	--	0.8	1.7	2.9	1.3	10.8	14.9
Textiles, clothing and leather	--	--	0.3	0.4	--	1.9	2.5
Wood products and furniture	--	--	0.2	0.7	1.1	1.0	3.1
Paper, printing and publishing	--	--	--	0.6	--	3.8	4.4
Chemicals, petroleum, rubber and plastics	0.2	0.4	0.5	4.9	2.2	15.9	24.0
Construction materials	--	1.3	1.0	3.3	4.3	4.9	14.8
Basic metals	--	--	--	--	--	20.5	20.5
Metal products and machinery	0.3	1.1	1.9	4.6	3.2	1.8	13.0

continued

Table 6 (continued)

Country, year and industry	Breakdown of establishments by numbers employed						Total
	1-4	5-9	10-19	20-49	50-99	100+	
Other manufacturing	--	0.3	--	1.7	--	--	2.0
Total manufacturing	0.7	4.0	5.6	18.4	10.7	60.6	100

Source: National establishment censuses.

a/ Private enterprises.

b/ Licensed estates.

Large enterprises in all countries are conspicuous particularly in the petroleum, chemicals and plastics industry, in metal products and machinery, and to a somewhat lesser extent in construction, as measured by the employment criterion. In the food, beverages and tobacco industry significant employment is provided by establishments of all sizes, and there is evidently a considerable amount of large-scale factory production in the industry. Bahrain exhibits one difference in its distribution pattern, the prominent position of large-scale enterprise production in basic materials, centred on the alumina smelter and related industries. But the very substantial employment provided in the textiles and clothing industry can be seen to come very largely from micro-enterprises, especially the 1-to-4 persons category. In the United Arab Emirates in 1985, for example, within the micro-enterprise sector of establishments employing less than 10 persons, the mean number of employees in textiles was 2.9 per cent, and in the micro-enterprise sector as a whole, 3.9 per cent. Leaving aside Bahrain (where the data exclude small unlicensed establishments), textiles in two of the countries account for about 55 per cent of employment in micro-enterprises, and nowhere for less than one third. Micro-enterprises in the metalworking machinery industry are also important, and in this industry likewise there is a complete cross-section of enterprise sizes. As indicated previously, the "medium-scale" sector with 50-99 employees is not strongly represented in the Persian Gulf States. Most sectors have, however, some proportion of such establishments, except for textiles and clothing, where establishments are mostly smaller.

How have small, medium-scale and large enterprises contributed to the expansion of the industrial sectors of the Persian Gulf States? Comprehensive data are not available, but some idea of tendencies can be derived from comparisons between years (table 7). In both Kuwait and

Table 7. Trends in the size distribution of manufacturing establishments

Item and year	Breakdown by range of numbers employed								Total
	1-4	5-9	10-19	20-49	50-99	100-199	200-499	500+	
A. Kuwait									
<i>Number of establishments</i>									
1975	2 625	529	171	67	41	16	15	4	3 529
1985	3 006	865	355	257	78	47	30	8	4 846
Percentage increase	14.5	63.5	107.6	283.6	90.2	193.8	100.0	100.0	37.3
<i>Numbers employed</i>									
1975	6 408	3 213	231.4	3 723	2 787	2 376	4 384	2 598	28 103
1985	7 556	5 340	4 759	7 883	5 232	6 088	8 718	7 099	52 675
Percentage increase	17.9	66.9	105.7	111.7	87.7	156.2	98.9	145.0	87.4
B. Saudi Arabia									
<i>Number of establishments</i>									
1976	10 292	1 724	598	253	49	41	--	--	12 957
1981	16 177	3 994	1 477	566	182	177	--	--	22 573
Percentage increase	57.2	131.7	147.0	123.7	371.4	331.7	--	--	74.2
<i>Numbers employed</i>									
1986	19 911	10 898	7 957	7 217	3 328	12 572	--	--	61 883
1981	35 633	25 176	19 491	16 285	12 083	47 419	--	--	156 087
Percentage increase	79.0	131.0	145.0	125.6	263.1	277.2	--	--	152.2
C. United Arab Emirates									
<i>Number of establishments</i>									
1980	3 384	1 058	373	271	88	60	--	3	5 237
1985	6 055	1 191	332	225	93	62	--	9	7 967
Percentage increase	78.9	12.6	-11.0	-17.0	5.7	3.3	--	200.0	52.1
<i>Numbers employed</i>									
1980	8 139	6 579	4 962	8 151	5 816	11 198	--	3 969	48 814
1985	14 153	6 302	4 411	6 906	6 231	12 036	--	8 386	48 785
Percentage increase	73.9	-4.2	-11.1	-15.3	7.1	7.5	--	111.3	20.4

Source: National establishment censuses.

Saudi Arabia the significant tendency appears to have been an increase in large enterprises: in Kuwait, between 1975 and 1985 the number of enterprises employing 100 or more persons increased from 35 to 85, with an increase in employment from 9,600 to nearly 22,000. There was also a large increase in the numbers of enterprises in the 20 to 99 range from 108 to 335. In Saudi Arabia there was a more than fourfold increase in large enterprises from 41 to 177, with again significant increases in small-to-medium-scale establishments. Part of this was associated with a construction boom, the biggest increase in numbers being in metal products and machinery, followed by construction materials, but there was some increase also of large firms in the food, beverages and tobacco industry. In both these countries the micro-economic sector grew much less rapidly.

The United Arab Emirates did not show the same increase in the number and importance of large or even small-to-medium-scale enterprises during the period 1980-1985. Overall increases in the number of establishments (except for the micro-enterprise group) and manufacturing employment were at much lower rates than in the other two countries. The same does not apply to MVA, which grew rapidly in this period, as observed previously (table 3), but was concentrated in the chemicals and petroleum industry. The most promising development in the United Arab Emirates was expansion in the metal products and machinery industry, which had become the second largest by 1988.

C. Labour and manufacturing in the GCC region

Developing countries are generally anxious to promote industrial development in order to create remunerative employment for their citizens. In the GCC region, however, substantial portions of the labour force have to be imported, not just to ease skill shortages, as in the more usual case, but to provide a basic supply of production workers, these coming especially from India, Pakistan, Sri Lanka and the Philippines. In 1985 the proportion of expatriate manpower ranged from about 52 per cent in Oman, where agriculture is more and manufacturing less important, to nearly 88 per cent in the United Arab Emirates. In Saudi Arabia the proportion had actually increased from 53 per cent in 1980 to 63 per cent in 1985, in just five years, as a result of economic expansion and thus increased demand for labour.

Dependence on expatriate labour in Saudi Arabia is even greater in manufacturing than in the economy as a whole, and particularly in private sector manufacturing, since, as in all GCC countries, there is a marked preference among nationals for employment in the better-paid jobs in the public sector and in large-scale public sector enterprises. In 1981 for example, the proportion of non-Saudi-Arabian labour in private sector manufacturing was as high as 91 per cent (table 8), and in construction, with its demand for low paid unskilled labourers, 95 per cent.

Table 8. Distribution of private enterprise employment by economic activity in Saudi Arabia, 1981

Sector	Saudi Arabians		Non-Saudi Arabians		Total	
	Number employed	Percentage	Number employed	Percentage	Number employed	Percentage of non-Saudi-Arabian labour
Agriculture	548	0.3	2,364	0.3	2 912	81.2
Mining and quarrying	28 632	15.6	26 336	3.2	54 968	47.9
Manufacturing	14 085	7.7	142 002	17.1	156 087	91.0
Electricity, gas and water	9 179	5.0	22 482	2.7	31 661	71.0
Construction	16 150	8.8	281 559	34.0	297 709	94.6
Wholesale and retail trade	72 627	39.7	178 667	21.6	251 294	71.1
Transport	17 416	9.5	57 538	6.9	74 954	76.8
Finance	13 480	7.4	43 847	5.3	57 327	76.5
Community, social and personal service	10 908	6.0	74,195	9.0	85 103	87.2
Total	183 025	100	828 990	100	1 012 015	81.9

Source: Census of Private Establishments (Riyadh, Central Department of Statistics, 1981).

The degree of dependence by manufacturing on foreign labour is even more startling in Qatar, over 95 per cent (table 9), with figures approaching 100 per cent in many industries. The only industry that deviates from this, though still with 80 per cent dependence, is the larger-scale chemicals, petroleum, rubber and plastics industry. Also noteworthy is the high proportion of non-Qatar nationals among proprietors, concentrated in industries such as food, beverages and tobacco, and textiles and leather, in which there are large numbers of small establishments. This is likely to be the general position in respect of micro-enterprises throughout the Persian Gulf States. The general position as regards imported labour in Omani manufacturing is very similar, if with slightly lower percentages (table 10).

Table 9. Manufacturing employment in Qatar, 1986

Industry	Proprietors			Full-time employees		
	Qatar nationals	Non-Qatar nationals		Qatar nationals	Non-Qatar nationals	
		Number	Percentage		Number	Percentage
Food, beverages and tobacco	10	25	71.4	6	1 702	99.6
Textile, clothing and leather	35	167	82.7	14	3 404	99.6
Wood products and furniture	22	12	35.3	11	2 451	99.6
Paper, printing and publishing	16	--	--	21	943	97.8
Chemicals, petroleum, rubber and plastics	4	--	--	640	2 536	79.8
Construction	13	1	7.1	34	3 081	98.9
Basic metals	--	--	--	80	1 103	93.2
Metal products and machinery	21	16	43.2	1	1 784	99.9
Other manufacturing	--	1	100.0	2	33	94.3
Total	121	222	64.7	809	17 237	95.5

Source: Establishment Census, February 1986 (Doha, Central Statistics Organization, 1987).

Table 10. Foreign workers in Omani manufacturing, 1987

<i>Industry</i>	<i>Number of non-Omani workers</i>	<i>Total number of workers</i>	<i>Percentage of non-Omani workers</i>
Food, beverages and tobacco	313	344	91.0
Textiles, clothing and leather	--	--	--
Wood products and furniture	168	189	88.9
Paper, printing and publishing	21	23	91.3
Chemicals, petroleum, rubber and plastics	95	107	88.8
Non-metallic mineral products	513	567	90.5
Basic metals	88	91	96.7
Fabricated metal products	192	216	88.9
Other manufacturing	11	16	87.5
Total	1 404	1 553	90.4

Source: Statistical Yearbook, 1987 (Muscat, 1987).

This exaggerated dependence on imported labour is such that the dilemma of industrialization in the Persian Gulf States might be described as one of "developing industry without labour", in the sense of having very largely to import whatever labour is required.

The difference in dependence on imported labour between small- and large-scale industry may be illustrated in the case of Bahrain manufacturing (table 11), percentages being in the mid-nineties for establishments employing less than 50 persons (99 per cent in the category of 1 to 4 persons), and only 45 per cent for establishments employing 100 or more.

In the case of Kuwait, a breakdown is available according to occupation rather than sector (table 12), which merits scrutiny. This shows that fewer than 5 per cent of production workers and labourers are Kuwaiti nationals, compared with the preferred occupations, administrative, managerial and clerical, where the proportion is around 40 per cent.

That the usual employment creation objective in establishing industries is not a primary one, at least as regards the short run, may be emphasized by looking at unemployment rates in the United Arab Emirates (table 13), Kuwait (table 14), and Qatar (table 15). Overall unemployment rates in the United Arab Emirates in 1980 were little more than 1 per cent. The data for Kuwait separate those seeking work for the first time, principally Kuwaiti school-leavers, and others. Among the

Table 11. Non-Bahraini workers in Bahraini manufacturing, 1987

Size of establishment (number of workers)	Total number of workers	Non-Bahraini workers	Percentage of non-Bahraini workers
1-4	84	83	98.8
5-9	323	310	96.0 (96.6) a/
10-19	1 309	1 240	94.7
20-49	1 752	1 637	93.4 (94.0) b/
50-99	1 426	1 210	84.9
100-199	2 714	2 081	76.7
200-599	2 020	1 192	59.0 (45.6) c/
600 and over:	7 394	2 253	30.5
Total manufacturing	17 022	10 006	58.8
Total for all sectors	85 975	64 249	74.4

Source: *Statistical Abstract, 1987* (Manama, 1988).

Note: Data include workers covered by the Social Insurance System only.

a/ Up to 19 workers per establishment.

b/ 10-99 workers per establishment.

c/ 100 or more workers per establishment.

Table 12. Occupational distribution of Kuwaiti labour force. 1985

Category	Kuwaiti nationals		All employees		Percentage of Kuwaiti nationals by category
	Number by category	Percentage of total	Number by category	Percentage of total	
Professional and technical workers	25 963	20.5	108 926	16.2	23.8
Administrative and managerial workers	4 011	3.2	10 365	1.6	38.7
Clerical and related workers	34 061	26.9	82 737	12.3	41.2
Sales workers	5 910	4.7	37 589	5.6	15.7
Service workers	40 615	32.1	189 061	28.2	21.5
Agriculture, animal husbandry etc.	2 657	2.1	13 040	1.9	20.4
Production workers and labourers	10 343	8.2	220 600	32.9	4.7
Persons seeking work for the first time	2 850	2.3	7 797	1.2	36.6
Total	126 410	100.0	670 385	100.0	18.9

Source: *Annual Statistical Abstract, 1985*. (Kuwait City, Central Statistics Office, 1985).

latter, for Kuwait the percentage decreased from just 1.5 per cent in 1975 to less than one half of 1 per cent in 1985. The position in Qatar is similar.

Table 13. United Arab Emirates: unemployment rates, 1980

<i>Item</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Numbers unemployed	5 690	903	6 620
Total labour force	531 693	28 267	559 960
Unemployment rate	1.1	3.3	1.2

Source: Annual Statistical Abstract, 1986. (Abu Dhabi, 1986).

Table 14. Persons seeking work in Kuwait, 1975 and 1985

<i>Item</i>	<i>1975</i>			<i>1985</i>		
	<i>Kuwaiti</i>		<i>Non-Kuwaiti</i>	<i>Kuwaiti</i>		<i>Non-Kuwaiti</i>
	<i>Total</i>	<i>Female</i>		<i>Total</i>	<i>Female</i>	
Persons seeking work for the first time						
Number	4 873	172	1 294	2 850	346	4 947
Percentage	5.3	2.3	0.6	2.3	1.4	0.9
Unemployed who worked before						
Number	1 375	10	445	544	35	549
Percentage	1.5	0.1	0.2	0.4	0.1	0.3
Total labour force						
Number	91 841	7 477	212 738	126 410	24 803	543 975
Percentage	100	100	100	100	100	100

Source: Annual Statistical Abstract, 1986 (Kuwait City, Central Statistics Office, 1986).

Table 15. Qatar: numbers unemployed in relation to economically active labour force aged 15 and above, March 1986

<i>Item</i>	<i>Number</i>	<i>Percentage</i>
Employed	199 218	--
Unemployed, previously employed	1 025	0.5
Total	200 243	100.0
Unemployed, seeking work for first time	1 015	--
Total unemployed	2 040	1.0
Total economically active, including all seeking work	201 258	100.0

Source: Annual Statistical Abstract, 1988 (Doha, 1988).

Attention needs to be drawn to another important feature of the labour market in the GCC region. As noted earlier, an important part of manufacturing development in the GCC region so far has been associated with import substitution. Such an industrial development strategy has been subject to a great deal of debate even where the size of the domestic market involved was not as small as in the case of the GCC group of states. Emphasis on export-oriented industry is now widely advocated, following success in this direction in some East Asian countries. It is significant, however, that many of the successful industries involved have not only been labour-intensive, but have relied to an important extent on female labour. Among GCC States little use is made of female labour in manufacturing, for social reasons, just 2 per cent in Kuwait (1984), for example, and just over 2 per cent in the United Arab Emirates (1980). Among production and related workers in the United Arab Emirates in 1980 just 0.1 per cent were female. In Qatar the proportion of females in manufacturing is similar. Considerably more encouraging is the upward trend in female participation in the labour force in Bahrain, which has gone up from below 5 per cent in 1971 to nearly 20 per cent in 1987 (table 16). The bulk of this participation is outside manufacturing, but even here an upward trend is discernable and could be encouraged.

Table 16. Bahrain: female participation in the Bahraini labour force, 1971, 1981 and 1987

<i>Item</i>	<i>1971</i>	<i>1981</i>	<i>1987</i>
Manufacturing			
Number	45	224	..
Percentage	0.8	3.0	..
All sectors			
Number	1 811	7 892	15 731
Percentage	4.8	13.7	19.4

Source: Statistical Abstract, 1987 (Manama, 1988).

The result of the overwhelming dependence on imported labour just described is that any export-oriented labour-intensive industry located in the GCC States will be at a cost disadvantage in overseas markets, compared with similar industries located in countries such as India or the Philippines, from which the GCC States obtain labour. This is inevitable, so, since the supply price of labour will equal the wage in the source country plus whatever differential is required to persuade the labourer to move to a strange environment. Comparative cost differences may be further aggravated where the export industry elsewhere makes use of cheaper female labour, this being scarcely used within the GCC, as noted above. The private and social costs of imported labour will be further increased where there is need to provide housing and medical and educational services to a higher standard than is generally provided in the source countries. These costs appear substantial in the GCC.

The fact that a great many - though certainly not all - small and medium-scale manufacturing enterprises are very labour-intensive is of particular significance for this category of industry. Importing much of the labour raises the question of the costs and benefits to be derived from small-scale industry in the Persian Gulf States. It will certainly reduce the multiplier and other effects from increases in MVA and involve, in addition to the spending on imported machinery and materials normally associated with import substitution, a loss of foreign exchange through remittances. It could be argued that the (foreign) wage component should be excluded from value added, since it does not accrue to nationals, although, unlike expenditure on imported materials, there will be a multiplier effect from this component due to expenditure by wage earners within the country.

At least partially, small-scale industry may be considered an alternative form of importation: instead of importing finished goods from

Asia, labour is imported from Asia to produce substantially the same goods. Given the fairly open policy on consumer goods imports, small-scale industry will be in direct competition with imports in a wide range of products. One effect of these substitution possibilities might be, for example, that restrictions on imports of labour applied in order to increase the domestic content of GCC output will lead instead to an increased volume of imported goods. Conversely, restrictions on imports of some consumer goods could lead to increased pressure to import labour in order to produce substitutes domestically. The degree of restrictiveness in respect of labour imports was a significant policy issue even before the Persian Gulf war. In Kuwait, for instance, and this may be true elsewhere, restrictions apparently led to the establishment of fictitious companies set up for the sole purpose of importing labour for subleasing to others at a profit subsequently.

Also affecting the assessment of industrial strategy in Bahrain, is the substantial progress made by that country, exceeding that of any other in the region, towards reducing dependence on imported labour; this progress has in fact been greatest in the public sector, while the private sector, incorporating a substantial proportion of small- and medium-scale enterprises, has a much higher ratio of imported labour. The effects described are aggravated by the fact that there is a substantial degree of dependence on expatriates in management positions also, in smaller enterprises particularly, further reducing the benefit which may be said to accrue to nationals. Palestinian participation was strongest in this area.

One way in which part of the income generated is diverted towards citizens is through the "sponsorship" system which has grown up in GCC states as a result of ownership regulations that require companies to be at least 51 per cent owned by GCC nationals. In a proportion of cases the GCC national is a so-called "sleeping partner", deriving a regular monthly royalty from the enterprise but acting as a sponsor for an expatriate partner, securing land, licences, permits as required, and so on. The system extends to the services sector, including restaurants and the like. The royalties can be seen in part, perhaps, as a method of securing economic rent or tax from small- and medium-scale enterprises, with rents dispersed rather widely among nationals.

The system has obvious drawbacks, particularly as it is evident that the distribution of royalties is not particularly egalitarian, some individuals retaining a large number of sponsorship arrangements, and the value of royalties increasing in lucrativeness according to the size and profitability of the enterprise. Nevertheless, the system certainly serves to broaden national participation in the economic activity that has been built up, and no doubt the dispersed distribution of sponsorships facilitates popular acceptance of a large proportion of expatriate workers, particularly management, in the economy.

The extent of active participation by sponsors in the enterprises varies, and remains undetermined. The challenge is to progressively

extend this participation, and the existing situation at least affords scope for doing this, something which will become increasingly important as young entrants to the workforce seek employment. It is reported, for example, that in Kuwait, which has a young population, with about 60 per cent below the age of 19, while entrants in the past were absorbed into civil service and other similar employment, there is now increasing interest in joining the private sector, a development which calls for special measures, in the new circumstances. Consideration should be given to an appropriate system of incentives which would encourage small and medium-scale enterprises above a certain very small size to recruit young nationals as technical apprentices and management trainees as appropriate.

Potential industrial competitiveness in the Persian Gulf States should be greatest in industries which are capital or technology-intensive rather than labour-using, or those which are downstream or energy-intensive. So far, however, while progress has been made in these latter directions, a great deal of new industry has been of the import-substituting kind, food, beverages, textiles, furniture etc., and in construction industries directed towards conspicuous private and public "consumption" of buildings.

There are two major reasons why the Persian Gulf States should wish to industrialize. One is the "roller-coaster" economy produced by dependence on petroleum, with major fluctuations in oil income generating construction booms, followed by recession. The other is the need to provide for the anticipated exhaustion of oil or gas reserves in some States. This provides a reason to promote industry, not necessarily small- or medium-scale industry. Given the structure of industry outlined above, however, reflecting the limited size of the GCC and especially national markets, it would be unsurprising if the easier projects to identify were in this category. Not surprisingly either, the drawbacks associated with small-scale enterprises in the Persian Gulf States have generated considerable policy ambivalence towards the sector.

D. Assistance to industry: industrial finance

The usual argument for providing preferential finance to small- and medium-scale enterprises is related to imperfect capital markets in which small firms are handicapped by lack of collateral or already accumulated capital, or by conservative attitudes on the part of bankers who find it easier to make loans to large, established enterprises, loans carrying fewer unknowns and problems of supervision. The latter is true in the GCC States, where bank lending tends to be short-term, measured in months rather than years, and directed towards working rather than fixed capital, which still would disfavour manufacturing as compared with trade.

Banks in the Persian Gulf region generally require collateral in the form of land or other real estate, together with personal or third-party guarantees, which many small-scale entrepreneurs would find difficult or impossible to secure. Much commercial bank lending in the region is said to be on a "know-person" basis, that is, made to persons who are known to the bank and seen as entitled to a line of credit. This will again create a bias in favour of trading or entrepreneurs already established in trade and wishing to diversify into manufacturing activity, and against "first-time" entrepreneurs wishing to establish a new manufacturing enterprise.

There exists in fact, in each of the Persian Gulf States, a number of "family groups" - in Kuwait some 50 to 100 - who control substantial amounts of capital. These are sometimes referred to as "conglomerates", in that they may own 10 or 20 separate licensed businesses either on their own or in partnership with expatriates. They may cover highly diversified activities with decentralized management operating under a head office. Such families often seek out and recruit highly qualified persons to serve as managers who are able to maintain effective enterprises. Their operations may extend across several of the Persian Gulf States. The fact that, among the development banks, both the Saudi Industrial Development Fund (SIDF) and the Emirates Industrial Bank acknowledge that the same names "frequently recur" in applications to them for loans suggests that the same groups may be involved here, thanks to easy lines of credit from commercial banks.

What are not available to any extent as a source of finance for small industry in the GCC States, given attitudes towards interest as usury, are the informal moneylenders found in certain Asian countries. Initial capital comes from personal savings, friends and relatives, in many cases through the formation of partnerships where such savings can be combined. Investible funds may be accumulated initially through trade or through involvement in contracting, which has generated numerous small enterprises.

Another set of factors affecting the supply of finance for small-scale manufacturing is the existence of alternatives, particularly trade and real estate. The strong alternative of trade may affect both the supply and demand sides. Potential entrepreneurs can secure a high rate of return in trading activities which require a lesser amount of capital and tie it up for a shorter time. Trade is traditional and has a long history in the region. It is further boosted by high oil incomes which generate a high inflow of consumer goods, purchased also by the imported labour force. In contrast, small-scale industry suffers from competition from the open importation policy and from consumer preference for internationally known brand names. The perception of relative opportunities, rates of return and risk on the part of the entrepreneur will be paralleled on the supply side by the view taken by bank managers.

Another competing option with a high rate of return is investment in real estate. This is evident from a consideration of the sectoral distribution of bank lending in some representative GCC countries (table 17). Thus in Kuwait real estate absorbed 18 to 19 per cent of bank loans over a five-year period. In contrast the share of lending allocated to manufacturing was generally no more than 3 or 4 per cent. The much higher figure for Bahrain reflects the higher share of larger-scale enterprises in the industrial sector.

The actual use of bank loans is obscured in the table by the substantial proportions allocated as "personal loans". Some of these may be used for small-scale enterprises of some sort, although the largest proportion is likely to be going into the purchase of motor cars and other consumption goods.

A majority of the GCC States have established industrial or development banks. It may be said that, leaving aside general encouragements to industry such as the absence of income and profits tax for national companies and joint ventures, the allocation of preferential finance through industrial banks is the most important direct measure being employed at the present time for promoting industry.

SIDF was established by the Ministry of Finance in 1974 as a Government-owned financial institution aimed at accelerating private - sector industrial development. All companies registered in Saudi-Arabia with an industrial licence are eligible, with loan eligibility proportional to their Saudi Arabian shareholding. The Industrial Bank of Kuwait (IBK), started similarly in 1973-1974, is owned partly by the Government, through the Ministry of Finance and the Central Bank, and partly by commercial banks, certain insurance companies and some industrial companies. The Emirates Industrial Bank (EIB) started later, in October 1982, becoming fully functional by 1983, though it was a successor to an earlier Emirates Development Bank which lacked effective portfolio management and survived only three years. Ownership is 51 per cent government and 49 per cent private, including local banks and insurance companies. The Oman Development Bank (ODB) was established by royal decree in 1976 and started operations in 1979. The Government contributed 40 per cent of initial capital, another 40 per cent coming from foreign industries and institutions, including the World Bank and the International Finance Corporation, and 20 per cent from Omani nationals and companies. Qatar has a comparatively small industrial sector and has not established an industrial bank. In 1980 steps were taken by the Ministry of Finance to establish an Industrial Loans Scheme, but this has operated rather fitfully since. Eight loans had been issued earlier by the Ministry itself, before responsibility for loan administration was passed to the Qatar National Bank. Bahrain has no industrial bank and is the only one of the Persian Gulf States without provision of soft loans for industry. The absence of such a bank is not surprising in an economy as small as that of Bahrain, but is also associated with the much

Table 17. Sectoral distribution of commercial bank lending in selected Persian Gulf States, various years

Sector	Kuwait				Bahrain		Qatar				Oman	
	September 1983		September 1988		1987		1982		1987		1987	
	Million KD	Perce- ntage	Million KD	Perce- ntage	Thousand BD	Perce- ntage	Million QD	Perce- ntage	Million QD	Perce- ntage	Million RO	Perce- ntage
Manufacturing	186.1	5.0	160.1	3.4	70 111	9.8	233.6	4.2	202.1	3.7	26.7	3.6
Trade	934.7	24.9	971.2	20.8	113 810	16.0	2 657.6	47.6	2 531.6	31.6	293.7	29.3
Real estate	656.6	17.5	901.7	19.3	--	--	--	--	--	--	--	--
Construction	678.8	18.1	803.9	17.2	145 589	20.4	773.1	13.9	975.1	11.6	116.9	15.6
Mining and quarrying	--	--	--	--	--	--	--	--	--	--	13.3	1.8
Agriculture and fisheries	30.9	0.8	11.6	0.2	1 228	0.2	13.8	0.2	0.5	(..)	6.2	0.8
Transport	--	--	--	--	17 746	2.5	93.1	1.7	106.5	1.2	6.7	0.9
Services	--	--	--	--	--	--	--	--	--	--	29.5	3.9
Financial institutions	255.6	6.8	381.0	8.2	--	--	26.2	0.5	47.1	0.8	--	--
Government enterprises	--	--	--	--	169 662	23.8	434.4	7.8	293.1	3.9	57.5	7.7
Personal loans	894.5	23.8	1 333.1	28.5	161 940	22.7	1 182.6	21.2	4 264.9	43.7	147.6	19.7
Other	115.4	3.1	111.9	2.4	33 033	4.6	161.4	2.9	322.4	3.5	49.9	6.7
Total	3 752.6	100	4 674.5	100	713 119	100	5 575.8	100	8 743.3	100	748.0	100

Sources: Central Bank of Kuwait, *Monthly Monetary Review*, various issues (Kuwait City); Bahrain Monetary Agency, *Annual Report 1987* (Manama, 1987); *Annual Statistical Abstract, 8th Issue* (Doha, Government of Qatar, July 1988); Central Bank of Oman, *Annual Report 1987* (Doha, 1988).

Notes: BD = Bahraini dinars KD = Kuwaiti dinars QR = Qatar riyals RO = Rials Omani

more direct role played by Government in large projects. The most successful of these is Aluminum Bahrain, in which the Government of Bahrain has a 58 per cent holding, and which now accounts for more than half of the real value added in non-oil manufacturing.

Loan terms offered by the industrial banks are very similar, generally 50 to 60 per cent of the project investment cost being loaned at interest rates of 2 1/2 to 6 per cent, with repayment over 5 to 10 years (25 years in the case of SIDF) and grace periods of 2 years, and collateral requirements limited to project fixed or land assets, sometimes supplemented by personal guarantees. In the case of Saudi Arabia, the interest charge is limited to a 2 1/2 to 3 per cent per annum "administration fee" to cover servicing costs, from which the inflation rate of 1 per cent may be subtracted to arrive at the real interest rate.

Even without allowing for inflation, this implies a 45 per cent grant element, assuming a commercial rate of interest of 15 per cent without grace period. Taking into account an assumed 1 per cent inflation rate gives a 49 per cent grant element. Applied to an average SIDF loan value of US\$ 4.04 million, these would be equivalent to average project grants of US\$ 1.82 million and almost US\$ 2.0 million respectively.

The figure quoted above was the mean value of SIDF loans up to 1987-1988 (15 million Saudi Arabian riyals), a value evidently not associated with small or medium-scale enterprises. The average was pulled up by large loans in the chemical sector (mean value of US\$ 7.1 million), but is not due merely to this factor, since data for 12 out of 14 industrial sectors showed average loans of above US\$ 2 million.

The Industrial Bank of Kuwait had issued 375 loans up to 1987, with a large mean size of loans, again, of US\$ 2.66 million, though it also issued more "small" loans of below US\$ 0.5 million, about 14 out of 75 loans issued during the two years 1983 and 1984 for which information is available.

The EIB has avowedly pursued conservative lending policies since its establishment, only 58 loans having been approved in the five years up to 1987, with a mean size of US\$ 1.11 million. Those loans focused mainly on existing industries (the largest allocation has been to food and beverages), and there is a stated preference on the part of EIB for dealing with large projects, with 7 to 10 "big names" strongly represented among the loan applications which come forward. In so far as commercial bank guarantees are requested, projects may need to be at least close to meeting ordinary commercial bank criteria, conflicting with the development objective of assisting with projects which might not otherwise take off. Representatives of the business community, whether with justification or not, certainly see the EIB as the least flexible of the GCC industrial banks.

The size of loans made in Oman by ODB is generally much smaller than for the other industrial banks, only US\$ 0.427 million in 1988, when 9 out of 26 loans were below US\$ 0.1 million. Over the whole period

1981-1988, 39 per cent of loans were below US\$ 0.26 million, with an average of 26 loans per annum. ODB operates a separate small-scale industries programme, and the Ministry of Social Affairs a Vocational Training Graduate Scheme. In the opposite direction, the Ministry of Commerce and Industry (with ODB as administering agency) has a Soft Loan or Interest-Free Scheme directed towards large enterprise, for which firms must have an industrial licence and be joint stock companies with at least 25 per cent of equity offered for public purchase. Interest-free loans are repayable over 15 years, including a five-year grace period, but a matching project equity contribution is required. Up to 1988, 61 loans totalling some US\$ 55.5 million had been issued, including many small but some very large ones, in excess of US\$ 4 million.

The Industrial Loans Scheme in Qatar has never been fully operational, and out of capital of QR 40 million approved in the budget, only QR 11.6 million have ever been transferred to the Qatar National Bank for distribution. Applicants must have an industrial licence and have invested capital of at least QR 50,000 (US\$ 68,500). Despite an avowed preference for small companies and light industries, the mean size of the loans approved by the Qatar National Bank up to 1989 has not been especially small, at US\$ 630,000. Only 1 loan (out of 9 approved) was below US\$ 260,000.

The average value of loans issued by the different industrial banks has thus been large in all cases (table 18) and can be assumed therefore to have been directed mostly to large enterprises. On the other hand, the average loan size varied quite widely between industrial banks, raising a query as to why enterprises at the smaller end supported in one State could not have attracted more support in Saudi Arabia or Kuwait.

Table 18. Mean value of preferential loans issued by Persian Gulf industrial banks

<i>Item</i>	<i>SIDF, Saudi Arabia (1974/75- 1987/89)</i>	<i>IBK, Kuwait (1974- 1987)</i>	<i>EIB, United Arab Emirates (1983-1987)</i>	<i>ODB, Oman (1979- 1988)</i>	<i>Official Loans Scheme, Qatar (1986-1989)</i>
Number of loans	997	375	58	250	9
Mean value of loans (thousand US\$)	4 040	2 660	1 080	515	631

Source: Annual industrial bank reports.

These large loans carried a very large subsidy, as observed above. What kind of activities were thus supported in this way? Over the period 1974-1975 to 1987-1988, as much as 40 per cent of SIDF credit was allocated to building materials and cement (including glass and ceramic products) (table 19), which in the case of Saudi Arabia could be classified as private and public consumption rather than investment-related, and 18 per cent to "consumer products", with 20 per cent to chemical products (where the need for a subsidy is questionable) and 21 per cent of engineering products. In the early years up to 1980-1981, the share of cement and building materials was regularly over 50 per cent, but fell to a healthier 10 per cent or less from 1985-1987 onwards.

Table 19. Sectoral distribution of loans by GCC industrial banks

<i>Industry</i>	<i>SIDF</i> <i>(1974/75-1987/88)</i>	<i>IBK</i> <i>(1974-1987)</i>	<i>EIB</i> <i>(1983-1987)</i>	<i>ODB</i> <i>(1979-1988)</i>
Food, beverages and tobacco	—	16.2	30.2	24.0 ^{a/}
Textiles, clothing and leather	—	1.8	2.2	3.9
Wood products and furniture	—	3.3	1.3	14.8
Paper, printing and publishing	—	8.2	12.0	0.7
Consumer goods	18.1	29.4	45.7	49.8
Cement and building materials	40.6	26.0	—	23.1
Chemicals and plastics	19.7	16.0	20.1	21.7
Metal products and engineering	20.8	13.7	18.3	7.5
Small-scale industry	—	—	—	0.3
Other manufacturing	0.8	14.8	3.4	2.7
Agriculture and fisheries	—	—	—	6.0
Total	100	100	100	100

Source: Annual industrial bank reports.

^{a/} Includes storage facilities.

In Kuwait, over the period 1974-1987, the IBK directed about 26 per cent of its credit towards construction materials and 29 per cent to consumer goods (including 16 per cent for food and beverages), the rest

going to chemicals (16 per cent), metal products and engineering (14 per cent), and marine and oilfield services (11 per cent).

The proportion allocated to consumer goods was nearly 46 per cent (30 per cent for food and beverages) for EIB, and practically 50 per cent for ODB, in the latter case perhaps reflecting in part the policy of issuing smaller average loans or perhaps lack of a similar opportunity to make loans to large-scale enterprises. The small-scale industry programme had yet to receive significant allocations in 1988. In Qatar, 5 out of 9 loans were for the food, beverages and tobacco industry.

There are, however, a number of special small-scale enterprise or craft credit programmes which will be examined briefly. The Saudi Credit Bank offers vocational loans to artisans operating as "entrepreneurs". These are quite small loans, averaging just over US\$ 5,000 over the period 1981-1987, during which period loans were issued at the rate of about 400 a year. Such loans are not the main objective at the Saudi Credit Bank, which was established mainly for social purposes, and have accounted for less than 2 per cent of total finance distributed. The most important trades supported have been mechanics, general electricity, welding and blacksmithing.

IBK does not usually finance craft industry. However, a new policy adopted a few years ago permits the financing of such an enterprise, provided it is not too small and has available mortgageable land. The policy remains ill-defined and uncoordinated. In Qatar a light industries loans scheme, with its own loans committee, has been established and may assist smaller-scale industries, but it is still awaiting a government budget allocation.

The ODB is the only one of the industrial banks to operate a separate small-scale industries programme, defined here as up to RO 100,000 (US\$ 260,000) in size. As noted above, the amounts loaned so far are quite small. There is, in addition, a vocational training graduate scheme, administered by the Ministry of Social Affairs, directed towards an emerging problem of unemployment among young Omanis leaving technical schools; leavers may be provided with 100 per cent of the finance required to establish a business, up to an amount of RO 15,000-RO 20,000 (US\$ 39,000-US\$ 52,000). This is a substantial figure, given their level of experience and the fact that groups of 3 to 4 leavers would be eligible for proportionately larger amounts. Under both schemes, loans are interest-free if all labour used is Omani, failing which a 3 per cent interest charge is imposed.

The general situation, therefore, is one of heavily subsidized preferential finance distributed through industrial banks mostly to large enterprises, with either no or quantitatively insignificant schemes directed towards small enterprises, especially craftwork. Much of this finance is directed towards import-substituting consumer goods industry or building and construction industries providing for private or public consumption in the form of buildings, rather than of the type that carries external

economies likely to contribute to a dynamic industrial growth process. In the absence of access to preferential finance, commercial bank lending is expensive, short-term only, used for working capital rather than start-up or venture capital, and biased towards trade rather than manufacturing.

A question which needs to be considered is whether finance really is a limiting constraint on the initiation of small and medium-scale manufacturing enterprises or whether the constraint is rather the lack of viable projects. The opinion widely held in Persian Gulf countries is that the latter is the case. It is difficult to substantiate this directly. However, funds are widely generated through trade and in the construction industry, while "conglomerates" operating in each of the countries could serve as a pool of capital for new ventures if these offered high returns. Moreover, there has always been a substantial flow of funds overseas, which could be redirected domestically if promising opportunities were perceived, though equally this freedom means that GCC projects need to compete with the rates of return attainable abroad. Despite the limitations of commercial bank lending as a source of other than working capital, the high level of liquidity among the banks, including also liquid assets held abroad, serves as an indicator, at least, of the relative availability of funds. The large number of banks throughout the GCC, which has produced the suggestion that the GCC is "overbanked", in fact indicates that a competitive situation exists in lending. It has been suggested that a factor in the stock market collapse of 1982 in Kuwait was that, following economic boom conditions in the 1970s, the supply of loanable funds was large relative to scarce domestic investment opportunities, this limited domestic absorptive capacity leading to bouts of overspeculation in the range of stock available, followed by collapse.* While the extent of surplus liquidity subsequently decreased, and is still not of comparable magnitude, the basic problem remains.

There is more direct evidence of money looking for suitable outlets. To give one example, a fisheries company project in Oman requiring capital funding of RO 10 million was oversubscribed by some RO 40 million within a few months. Officials, those in the Ministry of Industry of Bahrain, for example, have been approached directly by persons with funds to invest. ODB recently expressed the view that many of the obvious opportunities had been taken up, and that it would itself welcome assistance in identifying the less obvious ones.

Further possible evidence of a lack of ready-made projects is the considerable duplication of projects which exists within GCC in certain industries and the consequent excess capacity, together with, as described in the next section, the rather thin content, in terms of manufacturing

*See "The development of capital markets in the Gulf", in *Gulf Economic and Financial Report* (Manama, Gulf International Bank, February 1987)

enterprises already established, of some of the industrial estates, despite the subsidized facilities provided.

E. Assistance to industry: industrial estates and free zones

A second major prong of industrial promotion policy in the Persian Gulf States has been the establishment of industrial estates or "cities" while, following Jebel Ali in the United Arab Emirates, the establishment of free zones is looked upon by many as a possible way forward. In Saudi Arabia the policy of establishing 'industrial cities' was started in 1970, and is therefore a long standing one. The cities incorporate a full range of basic infrastructure: water and electricity, sewage facilities, telephones, workshops, banks, post offices, clinics, mosques and asphalted roads, together with land at very low rent on which labour housing can be constructed.

The term "industrial cities" itself suggests that these are seen in part as a potential mechanism to promote the geographical dispersal of industry within Saudi Arabia, and certainly the number of cities involved (14 implemented or planned in 1989, including Riyadh I and II and Damman I and II) and the substantial total area allocated, nearly 69 million square metres nationwide, much of it already developed, indicates a substantial commitment.

Since access to the estates implies access also to substantial subsidy, it is worth examining the conditions imposed for eligibility. The most important is the requirement of an industrial licence which, because of a quite inappropriately high capital asset condition (1 million Saudi Arabian riyals (SRI)), probably excludes much of small- and medium-scale industry. Evidence on the size distribution of the 1,300 or so establishments on the estates is not available, but it may be noted that the mean project cost had been, up to 1989, SRI 1.32 million (US\$ 350,000). As an indicator, at least, of what this would imply in Oman, approximately 97 per cent of registered industrial establishments in Oman in 1987 would have been below this size in terms of capital invested. An average site area of some 29 million square metres per establishment may also be noted for those areas implemented so far, even if this includes substantial unutilized areas.

The nature and distribution of activities in the industrial areas of Kuwait are very different, reflecting in part a different approach towards licensing and towards "craftwork" and smaller manufacturing establishments. In fact, industrial areas are seen as appropriate locations for a mixture of manufacturing, repair (garages), commercial and storage activities, in 1987 occupying respectively 21.7, 26.6, 28.2 and 23.5 per cent of 8,205 lots. Among industry and craftwork establishments, the more important categories were metal products, primarily, and carpentry, including furniture, which is predominantly small-scale. It seems that

this heterogenous mixture of activities may serve to obscure the development purposes for which the estates were established, including the promotion of modern small or large factories. More progressive planning, with clearer physical separation of manufacturing and commercial and service activities, is clearly called for.

Bahrain, which, as a small island, has a need to ration space carefully, particularly in the face of a threat of environmental pollution, has nine separate small industrial areas. Its programme, as measured by numbers of establishments attracted, was in its infancy in 1970, grew steadily during the 1970s, and then accelerated, tripling over the next decade to almost 500 in May 1989. Again, there is the same heterogeneity, only 100 of these being involved in manufacturing, though quite varied in composition, with a further 172 made up of workshops of different kinds (120) and garages (49), and 202 utilized as storage facilities.

In Qatar the main industrial area at Umm Said is under the management of the Industrial Development Technical Centre, but a second area exists for small enterprises under the authority of the municipality. The industrial area at Umm Said is centred upon major port facilities and is the location for big projects such as the Natural Gas Plant, oil refinery, fertilizer plant, iron and steel plant, a ship repair, engineering and fabrication complex, in process of development, a petrochemical complex, and a flour mill. Despite the existence already of alumina smelters in Bahrain and the United Arab Emirates, Qatar is hopeful of establishing its own plant. While projects have so far been large scale, capital-intensive ones, interest is strong in developing downstream projects, in plastics, for example, some of which may be in the small- or medium-scale category. However, no special provision is made at present, such as advance factories of different sizes, for encouraging small- and medium-scale enterprises. Electricity, gas and water rates for the existing large establishments are subsidized at below the level charged to commercial enterprises, but negotiated case by case with the Industrial Development Technical Centre.

A second area, Salma Industrial Area, is located 15 kilometres from Doha, and caters mainly for small-scale enterprises. The area, divided into 10 blocks, is made up of plots about 60 square metres (for comparison, the average site area of 29,000 square metres for the Saudi Arabian industrial cities may be noted). Plots are allocated initially for one year at a rent of QR 1 per square metre, during which the leaseholder should construct his premises. On completion of the building, which requires an approved plan submitted within the building regulations, a 20-year lease may be issued, carrying a much lower rent of QR 1 per 60 square metres. To qualify, an applicant should have either an industrial licence from the Ministry of Industry and Agriculture or an existing workshop with commercial registration. No particular activity is favoured.

Progress has been slow since development commenced at Salma in 1973, and no services were introduced until 1980. Different component blocks are at different levels of services and consequently of occupation, and even in the first block developed, with asphalted roads, electricity, water and telephone connections, there is still no gas or sewage provision. This fully occupied block has 325 carpentry and aluminium workshops, 301 block and concrete product factories, 338 garages and workshops, 150 miscellaneous maintenance workshops, 54 cold storage and beverage factories, and 34 car agents and showrooms. The second block, half occupied, has 213 miscellaneous establishments, including contractors and stores. The third, which has no water supply, has 425 miscellaneous units, while the last, where tenants have to use their own generators, has 150 units, including precious stones establishments and asphalt factories. The last two blocks are generally 30 to 40 per cent occupied.

The estate caters in effect for workshops and small-scale manufacturing, within a restricted range; for garages, repair and maintenance services; and for construction materials, including asphalt factories, generally small-scale also. There is little of what might be described as "modern small industry", or medium-scale industry, of a technologically progressive type. There is an evident dichotomy between both the nature of enterprises (large-scale) and level of services at Umm Said and those at Salma Industrial Area, a dichotomy which corresponds directly to that in the overall structure of manufacturing industry in the Persian Gulf States between large firms and the vast number of small, "informal sector" enterprises.

Despite the generally poor facilities, the Salma estate appears to fulfil a positive function, since there is a waiting-list of some 500 for plots, even if at the same time many plots that have been allocated and registered are not operational. Moreover, the number of operational plots varies monthly, indicating a high rate of turnover, and most of the group which entered the estate in 1985 were no longer there in 1989. The commonplace composition of estate activities may reflect its rather inauspicious origin in 1973, when a survey of workshops in Doha and elsewhere was carried out and a decision taken to encourage a shift out of the city to this location, in part as a means of separating off noisy and untidy workshop establishments, rather than of positively establishing an estate for stimulating new factory development. It is significant, also, that development responsibility is left in this case to the very much weaker, managerially and financially, municipality. It is fair to say that overall policy reflects an ambivalent attitude, not surprising in view of the earlier discussion, towards small scale enterprise development.

The Omani industrial estate at Rusayl is relatively recent although of very modern design, and has succeeded rather quickly in establishing a core of industrial establishments which have increased in number from 6 in 1985 to 42 in mid-1989. It is one of four estates included in the 1986-1990 Development Plan. The implementation of these has been affected

by the oil crisis, but two further smaller estates are in process of development. The Rusayl Industrial Estate Authority, set up in 1983 by royal decree, operates as a semi-autonomous body under a board of directors, appointed by the Minister of Commerce and Industry, with representation from several ministries.

Although the number of establishments after 5 years or less of operation was necessarily still quite small, there was a useful spread across industries and a mixture of small, medium-scale and large enterprises with 100 or more employees (table 20). It is not possible to say whether these industries owe their existence to the estate, and would not have been established in its absence, or whether they have simply selected this location in order to take advantage of the facilities offered.

These comprise firstly industrial plots, available to any specified size, at nominal rents and with a minimum lease of 25 years, going up to 99. The rent is subject to review every five years. Electricity, water and gas are supplied at favourable rates. A telephone exchange on site has available 1,000 direct lines, with scope for increased capacity. The estate has its own sewage treatment plant, with free treatment of industrial effluent. Access roads are asphalted. There is also a bank, post office, mosque, health centre, and a cafeteria which offers a variety of food to suit imported labour, with delivery to individual factory canteens.

Twenty-two advance factories are occupied and 10 more being prepared for which tenants have been approved, which will have leasing arrangements similar to those prescribed for industrial plots. Sensibly, given the spread of establishment sizes already observed, four basic size types will be on offer. As word has spread, demand for advance factories is increasing, and there is now a substantial waiting-list. High building costs in Doha are one reason.

Access to the estate depends only on the holding of an industrial licence, which evidently is available in Oman for quite small enterprises, measured in terms of numbers employed. This indicates the importance of avoiding unnecessarily restrictive licensing policies.

Additional services that have been or are to be introduced seem likely to prove quite valuable. A full-time liaison officer has been appointed to assist tenants with bureaucratic problems, such as licensing and labour clearance, and to provide information, for instance on export possibilities. Quarterly meetings with tenants are already conducted to discuss problems, meetings to which relevant government or other officials may be invited to attend. A housing complex is under construction, to include shops, cinema, supermarket and mosque, something which, given the dependence on imported labour, as well as the location of the estate some distance from Muscat, should be a major attraction for new enterprises, especially those of medium-scale or larger. Sensibly, also, given the need to progressively incorporate more Omani workers, it is intended to set up a trade and skills training centre, with the assistance of the Ministry of Social Affairs and Labour. So far only

Table 20. Oman: composition of industries at Rusayl Industrial Estate, 1989

Industry	Breakdown according to number of employees						Not specified	Total	Number of employees a/
	1-4	5-9	10-19	20-49	50-99	100+			
Food, beverages and tobacco	--	1	--	--	--	1	2	4	140
Textiles, clothing and leather	--	--	1	1	2	3	--	7	806
Wood products and furniture	--	--	1	1	--	--	--	2	50
Pap... printing and publishing	--	--	1	2	--	--	--	3	69
Chemical products and plastics	--	2	--	3	--	1	3	9	216
Construction materials	--	1	2	1	--	--	1	5	68
Basic metals	--	--	--	--	--	1	--	1	100
Fabricated metal products	--	3	1	3	--	1	3	11	267
Other manufacturing	--	--	--	--	--	--	1	1	--
Total	--	7	6	11	2	7	10	43 b/	1 716

Source: Rusayl Industrial Estate.

a/ Excluding establishments for which size is not specified, and including estimates for establishments expected to be operational shortly.

b/ Including one factory closed in 1989.

18 per cent of all workers, and 10 per cent of production workers, are Omani.

The high-quality buildings erected up to now as advance factories are almost certainly much more costly than the benefits justify, particularly if used to upgrade and develop existing small-scale enterprise, and the view has been expressed that charging of full cost fees for factory sheds would drive the existing establishments from the estates.

Apart from the Jebel Ali Free Zone, there are a number of industrial areas in the United Arab Emirates, including 10 Dubai industrial areas, where 965 establishments were located as of 1989. This large number appears less impressive when account is taken of 461 warehousing and storage facilities, 13 treatment plants and dangerous industries (located in the estates for different reasons), 57 materials and construction enterprises, and 113 classified as "industry related to customers", which may comprise service and repair activities. This leaves 281 under "general industry", 29 under "light industries" and 11 chemical industries.

The Jebel Ali Free Zone in Dubai is the largest of three in the United Arab Emirates, two less-well-developed areas being in Abu Dhabi and Fujairah. Established in 1983 and operational from 1985, it is still in its early stages of development. It may be commented upon simply as an industrial estate or specifically as a Free Zone. In the latter capacity it has attracted much attention among the GCC States, some of which are considering the adoption of an equivalent programme. Its progress, therefore, is of considerable significance.

While ordinary industrial firms in the GCC region enjoy a wide range of privileges, including minimal tax liability, Free Zone companies have a major additional freedom as regards ownership: there is no insistence on a minimum 51 per cent ownership by nationals, which could operate as a significant disincentive to foreign companies elsewhere.

Jebel Ali, however, goes out of its way to be attractive to foreign investment. The Government of Dubai guarantees 30 years' freedom from taxation. There is freer import of foreign labour, and medical services are provided on a highly subsidized basis. Bureaucracy is kept to a minimum. The Free Zone is itself empowered to issue special licences for foreign companies, and aims at securing registration within a week. It has a cooperative arrangement with the port authority so that firms may pay duties incurred on exports to GCC countries after six months rather than paying duties in advance and having to wait for refund of duty on exports outside the region. The infrastructural facilities offered are of a particularly high standard, particularly the port facilities in which some US\$ 2.5 billion have been invested to create one of the biggest ports in the world. Advance factories have been built, available for rent or purchase. Efforts are being made to satisfy recreational and educational requirements, such as a golf course and foreign schools.

It is premature to offer critical judgement as to the success of Jebel Ali, which has been in operation for only a few years. Nor can one yet be certain that it is likely to prove successful, even though the current rate at which new companies are being established, four or five a month, appears very favourable. If the composition of Free Zone establishments are examined, for instance (table 21), it is noticeable that a large proportion of establishments is engaged in trading and the distribution of goods and in service activities, and only 69 out of 187 are actually manufacturing enterprises. Of the latter, 32, nearly half, are in textiles, garments and leather, an industry in which concern has been expressed that foreign companies have been using a United Arab Emirates location as a means of bypassing quota restrictions in foreign export markets, in some cases with little or no genuine United-Arab-Emirates-based value added. It should be noted, also, that other countries, such as Bahrain, have made considerable progress without this mechanism.

It will be important to monitor the costs and benefits of the free zone to the host country, given that much of the labour and materials is imported, no income tax is paid and substantial infrastructural costs, particularly the port, are incurred. Local value added in terms of local materials used, construction of offices and residences, catering requirements, banking, insurance and other services are not likely to be substantial. The hope is that the attraction of a sufficient "critical mass" of industry will have a signal effect on potential investors and provide the necessary momentum for progressive expansion. In this connection, the establishment of Jebel Ali as a centre for international warehousing could have a positive spin-off, even for industry in the long term. Thus Sony has established warehousing to cover Western Asia and Africa.

Table 21. Jebel Ali Free Zone, United Arab Emirates: composition of activities among 187 registered companies, 1989

<i>Industry</i>	<i>Number of companies</i>
<i>A. Manufacturing</i>	
Food, beverages and tobacco	5
Textile, clothing and leather	32
Wood products and furniture	1
Paper, printing and publishing	2
Chemical products and plastics	6
Concrete and non-metallic products	3

continued

Table 21 (continued)

<i>Industry</i>	<i>Number of companies</i>
Basic metals (scrap)	4
Fabricated metal products	8
Special car, light aircraft assembly	2
Other manufacturing, especially the video industry	6
Total, A	— 69
<i>B. Non-manufacturing</i>	
Trading and distribution, including storage	69
Services	28
Storage	8
Maintenance	3
Packaging, assembly, minor processing and blending	5
Gas and construction	5
Total, B	— 118
Total, A and B	187

Source: Jebel Ali Authority.

The provision of custom-built factories for lease has been adopted in other countries, not always with success, but has evidently been a strong positive feature at Jebel Ali and a strong demand for these is exhibited. Forty factories have been built.

In 1989 some 1,000 employees were distributed among 200 establishments of all kinds. The mean of 27 suggests a large proportion of establishments are quite small. In fact there are so far a score or so of large enterprises, employing perhaps three quarters of the total, a similar number of small- to medium-scale enterprises, especially in the range of 20 to 50 persons, and a rather large number of very small establishments employing 10 persons or less, which might include trading, storage and other non-manufacturing activities.

Coming to some general conclusions, it is apparent that while industrial estates or areas are seen in all the GCC States as an important part of their industrial planning, no clearly defined policy yet exists. There is, for instance, no very clear distinction between an industrial area, in which land is allocated for the purposes of segregating industry

from residential areas, and an industrial estate in which industries are assisted in a number of other ways.

Establishments located in the industrial areas all enjoy cheap electricity and water, with a few exceptions, but for the most part this is not a distinguishing advantage, since the same charges obtain away from the area irrespective of location. In all the countries the important provision in the eyes of manufacturing is developed land with basic services, which is in every instance a scarce resource.

Generally speaking, there has not been a deliberate policy to use the mechanism of industrial estates to promote small- and medium-scale industry, even where these have in fact been assisted. In Saudi Arabia the restrictive industrial licensing policy pursued has led to the exclusion of a major swathe of medium- as well as small-scale establishments from the estates. The mean project cost among industrial establishments in the industrial cities was observed to be about US\$ 350,000. The variation in average project size between countries, and in particular between Saudi Arabia and the remainder, appears significant.

Kuwait has a less restrictive licensing policy, and the industrial estates there accept craft enterprises. Two industrial areas specifically for craft industry have been identified. However, as in Qatar and Bahrain, craftwork has been accepted in a rather unplanned way, with the result that heterogeneous mixtures of small-scale manufacturing, garages, services, repairs and storage facilities have emerged, sometimes brought together on an estate as a means of evacuating noisy and dirty informal-sector activity from city areas rather than as part of an industrial development strategy.

While it should remain the policy to provide facilities and space for activities in the informal sector, it is desirable to separate small manufacturing establishments, those, for example, with 10 or more employees, with some development potential. It may then be possible to assist these more effectively with rented sheds or small factory premises of an appropriate size and cost, and with credit, technical and marketing advice, labour recruitment and training, perhaps on the lines of the Rusayl Industrial Estates in Oman. Subject to scrutiny as regards the cost and appropriateness of the structures and services provided, the latter might provide a model for development elsewhere in the Persian Gulf region.

As just noted, the industrial estates in the GCC countries provide for small- and medium-scale establishments, without deliberately setting out to promote small-scale enterprises. Where they have been aimed directly at the informal sector, provision has been rather inadequate, and left to municipalities to organize and manage. This uncertainty, or ambivalence, may be related to the major dichotomy which exists in the structure of GCC manufacturing industry, with a number of very large enterprises alongside a preponderance of micro-enterprises, without a substantial intermediate small- and medium-scale enterprise category. What appears

desirable is a three-tier approach that would clearly identify large-scale ventures, modern small enterprise and informal-sector workshop activity, giving all three the appropriate form and level of support.

Although the provision of sheds or advance factories for lease has proved very successful at Rusayl (Oman) and Jebel Ali (United Arab Emirates), the approach generally pursued is merely to allocate land within an industrial area, leaving the entrepreneur to build the required factory or shed. This substantially increases the amount of total and start-up capital required, buildings often accounting for as much as 40 per cent of project cost. This is likely to work against small and medium-scale enterprises with less easy access to finance, and to aggravate the bias in preferential finance allocated at heavily subsidized rates to large enterprises. A particular advantage secured in being able to lease factory space, especially commented upon in the case of Jebel Ali, is that firms are allowed to "try the market" for some time before going on to build their own factory or to purchase the one in question, while in addition it reduces the lead time involved in establishing the enterprise. Both these aspects are especially important for smaller firms with financial constraints requiring very careful use of risk capital and those engaged in innovative ventures, by providing an important element of flexibility. At Jebel Ali the factories can be sectioned to provide sheds of different sizes from 500 square metres up to 7,000 square metres, with a cost ranging at 45-600 dirhams per square metre from US\$ 60,000 to US\$ 80,000 for a 500 square metre unit to from US\$ 850,000 to US\$ 1,150,000 for the largest size. This form of assistance is appropriate at all levels if the three-tier approach to industrial promotion is pursued, including craftwork enterprises and medium- and large-scale factories. As compared with loans incorporating a substantial grant element, ownership is retained by the development authority for eventual reallocation or sale to the incumbent.

A major potential advantage of industrial estates is that non-financial assistance can be more easily directed to industrial establishments, particularly small- and medium-scale enterprises, when assembled together. This includes assistance to new enterprises in cutting through red tape and bureaucratic procedures of all kinds, including planning permission, issue of licences, visas and permits for imported labour, and connection with basic services; here it is useful if the estate and its management can serve as a "one-stop shop" dealing simultaneously with all these requirements. And secondly, it includes assistance in production and sales, such as advice on technology and on export possibilities where applicable. There is a need, in other words, to go beyond the "industrial area" concept, where the main emphasis is simply on making land available for factory construction, towards the estate concept, with more comprehensive involvement in the promotion of new and expansion of existing enterprises.

F. Industrial licensing policy

Another element of industrial policy which appears important, in Saudi Arabia particularly, and needs to be considered, is industrial licensing, even though in this case its impact appears to be negative. In comparison with the other countries, and absolutely, Saudi Arabia pursues a very restrictive industrial licensing policy, industrial licences being issued only to firms with a total investment of at least SRI 1 million (US\$ 0.267 million). As observed above, this would have excluded 95 per cent or more of registered manufacturing establishments in Oman in 1987, for example. Within Saudi Arabia, 21,648 out of 22,573 private establishments enumerated in the 1981 Census of Manufacturing Establishments (96 per cent) employed fewer than 20 persons (table 4): it may be wondered how many of these would have the capital investment required to qualify for an industrial licence.

The effect of not having a licence can be serious. First, such enterprises are not entitled to location on an industrial estate. Being away from the industrial city does not affect the rates payable for electricity and water, which are equally favourable on and off the estate. Access to land is a different matter, with high rents payable elsewhere, and only some US\$ 0.023 per square metre per annum on site. Secondly, without an industrial licence there is no access to preferential finance through SIDF, even if lending policy were not for other reasons biased towards large enterprises. Thirdly, firms with no industrial licence are denied the facility of duty-free import of raw materials and equipment. Since smaller firms which are otherwise more labour-intensive already are disadvantaged by the scarcity of labour in the region, this adds a second disadvantage to firms operating at this scale. Fourthly, the same firms cannot be registered in the Guide of Manufacturing Industries in the GCC countries maintained by the GCC secretariat, and are thus not eligible for duty-free export to the other countries.* This could be a major point for small, dynamic firms wishing to expand. Lastly, under this policy, firms with less than SRI 1 million of capital must register, not with the Ministry of Industry and Electricity, but, since 1980, with separate local municipalities which may not keep a record of their existence, let alone have the capacity to provide the range of supportive measures which they might need.

The establishments licensed by the municipalities in Saudi Arabia are a very mixed bag, mostly workshops, garages, petrol stations, other retail trading outlets, and services. In 1988, 30 per cent were food supply establishments. Evidently municipalities could not be expected to be

*In practice, Kuwait and perhaps other GCC countries except Saudi Arabia are willing to accept goods irrespective of Guide registration and size, subject to rules of origin (value added).

developing a programme of industrial promotion and assistance within this heterogeneous group of activities. Any genuine but smaller-scale manufacturing enterprise consigned to this category would be lost in this respect; the assistance requirements for modern manufacturing establishments, small or large, for manufacturing micro-enterprises, for service and repair establishments, and for wholesale and retail stores are different. By offering different fee levels of industrial, workshop and commercial licences (higher for the industrial), enterprises could below a certain size be left to select themselves, choosing the industrial rather than workshop licence where this is seen by them to carry an advantage. This would avoid any attempt to draw a line administratively, which must inevitably be arbitrary. Workshop estates could be developed separately to cater for the needs of the second category. Certain advantages such as duty-free import of materials could equally be extended to this category rather than establishing a strong dichotomy in terms of entitlements.

A different licensing policy is pursued in Kuwait. Here there are two types of licence, an industrial one for projects, and one for craftwork. Eligibility is again determined administratively, but this time on the basis of the perceived level of technology (together with, to some extent, the level of skills, type of product and management), rather than the capital or the labour employed. This has created certain difficulties, some quite large enterprises being classified as craftwork, due to the employment of technically simple rather than automated processes.

Very similar numbers - 700 or 800 - of each type of licence have been issued (table 22). It will be noted that a large proportion of craftwork licences has been for carpentry (244, or 30 per cent), garment-making (198, or 25 per cent) and light metal products (90, or 11 per cent), altogether accounting for 65 per cent of licences. But it can be seen that the same type of product, for example, aluminium profiles and light metal work, may be produced under either an industrial or craftwork licence, underlining the arbitrariness of the division.

Table 22. Kuwait: distribution of industrial and craftwork licences by industrial division, end-March 1989

<i>Industry</i>	<i>Industrial licences</i>	<i>Craftwork licences</i>	<i>Total licences</i>
Quarrying	39	--	39
Food processing	81	54	135
Chips and ice cream	(2)	(39)	(41)

continued

Table 22 (continued)

<i>Industry</i>	<i>Industrial licences</i>	<i>Craftwork licences</i>	<i>Total licences</i>
Textile and leather	11	202	213
Garments, ready-made clothes	(1)	(198)	(199)
Wood and wood products	75	249	324
Carpentry	(73)	(244)	317
Paper products and printing	61	53	114
Printing and bookbinding	(42)	(46)	(88)
Chemical products, plastics etc.	72	15	87
Non-metal products and construction	145	57	202
Cutting and polishing marble	(12)	(31)	(43)
Metal products and equipment			
Light metal work	88	90	178
Aluminum profiles	(58)	(53)	(111)
Total	572	720	1 292

Source: Ministry of Commerce and Industry of Kuwait.

Note: Figures in parentheses not included in totals.

A major advantage of obtaining an industrial licence in Kuwait, where industrial plots are at a premium, is that licensed enterprises are automatically allocated a plot in an industrial area: no industrial licence holders exist outside these designated areas. Subsidized rents in the industrial areas are so low at KD 0.2 (US\$ 0.67) per square metre per annum as to rate as negligible in comparison with commercial rents outside of KD 6 to KD 24 per square metre per annum (US\$ 20 to US\$ 80 per square metre per annum). That these advantages are perceived by firms is demonstrated by the large-scale unofficial encroachment of significant numbers of enterprises of various kinds on to the estates.

Craftwork enterprises appear to have a great many difficulties with officialdom, particularly with municipalities, in trying to secure plots, especially if they are by nature noisy or messy, producing bricks and tiles or cement blocks, for example. Indicative of the ambivalent attitude of at least some of the authorities is that in 1986 a large number of such enterprises in the informal sector were bulldozed. Some have failed to resume production or have switched to other activities such as storage. This runs counter to prevalent views among development economists today, who consider that activities in the informal sector have a positive role to play and need rather to be encouraged.

Concern for the environment can be combined with promotion of such activities if craftwork areas can be designated as estates distinct from the industrial estates of larger enterprises, where appropriately designed assistance as required can be targeted. This would at least establish the two categories on the same basis as regards access to land, which is seen as of critical importance. Evidence of a more benign attitude exists now, an estate having been developed to accommodate service workshops, including garages.

As in Saudi Arabia, craftwork establishments largely buy materials and equipment locally, without customs duty exemption. Establishments that are approved for industrial licences are issued simultaneously with import licences. Establishments with only craftwork licences may be refused import licences for similar equipment being imported free of duty by those with industrial licences. Access to preferential finance from the Industrial Bank is not affected by lack of an industrial licence, but only because loans are mostly issued to relatively large enterprises anyway.

In the United Arab Emirates, to obtain an industrial licence firms must satisfy at least two of the following three conditions: project capital should be at least 250,000 dirhams (US\$ 68,000); at least 10 persons should be engaged; and driving power should be at least 5 kilowatts. Remaining establishments also need a municipal licence, having satisfied certain health and building requirements. It may be observed that the US\$ 68,000 condition for eligibility is low compared with Saudi Arabia (US\$ 267,000) and Oman, while Kuwait does not use the criterion of capital at all, unless indirectly via technology. The criteria employed in Qatar, QR 250,000 (US\$ 68,000) of invested capital and 10 or more persons employed, are similar to those used in the United Arab Emirates. There is thus no agreed definition within the GCC of what industry should be considered eligible for an industrial licence.

Despite the significant differences in defining and coverage, the advantages or disadvantages resulting are similar, for example access to an industrial estate, inscription in the GCC Guide and freedom to export duty-free within the GCC (subject to value-added content), and duty free import of materials and equipment. It follows that in these respects establishments of the same size within the GCC do not qualify equally for privileges.

As a matter of principle, in any case, it appears desirable to separate the process of licensing, and charging of licence fees, firstly, from the analysis of feasibility and provision of technical and market information and advice; then from project analysis for the purpose of loan issue; and finally from decisions to accommodate on an industrial estate with accompanying managerial advice, labour training, and the like.

In the case of industrial estates such as Rusayl, in Oman, an attractive aspect is the assistance provided in short-cutting procedures for acquiring licences and permits and for meeting other administrative requirements. There is no reason why such streamlining of procedures via

"one-stop shopping" arrangements should be limited to establishments on industrial estates.

With respect to project identification, technical and market information and feasibility studies, a related service could be provided. The Industrial Development Technical Centre in Bahrain, attached to the Ministry of Industry, already offers a service along these lines to potential entrepreneurs interested in developing new ventures. In other countries, the industrial banks carry out full feasibility studies for projects which they are considering funding, but these tend to be large projects, and the service is not general.

Related to licensing is the issue of planning and the need to avoid duplication of projects, with market saturation and excess capacity, which has in any case occurred, in the United Arab Emirates for example, despite licensing. This is best dealt with not by lengthening the licence application process for projects as a whole, but through the supply of initial market information to the entrepreneur, to enable the latter to calculate the expected rate of return, by a properly established advisory service within the Ministry or Chamber of Commerce, or both, and later by the lending institution where a loan is applied for.

G. The case for targeting promotional efforts to industry

As observed earlier, given the need to import labour in expanding traditional small-scale enterprises, and the labour-intensity of even large-scale import-substituting industries (and corresponding lack of opportunity for labour-intensive export-oriented industry), there is a strong case for concentrating promotional efforts in capital- and technology-intensive small- and medium-scale enterprises in an effort to gain a foothold in specific markets. The GCC region does offer, where labour-intensity is not an important consideration, the following advantages: cheap capital; extremely cheap energy (the basis of energy-intensive alumina-related industries in Bahrain and the United Arab Emirates, using imported bauxite); good infrastructure, including sea and air communications; an exceptionally well-developed banking system; favourable geographical location in relation to Europe and other continents; a coherent GCC common market; and strong regional political stability. Technology-intensive industries could expect to benefit from preferential finance carrying substantial subsidy (assuming in Saudi Arabia that capital investment exceeded US\$ 260,000 in order to qualify for an industrial licence) and infrastructural subsidy through industrial estates. Most importantly, fiscal incentives even outside the free zones are exceptionally favourable, with no income or company taxes for national companies and foreign companies combining in joint ventures able to secure 5- or 10-year tax holidays in different countries and a range of other privileges. What is significant is that, despite these evident

advantages, not a great deal of development (except in Bahrain) has taken place so far in these directions, as opposed to conventional import-substituting industry.

A constraint here may be information, relating to both markets and technology. A widespread comment among those involved in industrial promotion in the Persian Gulf States, whether in Ministries of Industry, Chambers of Commerce or financial institutions, is that a particular weakness among local entrepreneurs relates to awareness of markets. With reference first of all to GCC export market information, the deficiencies here are made obvious by the existing duplication of plants, and consequent widespread excess capacity in GCC manufacturing. If this is the situation with respect to national and GCC markets, it will clearly be even more problematic in relation to overseas markets, for new departures in GCC production and for small- and medium-scale enterprises.

In addition to market information, technical information is frequently needed. It is particularly difficult for a small entrepreneur, especially, to obtain information on technology and the range of equipment available, and it is not efficient for each individual to undertake such a search, where the information may be important to a number of individuals at different times. At present, it may be necessary for an entrepreneur to approach a number of different embassies in order to obtain and compare alternatives.

For evident reasons, private sector entrepreneurs in the GCC, who may well have the finance required, have difficulty in identifying product opportunities, and will frequently be interested in entering a new business as a joint venture in collaboration with an established overseas manufacturer. Conversely, because of the laws constraining foreign participation in national ventures, foreign entrepreneurs will need to find local partners or sponsors. Communication in either direction will not be an easy matter, in the absence of any facilitating mechanism, and the formation of business partnerships even in the most favourable circumstances is obviously a delicate proposition. Establishing a pool of local industrialists interested in such collaboration needs a degree of organization, in which clearly local Chambers of Commerce (or manufacturers' associations if such exist) should be involved.

Technology-intensive industries may also be capital-using, because of the rapid obsolescence of technology and products, requiring constant reinvestment in research and development (R&D) and marketing organization. Persian Gulf States might find that the best use of their cheap capital would be to encourage particular categories of industry to become established in the area, with major support in R&D, together with technical training, rather than dispersing this rather widely and indiscriminately in industrial subsidies in the form of tax benefits, preferential finance and subsidized infrastructure.

SOMMAIRE

La planification gouvernementale dans une industrie pétrolière de petite dimension : facteurs limitant les efforts du Qatar en matière de diversification de l'industrie

Robert E. Looney

L'objectif de l'article est d'évaluer les efforts déployés à ce jour par le Qatar en matière d'industrialisation. L'auteur y évoque essentiellement les incidences de la politique des pouvoirs publics sur la diversification de l'industrie dans le pays. Aux fins de bien suivre le processus d'industrialisation du pays, une évaluation comparative et quantitative des caractéristiques de l'industrialisation dans 20 pays arabes d'Asie occidentale et d'Afrique du Nord a été entreprise. Il ressort de cette analyse que de nombreux facteurs qui, pour la plupart, échappent dans une large mesure au contrôle des pouvoirs publics, ont freiné le processus d'industrialisation.

L'insuffisance des importations et les effets inflationnistes de la dévaluation dans les pays en développement

Mehdi Shafaeddin

La dévaluation vise l'augmentation des recettes en devises et la fourniture de biens commercialisables. D'après l'auteur, l'homogénéité entre les importations et les biens produits dans le pays, fondement de toute conception classique de la dévaluation, est faible, notamment dans les pays à revenu très peu élevé. L'auteur analyse l'influence des importations sur l'inflation et étudie la mesure dans laquelle une dévaluation nominale se transforme en une évaluation réelle ainsi que la contribution directe de la dévaluation à l'inflation. Il étudie par ailleurs les résultats statistiques concernant 58 pays en développement classés en quatre groupes de revenu et ayant procédé à une dévaluation au cours de la période 1980-1987. Il en déduit que, pour le groupe au plus faible revenu et, dans une certaine mesure, pour le groupe qui suit, le rôle de l'insuffisance des importations et l'impact de l'inflation sur cette même insuffisance se confirment. Pour les deux autres groupes, il n'y aurait aucune association statistique significative.

Inefficacité de la gestion dans la petite industrie manufacturière en Arabie saoudite : un obstacle au développement de l'économie

Bandar Al Hajjar et John Presley

L'existence d'un "déficit financier" a fait l'objet d'amples recherches tant dans les pays développés que dans les pays en développement, ce déficit étant considéré comme le principal obstacle au développement de la petite entreprise. Au-delà de ce "déficit financier", des auteurs cherchent à analyser l'inefficacité de la gestion des petites entreprises et présentent dans ce contexte une étude de cas du secteur manufacturier en Arabie saoudite au cours des deux dernières décennies.

L'étude fait apparaître l'absence de toute "gestion avertie" dans la petite entreprise, laquelle a des incidences sur la demande de financement et empêche la petite entreprise de prétendre au financement institutionnel. Il reste bien entendu que l'inefficacité de la gestion a des conséquences bien plus importantes dans la mesure où elle constitue un obstacle à une réelle contribution de la petite entreprise au processus de développement.

En conclusion, les auteurs passent en revue les moyens qui permettraient de pallier l'inefficacité de la gestion en Arabie saoudite.

La privatisation en Afrique : le cas de la République- Unie de Tanzanie

John S. Henley et George B. Assaf

La privatisation est tout à fait à l'ordre du jour de la politique de nombre de pays africains. Il n'en demeure pas moins que peu de ces pays ont fait des progrès significatifs dans ce sens. Une des principales raisons de cet état de fait tient à l'absence de toute évaluation réaliste des besoins de ces pays et de leur capacité à se lancer dans une véritable entreprise de privatisation - modalités de l'aide financière, initiatives prises en matière de politique, promotion des investissements et par-dessus tout exploitation des ressources humaines. L'article met en évidence tous ces problèmes qui touchent notamment la relation entre la réadaptation et la privatisation et ce, dans le cadre d'une étude de cas par pays.

Depuis 1967, la République- Unie de Tanzanie suit une politique de développement du type socialiste. Il s'agit par conséquent d'un pays qui possède un vaste secteur public ou para-étatique et dans lequel

L'intervention des pouvoirs publics dans l'économie est depuis longtemps très marquée. Le gouvernement envisage aujourd'hui sérieusement d'adopter une politique de privatisation qui lui permettrait de régénérer l'industrie et la transformation des produits de l'agriculture. Il reste que les politiques de libéralisation et de privatisation se heurtent à l'heure actuelle à des difficultés particulières. C'est pourquoi les auteurs ont choisi l'exemple de la République-Unie de Tanzanie pour faire ressortir les principaux problèmes qui se posent dans un contexte africain avant que la privatisation ne puisse être sérieusement considérée comme une solution politique viable susceptible de conduire à la réadaptation et à la régénération de l'industrie. Il importe néanmoins de noter que les auteurs n'ont pas cherché à étudier tous les problèmes que pose le processus de privatisation dans la République-Unie de Tanzanie. L'article ne doit, par conséquent, être considéré que comme le point de départ d'un examen plus complet des obstacles auxquels se heurte la privatisation dans ce pays et des possibilités en la matière.

**La promotion de l'industrie de petite et moyenne dimension
important de la main-d'oeuvre : politique et perspectives
dans les Etats du golfe Persique**

Ian Livingstone

Bien que partie de peu de chose, l'industrie de petite et moyenne dimension s'est rapidement développée dans les Etats du golfe Persique essentiellement du fait d'un apport général de richesse et du niveau élevé de l'activité économique résultant de l'existence de ressources pétrolières ainsi que de l'aide apportée par les pouvoirs publics, notamment sous la forme d'importantes subventions. L'un des principaux obstacles à ce développement a été l'insuffisance de la main-d'oeuvre autochtone. C'est pourquoi le développement de l'industrie de petite et moyenne dimension dans la région est un cas plutôt unique en son genre qui soulève divers problèmes touchant les coûts et les avantages des pays, problèmes étudiés dans l'article. Le développement et la composition des entreprises industrielles de petite et moyenne dimension dans les Etats du golfe Persique y sont analysés comme les politiques gouvernementales ayant trait au financement, aux établissements industriels, aux zones franches et à l'octroi des licences.

EXTRACTO

Planificación gubernamental en una economía petrolera pequeña: factores que limitan los esfuerzos de diversificación industrial de Qatar

Robert E. Looney

El propósito de este trabajo es evaluar los esfuerzos de industrialización realizados por Qatar hasta la fecha. Examina principalmente el efecto de la política gubernamental sobre la diversificación industrial del país. A fin de apreciar en perspectiva el proceso de industrialización de Qatar, se realizó una evaluación comparativa de los resultados cuantificados de la industrialización en 20 Estados árabes de Asia occidental y África septentrional. De este análisis se deduce que muchos factores, la mayoría de ellos en gran parte fuera del control gubernamental, han socavado el proceso de industrialización.

Insuficiencia de las importaciones y repercusiones inflacionarias de la devaluación en los países en desarrollo

Mehdi Shafaeddin

La devaluación tiene como objetivo aumentar los ingresos en divisas y la oferta de bienes comerciables. Este trabajo afirma que la homogeneidad entre las importaciones y los bienes producidos internamente, hipótesis adoptada tradicionalmente para justificar la devaluación, es insuficiente, especialmente en el caso de países de muy bajos ingresos. Investiga la influencia de la insuficiencia de importaciones en la inflación y la medida en que la devaluación nominal se convierte en devaluación real, y examina la contribución directa de la devaluación a la inflación. El trabajo analiza los resultados estadísticos de 58 países en desarrollo, clasificados en cuatro grupos de ingresos, que devaluaron sus monedas durante el período 1980-1987, para llegar a la conclusión de que respecto del grupo de países de menores ingresos, y en cierta medida el grupo siguiente, se confirma la realidad de la insuficiencia de las importaciones y su repercusión inflacionaria. En lo que respecta a los otros dos grupos de países, no se descubrió ninguna relación estadística significativa.

Ineficiencia en la gestión de pequeñas empresas manufactureras en la Arabia Saudita: un obstáculo para el desarrollo económico

Bandar Al Hajjar y John Presley

La existencia de una "insuficiencia financiera" ha sido el foco de investigación, tanto en las economías en desarrollo como en las economías desarrolladas, por considerarse como el principal factor limitativo del crecimiento de la pequeña empresa. Este documento busca más allá de esa "insuficiencia financiera" y señala las deficiencias de gestión que se dan en las pequeñas empresas. Efectúa un estudio monográfico de las pequeñas empresas en el sector manufacturero de la Arabia Saudita durante los últimos dos decenios.

La encuesta revela una notable falta de "saber profesional" en la gestión de las pequeñas empresas que repercute en las solicitudes de financiación y en la aptitud de los pequeños empresarios para obtener asistencia de las instituciones financieras. Pero, por supuesto, esas deficiencias de gestión trascienden de la cuestión financiera, al limitar además la aptitud de la pequeña empresa para contribuir al proceso de desarrollo.

En conclusión, el documento examina la posible forma de remediar esas deficiencias de gestión en el contexto de la Arabia Saudita.

La privatización en un contexto africano: el caso de la República Unida de Tanzania

John S. Henley y George B. Assaf

La privatización figura invariablemente en el programa de políticas declaradas de muchos países africanos. No obstante, pocos de ellos han hecho progresos significativos en esa dirección. Ello responde principalmente a la falta de una evaluación realista de las necesidades y capacidades que se requieren para llevar a cabo una privatización exitosa - condiciones ofrecidas a título de apoyo financiero, iniciativas de política económica complementarias, promoción de inversiones y, lo que es más importante, perfeccionamiento de los recursos humanos. Este documento pone de relieve estas cuestiones - especialmente la relación entre rehabilitación y privatización - en el contexto concreto de un estudio monográfico respecto de un solo país.

La República Unida de Tanzania ha seguido una vía de desarrollo socialista desde 1967. Como resultado de ello, es un país con un sector público/paraestatal importante y que tiene también una larga tradición

de marcada intervención estatal en la economía. En la actualidad, el Gobierno está considerando seriamente la posibilidad de la privatización como medio de galvanizar la recuperación de la industria en general y del sector de elaboración de productos agropecuarios en particular. No obstante, existen actualmente dificultades especiales en lo que respecta a las políticas de liberalización y privatización. Por consiguiente, se ha elegido a la República Unida de Tanzania para sacar a relucir las principales cuestiones que habrán de resolverse en el contexto africano antes de que pueda considerarse seriamente la privatización como opción política viable para la rehabilitación y la recuperación de la industria. Es importante destacar que el documento no intenta examinar todas las cuestiones implicadas en el proceso de privatización de la República Unida de Tanzania. Por lo tanto, debe entenderse que prepara el terreno para un examen más completo de los obstáculos y oportunidades que puede haber para la privatización en ese país.

**Promoción de la pequeña y mediana industria con mano
de obra importada: política y perspectivas
de los Estados del Golfo Pérsico**

Ian Livingstone

La pequeña y mediana industria de los Estados del Golfo Pérsico ha registrado un ritmo de desarrollo rápido, aun cuando la base inicial de cálculo fuera baja, en gran parte como resultado de la afluencia general de riqueza y de los elevados niveles de actividad económica generados por el recurso petrolero, así como por el apoyo estatal, que ofrece subvenciones importantes. Uno de los principales obstáculos ha sido la insuficiencia de mano de obra autóctona. Por lo tanto, el desarrollo de una industria pequeña y mediana en la región representa un caso bastante excepcional, y plantea diversas cuestiones relativas a los costos y beneficios eventuales para el respectivo país, que se exploran en este documento. Se analiza el desarrollo y la composición de la pequeña y mediana industria en los Estados del Golfo Pérsico, y se examinan las políticas gubernamentales en materia de financiación, parques industriales y zonas francas y concesión de licencias.

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