Ability of the Foreign and Joint Venture Industries in Jeddah to Spread Benefits to the Local Spatial and Economic Environments

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ABSTRACT. It is widely accepted that the incentives provided for industries succeeded overwhelmingly in attracting foreign capital to participate on a sole or on a joint venture basis in the Saudi industrial development. This is in line with the Saudi long-term goals of achieving self-sufficiency and economic diversification. However, if incentives ceased, a significant proportion (if not all) of the foreign capitals might cease out of the Saudi industrial economy. This stresses the need to maximize positive impacts of such foreign capitals on national industrial and spatial developments. Regarding this, the explorative question is: to what extent do the foreign and joint venture industries operating in Saudi Arabia actually spread benefits within the local spatial and economic environments? With reference to the Jeddah Industrial Estate as a case study, the paper attempts to answer this question. In light of the answer, recommendations are drawn for the future of the Saudi Industrial Development Strategy, amongst which is the call for linking joint venture and foreign industries with the Saudi national factors of production whenever and wherever possible.

1. Introduction

Regional development in Europe has been formally attempting to activate generation and to influence spatial distribution of industries – as both significant employers and stimulators of spatial and economic development – since the early times of the twentieth century, mainly through objectively varying industrial incentives (e.g., exemptions from taxes) across geographical spaces. This has been due to the unanimous wish to help in enhancing national economies as well as in achieving a kind of even spatial distribution of economic activities[1].
The ability of the industrial incentives, provided in some assisted areas, to stimulate positive impacts on economy and on social welfare, through generating industries from start up or attracting them from other spatial locations, have been amongst the criteria applied in assessing success of regional (industrial) policy in a high number of the European countries. For example, More and Rhodes found in 1973 that, because of regional policy, Scotland gained 12-15,000 jobs in indigenous industry and an additional 34-38,000 jobs in incoming manufacturing\[2\].

Setting aside further discussion of the implications of industrial policies in Europe and/or elsewhere, it has been accepted - probably all over the world - that industrial development is a key to a more solid economic base: It substitutes importing; it - in the case of exports - brings revenues to the national economy; it provides jobs; it utilizes local factors of production, with all the value-added benefits associated to this; it generates spatial and economic development in the backward areas, ... etc. These potential implications have been largely and factually demonstrated by the impacts of the industrial revolution in Europe.

It is believed here that, in order for a country to benefit most from its industrial development, there should be follow-ups and evaluations for the extent to which industries are actually helping in the achievement of the national industrial and other development goals. The need for such evaluations becomes more imminent when addressing industries with foreign and/or joint venture capitals. This is because such capitals may pull out one day from the concerned national economy before they fulfill the expected objectives (e.g., shared experiences, technical benefits to national industries, training of local personnel).

Saudi Arabia has been no exception regarding the belief on the potentially positive impacts of industrial developments. As early as the late 1960s, besides encouraging establishment of the national industries, foreign capitals have been welcomed in. The incentives provided attracted foreign capitals to participate in the Saudi non-oil industrial development, on a sole as well as on a joint venture basis. It is assumed here that there is a need to test the extent to which such foreign and joint venture industries are functionally linked with the Saudi spatial and economic arenas of development. This is an important proposition that underlines the need to investigate whether or not such industries functionally exist in Saudi Arabia as they do physically: A task assumed by this paper.

Due to locational proximity, the Jeddah Industrial Estate has been chosen for close inspection. It is important that this paper targets studies to industries that have been functioning for a reasonably long time: Time factor has something positive to do with showing the potential impacts of industries.

By the year 1983, there was an aggregate sum of 188 operating factories in the Jeddah Industrial Estate, of which 61 (or 32\%) were based on foreign and joint venture capitals\[3\]. By the time of this research (June, 1991) those 61 factories were fortunately still functioning. Due to resource limitations, a questionnaire survey was targeted to a sample of 30 (or 50\%) of these 61 factories. However, units within the
sample were carefully selected so that the factories surveyed would proportionally represent all the categories represented by the 61 foreign and joint venture factories that were functioning in the Industrial Estate for some time prior to 1983 (Consult Table 1).

**Table 1.** The sample selected from the 61 foreign and joint venture factories that were functioning in the Jeddah Industrial Estate prior to 1983.

<table>
<thead>
<tr>
<th>Category</th>
<th>Share of category in the 61 factories (Nos.)</th>
<th>Share of category in the selected sample (Nos.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement related</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Other constructional</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Chemicals</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>Food</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Furniture</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Electrical appliances</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

Source: Manipulated from Ref. [3].

In preparation for utilizing the analysis of the gathered data, theoretical and practical backgrounds to the spread of industrial benefits will be introduced, and general information about the Saudi non-oil manufacturing industries will then be provided. These steps will facilitate the eventual statement of the research recommendations.

2. Theoretical and Pragmatic Basis

Philosophies about the ability of industries to spread benefits to their surrounding spatial and economic environments were probably first introduced into economic literature in the context of the 'growth pole theory', initially formulated in 1955 by the French Scholar Professor 'Francois Perroux'[4]. The theory was developed as a result of practical studies of the ways in which industrial developments occur and cause beneficial effects on the surrounding economic and spatial areas. The studies proved that industrial development does not take place in similar intensities and/or everywhere but rather in varying intensities and at a few points (poles) from where benefits get diffused along diverse channels, causing varying terminal effects for economic and geographical environments in spatial and/or functional proximity[4].

Setting aside the definition and discussion of several related concepts and mechanisms (e.g., propulsive industry, external economies), the growth pole theory acknowledged the ability of industries to spread benefits via diverse channels. These
channels are represented by what economists call ‘factors of production’: raw materials, labor, capital, market (or sales), …, etc. For example, the benefits diffused via the channel of labor may be economically represented by the tendency of workers to spend some of their income in their home places.

The works of Myrdal (1957)\(^5\) and Hirschmann (1958)\(^6\) independently demonstrated findings in Sweden and in the United States of America (respectively) that were similar to the findings demonstrated by the earlier work of Perroux (1955)\(^4\) in France. Setting aside discussion of their findings about the ability of concentrated industries to polarize or attract factors of production and other functionally-linked industries, Myrdal and Hirschmann acknowledged the ability of industries to spread benefits along diverse channels and respectively named it the ‘trickling down’ and the ‘spreading’ mechanisms\(^7\).

Pragmatically, the ability of industries to spread benefits to their surrounding geographical and economic environments has always been judged as positively correlated with the extent to which functional linkages (through Perroux’s channels or factors of production – i.e., labor, capital, raw materials, markets and others) exist between the two sides – i.e., industries on one hand and spatio-economic environment on the other. The different factories that were independently studied by Perroux (1955), Myrdal (1957) and Hirschmann (1958) were functionally linked with local factors of production, and hence the channels of benefit diffusion were accordingly terminating in local areas. This was probably the essence of the then prominent ability of concentrated industries to spread their benefits to the areas in their geographical proximity.

With technological advancements (especially in transporation), industrial linkages with local factors of production probably became unnecessary for industries to establish and/or to keep functioning. Importing labor and raw materials from far areas became possible. Foreign capitals became welcomed to establish or expand national industries. Returns to such factors of production may leak from cycles of domestic economies causing terminal effects at areas from where such factors of production get imported. This may cause industries to spread some benefits far away from their national or surrounding spatial and economic environments, i.e., in areas where channels of benefit diffusion terminate. The inability of the Spanish Industrial Poles\(^9\), the Nigerian Industrial Estates\(^9\), the South Korean Rural Estates\(^10\), and the British Enterprise Zones\(^11\) to effectively spread benefits to their very surrounding areas are cases in point. In the light of the previously stated research objective, the questions that therefore lend themselves to discussion are: Are industrial concentrations doing any better in Saudi Arabia? If not, how can they do better in the future? Reasoned answers will be attempted with reference to the experiences of the foreign and joint venture factories operating in the Jeddah Industrial Estate. However, brief information about the Saudi non-oil manufacturing will first be provided.

3. The Saudi Non-oil Manufacturing Industries

Besides aiming at development of oil-related industries, the Saudi First Development Plan (1970-1975) aimed at activating roles of private sectors in establishing
non-oil industries throughout the country\textsuperscript{12}. Welcoming non-Saudi workers and actively training Saudis who should be prepared to replace non-Saudis in later stages of industrial development were amongst the other industrial aims adopted by the Plan.

It was the Second Development Plan (1975-1980) that made the historically giant step towards encouraging involvement of private sector (Saudi, joint venture and foreign) in the Saudi non-oil manufacturing industries. The Plan formulated what has been called the ‘Industrial Policy for Saudi Arabia’\textsuperscript{12}. The policy spelled out several aims for the Saudi non-oil manufacturing industry to achieve, amongst which participating in the diversification of the Saudi economic resources and in the achievement of self-sufficiency in basic goods were the most prominent.

In order to achieve its objectives, the Saudi Industrial Policy provides wide range of incentives in favor of newly establishing industries, amongst which are the following\textsuperscript{13}:

1. Provision of loans and participation equity capital under favorable conditions;
2. Technical assistance to businessmen in the formation and organization of new industrial companies;
3. Assistance in the selection of industrial projects and in the preparation of their economic feasibility studies;
4. Exemption from customs duties on imported equipment and primary materials;
5. Exemption from taxes on the profit share given to the foreign partners of the company, as provided in the Foreign Capital Investment Statute;
6. Preference given to local producers in government purchase;
7. Imposition of protective customs tariffs on competing imports;
8. Provision of accommodation in industrial cities;
9. Granting of subsidies for training Saudi employees; and

Besides enabling them to enjoy almost all the incentives provided for the Saudi national investors, the Saudi Industrial Policy explicitly welcomed the participation of foreign investors in the Saudi Industrial development\textsuperscript{13}:

“The Government welcomes foreign capital as well as foreign expertise and participation in industrial development projects in cooperation with Saudi businessmen. The Government, recognizing the benefits to the industrial development of the Kingdom from the entry of foreign capital accompanied by administrative and technical capability and ability for international marketing, assures investors that it will always avoid imposing any restrictions on the entry and exit of money to and from the Kingdom and that it shall continue its policy based on the respect of private ownership in Islamic Law (Sharia)”.

The most influential industrial development policy means (other than industrial loans) has probably been the provision of concentrated incentives (e.g., cheap accommodation and services) in the geographical contexts of the industrial estates. By
the year 1985, there were a total of 11 industrial estates throughout the country. However, it is believed that the designation of industrial estates and the simultaneously flourishing Saudi markets collaborated in stimulating exceptionally active attraction of foreign, joint venture, and national capitals into the Saudi industrial development (Table 2).

**TABLE 2.** Number of foreign (and joint venture) and national industries by the Saudi administrative regions in 1985: Concentrated mostly in industrial estates.

<table>
<thead>
<tr>
<th>Type of capital involved</th>
<th>Riyadh</th>
<th>Makkah</th>
<th>East</th>
<th>Madinah</th>
<th>Qassim</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Foreign and/or joint venture</td>
<td>140</td>
<td>133</td>
<td>104</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>393</td>
</tr>
<tr>
<td>(B) National</td>
<td>475</td>
<td>366</td>
<td>336</td>
<td>78</td>
<td>86</td>
<td>130</td>
<td>1471</td>
</tr>
<tr>
<td>Total</td>
<td>615</td>
<td>499</td>
<td>440</td>
<td>84</td>
<td>89</td>
<td>137</td>
<td>1864</td>
</tr>
</tbody>
</table>

* Other stands for the rural regions of Najran, Hail, Tabuk, Arar, Jouf, Qurayat, Assir, Al-Baha, and Jizan.

** The Makkah Administrative Region encompasses the Jeddah Industrial Estate (our case study).

Source: (A) Ref. [14] · P. 21
(B) Ref. [4] · P. 18

The 1,864 non-oil factories that were functioning in Saudi Arabia by the year 1985 (Table 2) invested an aggregate sum of 59,781 millions of Saudi Riyals (i.e., nearly $15,942 millions)\(^{[14]}\), of which the then 393 foreign and joint venture factories invested $7,909 millions (or nearly 50%)\(^{[14]}\). Furthermore, those 1,864 factories employed (in 1985) 126,204 persons\(^{[14]}\), of whom 37,261 (or 30%) were employed by the factories licensed under the Foreign Investment Law\(^{[14]}\). This suggests that, although they numerically appear fewer, the foreign and joint venture factories tended to be comparatively significant investors and employers in Saudi Arabia. This stresses again the importance of ensuring their positive impacts on the Saudi spatial and economic development.

4. Terminals of the Channels Along Which the Foreign and Joint Venture Industries in the Jeddah Industrial Estate Spread Benefits

4.1 The Jeddah Industrial Estate

Located in proximity of the Jeddah seaport and intercity highways, the Jeddah Industrial Estate covered in 1985 a total area of 7.86 million square meters\(^{[7]}\). It was initially established in 1975, simultaneously with several other estates throughout the country. It administratively comes under the Ministry of Industry and Electricity, Deputy Ministry for Industrial Affairs. Like the other Saudi industrial estates, it en-
joys concentrated incentives (e.g., rebates on costs of accommodation and services) as an approach towards enhancing its ability to polarize existing industries as well as to stimulate the establishment of new industries from start up.

Jeddah Industrial Estate had in 1983 a total of 188 operating factories, of which 61 (or 32%) were in a foreign and joint venture status: Ten of the latter category were totally based on foreign capital[15]. In June 1991, there existed 201 operating factories in the estate, of which 69 (or 34%) were based on foreign and joint venture capitals: 12 of the latter category were totally on foreign capital[15]. Although without substantial evidence, it seems that the concentrated incentives played effective role in encouraging spatial concentration of industries in the Jeddah Industrial Estate.

5. Analysis of the Gathered Data

Table 1 showed that 30 foreign and joint venture factories, in the Jeddah Industrial Estate, formed the target of a questionnaire survey, carried out, for the purpose of this paper, in June, 1991. Analysis of the gathered data will now be used to illuminate the extent to which those factories were capable of spreading benefits to the Saudi economic and spatial environments, via the channels of capital, labor, sales, raw materials and functional linkages with other industries that operate within the nation.

5.1 Capital

Of the 30 factories surveyed, 5 (or 17%) are based on 100% foreign capitals, 15 (or 50%) over 65%, while 10 (or 33%) between 45 and 60%.

Economically, it is well known that it is not the foreign capital that should be welcomed to an economy but rather its potentially positive impacts on national economies. This, at least in theory, could happen through activation of the mechanisms of development multiplier effects, i.e., stimulating positive impacts on related aspects of economic development and social welfare, such as generation of employment[16]. This suggests that it is important to not only appreciate the amount of foreign capitals involved in domestic economic cycles but more importantly to ensure that actual beneficial impacts are effectively exerted by such foreign capitals on domestic aspects of development.

5.2 Labor

Labor apparently forms the most effective and tangible channel along which industrial developments can spread benefits. Usually, workers send some of their savings to their home places. The benefits gained by their home places through this channel are economically considered opportunity losses of the work places (i.e., losses that could otherwise be saved). However, magnitudes of such opportunity losses may be intensified when industrial areas have potentially national personnel who could replace foreign workers.

The 30 foreign and joint venture factories surveyed employed 1,980 persons, of whom only 135 (or 7%) were Saudis. Of the Saudis, 68 (or 50%) were occupying ad-
ministrative jobs, 30 (or 22%) were technicians and, 37 (or 28%) were workers. Most of the interviewed personnel admitted that Saudis are potentially capable of handling administrative, technical and, other industrial works, but better job chances (in terms of salaries paid and efforts required) are still generously available for them in governmental agencies. This renders factories unable to compete with such employment generators in attracting Saudis. However, it is important for this paper to notice that the majority (93%) of the employees in the surveyed factories came under the non-Saudi category. This reveals that those industries were diffusing some of their benefits via this important channel (i.e., labor) to countries abroad.

5.3 Sales

Of the 30 factories surveyed, 23 (or 77%) sold between 90 and 100% of their products within the country, while 5 (or 17%) sold 60-70% and 2 (or 6%) sold 50%. The remaining proportions of products were exported to countries abroad.

Getting 77% of the surveyed factories selling almost all their products within the country should have helped in achieving the Saudi industrial long-term goal of ‘achieving self-sufficiency’, bearing in mind all the economic benefits attributed to getting the local products substituting the imported ones. On the other hand, those factories were short of effectively participating to the diversification of the national revenue earners: Another Saudi long-term goal. This implies that despite the contribution of the surveyed industries to satisfying demand in the Saudi markets, their apparent inability to bring direct revenues to the Saudi economy, through activating exports as well, is a drawback. One should call back the previously quoted statement that expresses the wish of the Saudi Industrial Policy to welcome involvement of foreign capital in the Saudi industrial development for several objectives, of which expanding Saudi products to international markets (i.e., enhancing exports) has been probably the most imminent.

5.4 Raw Materials

Of the aforementioned 30 foreign and joint venture factories, 8 (or 27%) obtained over 50% of their raw materials from abroad, while 7 (or 23%) obtained up 65%, 6 (or 20%) obtained up to 75% and 9 (or 30%) obtained all their raw materials from abroad.

Unavailability of local materials has probably been the prime factor behind those (and probably other) non-oil industries relying on imported raw materials. Nevertheless, it is – for the purpose of this paper – a fact that revenues to raw materials has been an important channel along which those factories diffused significant benefits to countries abroad. One should not however overlook the economic benefits of the value-added aspect (i.e., benefits gained due to further manufacturing of raw or semi-processed materials locally).

5.5 Functional Linkages

Of the 30 foreign and joint venture factories surveyed, only 4 (or 13%) had any sort of give-and-take relations (in materials, experiences, ...) with other factories that
were operating in the same Jeddah Industrial Estate. Furthermore, in aggregate terms, only 8 factories (or 27%) had any sort of functional linkages with the other national factories that were operating throughout the country.

None of the surveyed foreign and joint venture factories provided training programs for Saudis, unlike what was drawn by the Saudi Industrial Policy. Their preference was for readily trained labor, whether Saudis or foreigners. The profit-maximizing aims of those factors seem to have rendered catering on training programs for the benefit of Saudis non-profitable. Therefore, training Saudis and exchanging benefits and experiences with national industries could have been suitable channels for spreading benefits to the Saudi industrial development, but the experience of the surveyed foreign and joint venture factories showed that the case has not been as such.

5.6 Summing Up

As previously mentioned, foreign capital may not permanently stay in the Saudi industrial economy, particularly in case of governmental incentives ceasing out. This underlines the need to maximize positive inferences of this sort of capital on as many aspects of national development as possible (spatial, economic, employment, experience, training). An approach to do so could be through occasional evaluation of the ability of foreign and joint venture factories to spread positive impacts to the local spatial and economic development.

This study found that the surveyed foreign and joint venture factories in the Jeddah Industrial Estate diffused benefits through the channels of labor and raw materials, but such benefits largely terminated outside the Saudi spatial and economic environments, in areas from where those factors got imported. Role of those industries in benefiting experiences and technical abilities of the national industries and personnel has been declared negligible, unlike what was optimistically hoped by the Saudi Industrial Policy and Objectives. Furthermore, those factories have participated in answering demands in domestic markets, but this success has been outweighed by their inability to effectively lead the Saudi products to international markets as it was objectively drawn for them. Therefore, assuming the representativeness of the factories surveyed, the Saudi foreign and joint venture industries operating in Saudi Arabia tended to be physically (or spatially) existing, but functionally unable to exert clear benefits to the spatial and economic arenas of development.

6. Recommendations

In order to enhance the ability of the foreign and joint venture industries that operate within Saudi Arabia to spread benefits within the domestic spatial and economic environments, the following measures are suggested to be adopted by the Saudi Industrial Strategies and Policies:

1. Factories that utilize or are established to utilize (partially or fully) local raw materials should be given advantages (e.g., incentives) over the others, unless the raw materials are not locally available. This will help to get the returns to raw materials benefiting the Saudi spatial and economic environments, as much as possible.
2. In order to be licensed or relicensed, foreign and joint venture factories should provide and pragmatically abide by plans and time programs for training Saudis as well as for establishing functional linkages (give and take, in materials and consultations) with national factories. This will help in getting these industries spreading benefits to the Saudi personnel as well as to the Saudi national industries.

3. Also, in order to be licensed or relicensed, foreign and joint venture factories should provide and abide by plans (quantitative and qualitative) for responding to consumer demands at national markets (i.e., contributing to self-sufficiency) as well as for exporting goods to international markets (i.e., contribution to diversification of Saudi revenue earners).

The strategic guidelines suggested above should not be perceived as disincentives to involvement of foreign capital in the Saudi industrial development. They should rather be viewed as means for getting foreign and joint venture industries effectively spreading benefits to the Saudi spatial and economic fields of development.

References

قدّرة المصانع ذات رأس المال الأجنبي والمشتركة بمدينة جدة على نشر الفوائد عبر الأبعاد المكانية والاقتصادية لتنمية المحلية

عبد الله محمد عبد الله العامدي
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جدة - المملكة العربية السعودية

المستخلص: من الأمور المفروضة، بعيدًا عن كثير من الجدل العلمي، أن الحوافز المتوافرة للمصانع والمصانع نجحت بشكل ملفت للنظر في جذب رأس المال الأجنبي للمشاركة بشكل مفرد أو مشترك مع رأس المال المحلي في التنمية الصناعية السعودية. يتمثل ذلك إيجابًا في الأهداف التنموية السعودية طويلة المدى، الداعية إلى تحقيق الاكتفاء الذاتي، وتنوع مصادر الدخل الوطني. على أي حال، قد تغادر نسبة كبيرة من رأس المال الأجنبي (إذا لم يكن جميعه) الاقتصاد السعودي في حالة يسبح الحوافز التي ساهمت أصلًا بشكل فعال في جذبه للاستثمار داخل المملكة. يوضح ذلك الحاجة للاستفادة القصوى من الامكânات الإيجابية لرأس المال الأجنبي على الصناعة الوطنية والتنمية المحلية ببعدها المكاني والاقتصادي. تحديد الطرق المحقة جزئيًا أو كلية لذلك، يبحث هذه الورقة في الإجابة على السؤال التالي: إلى أي مدى تستطيع المصانع ذات رأس المال الأجنبي أو المشترك العامة في المملكة نشر الفوائد داخل البيئة السعودية بعدما الاقتصادي والملكي؟ للإجابة على هذا السؤال، تجري هذه الورقة تحليلات عن خبرة المصانع في مدينة جدة الصناعية كدراسة حالة. ترسم الورقة نتائجها في ضوء جوانب الإجابة على هذا السؤال، موجهة عدة مقتراحات لفائدة مستقبل استراتيجيات التنمية الصناعية في المملكة العربية السعودية.