

PHILIPPINE INSTITUTE FOR DEVELOPMENT STUDIES
Working Paper 86-03

**FACTORS AFFECTING THE CHOICE OF LOCATION:
A SURVEY OF FOREIGN AND LOCAL FIRMS IN THE PHILIPPINES**

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October 1986

The views expressed in this study are those of the authors and do not necessarily reflect those of the Institute.

Abstract

The paper addresses the following questions: is the locational behavior of foreign firms systematically different from that of local enterprises; what are the more important determinants of industrial location, in general and by specific type of firms; how effective are direct government influences in the choice of location? The analysis is based on data from a survey of 100 firms – 50 local and 50 foreign – drawn from the top 1,000 corporations in the Philippines.

The overall finding is that out of 34 factors that are commonly thought to influence location decision, only seven are considered as decisive by the majority of firms. These determinants are largely of the social overhead capital (SOC) type and include: (a) closeness to major customers; (b) easy road access; (c) reliable electrical power; (d) adequate telephone/telex services; (e) availability of a suitable plot of land; (f) availability of a suitable building; and (g) adequate space for expansion. These can probably be distilled into four critical location determinants, namely: access or transport (a) and (b), power (c), information and communications (d), and physical plant requirements (e, f and g). These factors apply to local and foreign firms, implying that there is hardly any difference in their location behavior. Another significant finding is that direct government interventions are generally not considered as either decisive or of major importance in location choice, supporting the results of earlier studies in developing countries.

Just as the current geographic location of firms has been shaped largely indirectly by public policy in the past, the influence of policies on future firm location will also tend to be indirect. It seems that basic SOC has to be in place before direct government influences can work, as may be suggested by a comparative evaluation of these interventions in developing countries vis-à-vis more developed countries. Also, policies aimed to correct for unintended distortions and biases in the composition of firms to be established could indirectly shape their spatial structure in view of the finding that the importance of certain location factors tends to be firm-specific. When these unwanted distortions and biases are rectified, it may be possible to see the emergence of a more spatially dispersed industrial structure to the extent that, by virtue of location criteria, certain establishments may tend to locate in the regions. Given the desired composition of industries, policies to make certain regions outside Metro Manila attractive as alternative centers could then be pursued more efficiently to reinforce the natural pull of these areas.

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I. INTRODUCTION

Despite perennial migration to better places, a great many people in a typical developing country still live in the less developed regions. These regions are poor because in most cases they are not functionally integrated into the national space-economy. Often, the flows of resources are uni-directional – from the outer regions to the core region. True economic integration, however, entails a two-way geographic and sectoral mobility of factors. This has been recognized as essential for the efficiency and equity objectives of development policy.

The manifestation of imperfect spatial economic integration has been characterized in various ways by such terms as polarization, urban primacy, unbalanced urbanization, and spatial concentration of population and industrial activity. Problems of regional development and considerations relating to the location of industry involve scarcities of technical and managerial inputs, antiquated social institutions and practices, uncertainties, imperfect information, and lack of infrastructure and basic social services (Alonso, 1968). Many of these problems have their roots in the colonial history of developing countries and often are perpetuated by ill-conceived industrialization and general development policies.

* Research underlying this paper originated in the East-West Population Institute, East-West Center, and was subsequently carried on at the University of the Philippines and the International Labour Organisation, Bangkok. Financial support from the East-West Center and the Philippine Institute for Development Studies is gratefully acknowledged.

An increasing amount of research effort has gone into the analysis of urbanization and spatial development, but the focus has largely been on the internal dynamics of the phenomenon. That is to say, scant attention has been given to external economic forces, such as trade, foreign aid and investment, or at least no distinction has been made between the roles of foreign and domestic forces in regional development. Given the reality of transactional relations, such a closed-system approach has fallen under increasing criticism, especially from the world-system/dependency schools of development (e.g., Snyder and Kick, 1979; Forbes and Thrift, forthcoming).

This paper is an attempt to consider a major external economic force, namely, foreign direct investment (FDI) in relation to the issue of spatial concentration. The general question being addressed is whether or not foreign investment exerts a systematic, independent bias toward the metropolitan region. More specifically, is the locational behavior of foreign (-owned or -controlled) firms systematically different from that of local enterprises? What are the more important determinants of industrial location, in general, and by specific type of firms? How effective are direct government influences in the choice of location?

A recent cross-national study of Japanese investments in East and Southeast Asia suggests that locational considerations of foreign investors tend to differ little from those of domestic entrepreneurs, or that foreign investors in their locational choice may be greatly influenced by prior decisions of local businessmen (Fuchs and Pernia, forthcoming). This result would seem to be quite logical, considering the handicaps of foreign investors in terms of the uncertainties and costs of information they have to confront if they would have to make independent choices. Hence, it appears that the

locational behavior of businessmen based on “probabilistic rationality”¹ would apply even more to foreign investors.

The present paper tries to find out to what extent the cross-national result is borne out at the level of the firm in the Philippine setting. The issue of differential locational behavior of foreign vis-à-vis local firms is significant for policy and planning because of the contribution that foreign investments can make to unbalanced spatial development. While there has been a continuing scholarly and policy debate about the social and economic impacts of transnational companies in terms of employment, income distribution, social values and so on, the spatial dimensions of these concerns have largely been ignored. It would seem desirable from the policy standpoint that, in scrutinizing the social and economic consequences of foreign investments, due attention be given as well to their spatial impacts.

Dispersed regional development has been an avowed major policy objective in the Philippines since the mid-60s. Policy measures to pursue this objective has taken on various forms, such as investment incentives, industrial ban from Metro Manila, infrastructure policy, establishment of export processing zones, integrated area development and urban growth centers (Paderanga and Pernia, 1983). Ex-post evaluations of these measures, however, have indicated, inter alia, that the industrial ban was fundamentally unsound, to start with; that inspite of the investment incentives, more than 70 percent of new industries registered with the Board of Investments during the

¹ “Probabilistic rationality” is well explained by Alonso (1968: 25) as follows: “... the know advantages of the distant location will have to be very large to offset the probable, but unknown, disadvantages. In other words, uncertainty or possible error is not symmetrical about the most probable estimate of costs, but rather is strongly skewed in the positive direction. The probable profits, therefore, are strongly skewed in the negative direction, and any sort of strategy for minimizing losses or maximizing profits will tend against situations with higher uncertainty.”

1970-77 period were located in Metro Manila (Reyes and Paderanga, 1983); that the choice of location for export processing zones was based not on economic grounds but rather on political considerations; that integrated area development projects may take more time to have an impact; and that sufficient resources may not have been allocated to designated growth centers. Then, too, the desire to make Manila a “metropolis of international stature” may have diverted scarce investible funds away from the regions, making Metro Manila more attractive to migrants and industries (NEDA, 1982).

It is also argued that Metro Manila’s long-developed central place functions (as a center of education, communications, modern facilities and services, and so forth) explain a good deal of its strength and attractiveness (Medalla, 1985). Furthermore, macroeconomic policies, are shown to have exerted a potent spatial bias since the 50s, which have rendered explicit dispersal policies in the late 60s and 70s largely ineffective (Pernia, Paderanga, Hermoso et al., 1983). Thus, the policy goal of regional development combined with the virtual inefficacy of corresponding policy instruments have kept spatial and locational issues in the mainstream of development policy discussions.

The paper is organized as follows. Section II gives a brief description of the data collection procedure and presents the main characteristics of the sample firms. Section III discusses the survey results concerning reasons for choice of current location, and Section IV touches on factors affecting future location. Section V provides the summary and concluding remarks.

II. THE DATA AND PROFILE OF SAMPLE FIRMS

Data Collection

The survey gathered data from a sample of 100 firms – 50 local and 50 foreign – to determine the relative importance various firms attach to a pre-selected set of factors in their choice of location, retrospectively as well as prospectively. The sample firms were selected from the top 1,000 corporations, listed in 1983, of which 836 were local firms and 164 foreign firms. The sample of 50 firms in each ownership category was randomly selected proportional to size in each industrial type. Of the 100 firms originally drawn, 22 did not wish to participate in the survey; these were replaced by other firms, following the same random procedure. Table 1 presents the number of firms by ownership and industry category for the top 1,000 corporations and for the final sample.

A personal interview was requested of the highest ranking executive officer of the sample firms; in almost all cases, however, the interview was delegated to other officers. The actual respondents included a director, six vice-presidents, seven assistant vice-presidents, 58 managers of various divisions (such as finance, administration, accounting, general services, operations, plants, planning, office, marketing, etc.), and five project engineers. The rest of the respondents were senior officers under the supervision of their managers (e.g., administrative, personnel, planning, and accounts).

The respondents were queried as to the importance of each of a number of factors commonly known to influence the choice of industrial location. These factors relate to labor supply, access to principal supply and demand markets, presence and adequacy of urban/public services, suitability of site, direct government influences, and other factors. In addition, the survey attempted to assess the weight firms would attach to several policy

measures designed to decentralize prospective firm location outside Metro Manila. The industrial location survey form is given as Annex I. It is largely patterned after a similar survey conducted in Brazil (Townroe, 1983).

Profile of Sample Firms

Of the 100 sample firms, 38 are wholly locally-owned while another 38 wholly foreign-owned. Of the remaining firms, 12 are locally-owned but with foreign equity participation averaging 19 percent of total equity, while another 12 are foreign-owned but with local equity participation averaging 15 percent. The ownership structure can be summarize as follows:

<u>Type of Firm</u>	<u>Number</u>	<u>Percent Foreign Equity</u>
<u>Local firms</u>	50	
Wholly locally-owned	38	0
With foreign equity	12	19
<u>Foreign firms</u>	50	
Wholly foreign-owned	38	100
With local equity	12	85

Of the 100 firms, 49 are manufacturing firms – 20 local and 29 foreign. A more complete picture of the industrial distribution of firms is shown in Table 1.

All 50 of the foreign firms in the sample have their main offices in Metro Manila compared with 44 of the local firms. The other 6 local firms are based in the Visayas.

The geographic location of the firms' plants or major activities is as follows:

<u>Location of Plants/ Major Activities</u>	<u>All Firms</u>	<u>Local</u>	<u>Foreign</u>
Metro Manila	82	39	43
Other Luzon	9	4	5
Visayas	6	6	0
Mindanao	3	1	2

As the data indicate, the location of firms is predominantly in Metro Manila. The firms located in Metro Manila consisted of 37 of the 49 manufacturing firms, all of 18 wholesale and retail trade enterprises, all of the 20 service enterprises, 3 of the 4 construction firms, and 3 of the 4 transport firms (Table 2).

With respect to market orientation, 60 percent of the firms (56 out of 93 which gave specific information) sell their output/services solely to the domestic market. The percentage for local firms is 76 (35 out of 46) while that for foreign firms is 45 (21 out of 47) – reflecting the relative import-substituting character of local firms. On the other hand, of the 82 firms that provided the necessary information, only 30 percent obtained their inputs/raw materials solely from domestic sources. The percentage for local firms is 54 (21 out of 39) while that for foreign firms is 9 (4 out of 43). It thus appears that foreign firms compared with local firms represented in this sample are characterized by relatively lower interindustry linkages with the rest of the economy. The relevant data are shown below.

<u>Market Orientation</u> (<u>Percent Foreign Market</u> <u>to Total Market</u>)	<u>All Firms</u>	<u>Local</u>	<u>Foreign</u>
<u>Domestic</u>			
0	56	35	21
1-50	19	4	15
<u>Foreign</u>			
51-99	8	3	5
100	10	4	6
N.R.	<u>7</u>	<u>4</u>	<u>3</u>
Total	100	50	50

<u>Input Supply Orientation</u> (<u>Percent Foreign Source</u> <u>to Total Source</u>)	<u>All Firms</u>	<u>Local</u>	<u>Foreign</u>
<u>Domestic</u>			
0	25	21	4
1-50	18	7	11
<u>Foreign</u>			
51-99	26	7	19
100	13	4	9
N.R.	<u>18</u>	<u>11</u>	<u>7</u>
Total	100	50	50

About half of the sample firms have been established in their current location since only 1970, as shown below.

<u>Year Established</u>	<u>All Firms</u>	<u>Local</u>	<u>Foreign</u>
Before 1950	7	3	4
1950-1959	13	9	4
1960-1969	23	13	10
1970-1979	38	17	21
1980 and after	14	5	9
N.R.	<u>5</u>	<u>3</u>	<u>2</u>
Total	100	50	50

As mentioned earlier, regional development became an express policy objective of the government around the mid-60s. If 1967 is taken as a benchmark year, a total of 64 out of the 95 responding firms have been established in their current location since then – 29 local firms and 35 foreign firms.

III. REASONS FOR CHOICE OF CURRENT LOCATION

Key officers of the sample firms were asked to rate the importance of pre-selected factors in their choice of current location. These factors concern labor supply, access to suppliers and customers, presence and adequacy of urban/public services, suitability and cost of site, and other factors. In addition, the respondents were asked to assess the impact of specific government measure on their location decisions.

The importance of a particular factor with respect to location decision is measured alternatively by a mean index score and by the percentage of firms indicating that a factor was either “decisive” or “of major importance” in their location decision. The mean index score was calculated using the following scoring procedure: 4 = decisive; 3 = of major importance; 2 = of some importance; 1 = unimportant. Considered critical in the choices of current location are those factors with a mean index score of 2.0 or greater and for which 50 percent or more of the respondent firms indicated them to be decisive or of major importance. Factors of secondary importance include all those with mean index score of 2.0 or greater.

In general, we find from Table 3 that for all firms, only 7 out of the 34 pre-selected factors can be regarded as critical in the choice of current location. Seven other factors may be considered of secondary importance. The data in Table 3 are summarized below, showing the mean index scores and percentages of firms (in parentheses) indicating a factor to be decisive or of major importance.²

<u>Factors</u>	<u>All Firms</u> (n=100)	<u>Local</u> (n=50)	<u>Foreign</u> (n=50)
A. <u>Considered decisive or of great importance by 50% or more of the firms</u>			
(4) Close to major customers	2.58(62)	2.58(62)	2.60(62)
(7) Easy road access	2.62(51)	2.66(60)	2.44(56)
(14) Reliable electrical power	2.77(64)	2.72(62)	3.00(72)
(18) Telephone/telex services	2.71(64)	2.70(62)	2.76(72)
(20) Suitable plot of land	2.81(70)	2.88(72)	2.48(62)
(21) Suitable building	2.34(55)	2.32(50)	2.42(58)
(22) Space for expansion	2.61(61)	2.66(62)	2.34(54)

² The mean scores and percentages (in parentheses) calculated for “All Firms” took account of the sampling weights used in the study.

<u>B. Other factors with index score equal to 2.00 or more</u>			
(2) Labour with required skills	2.05(35)	2.06(36)	2.02(32)
(3) Close to major suppliers	2.00(34)	-	2.08(42)
(15) Public water supply	2.24(42)	2.24(42)	2.26(40)
(17) Public transportation to plant site	2.34(45)	2.36(46)	2.24(42)
(23) Property available for lease	2.15(44)	2.16(44)	2.08(42)
(24) Low cost of land	2.14(45)	2.18(48)	-
(28) Infrastructure especially designed for industry	2.07(41)	2.10(42)	-

This result seems strikingly consistent with that from a similar survey in Brazil where practically the same factors were considered decisive or important (Townroe, 1983). We also note from the above that none of the direct government influences are considered sufficiently important in location decision by a majority of the firms. The same finding was obtained for Brazil and is, as well, supportive of an earlier study on the Philippines (Moran, 1979). By contrast, a survey of 49 Scottish manufacturing firms showed that many projects were significantly affected by regional incentives and a high proportion would not have gone ahead without these incentives (McGreevy and Thomson, 1983).

We note, furthermore, that both local and foreign firms regard essentially the same factors as “critical” or “of secondary importance.” This result seems to substantiate an earlier study which indicates that, by and large, foreign firms base their location decision on much the same criteria as local firms (Fuchs and Pernia, forthcoming). Two “decisive” criteria especially stand out for both local and foreign firms: reliable electrical power and telephone/telex services. The other factors are slightly more or less important for local firms or for foreign firms. Apart from factors of critical or secondary importance, a few factors can be read off from Table 3 which have appreciably different

scores for local firms vis-à-vis foreign firms. For example, cheap labor, limited local competition for products, and personal/family reasons appear to be more weighty considerations for local enterprises.

It is generally known from the literature on location theory that the critical value of factors tends to vary according to different types for firms.³ For example, firms catering mainly to domestic final demand may consider closeness to major customers as a more important location factor than other factors, while firms relying mainly on imported inputs may consider closeness to major air or maritime ports more crucial. It is necessary, therefore, to look at certain characteristics of firms to be able to identify location factors more closely. These characteristics include market orientation, input supply orientation, and type of production activity. The results are presented in the subsequent tables. To facilitate the presentation of results, we define a factor as “important” if 50 percent or more of the sample firms in the relevant category consider the factor as either “decisive” or “of major importance”.

The data in Table 4 concerning market orientation of firms are distilled below. The data suggest that firms with essentially foreign market orientation adopt a different set of location criteria from firms with domestic market orientation. For example, while domestic market-oriented firms consider “closeness to major customers” as a critical factor in location choice, foreign market-oriented enterprises do not.

³ Hoover (1948), for example, distinguishes among three main types of industries in terms of spatial preference: market-oriented, materials-oriented, and footloose.

<u>Factors Considered "Important"</u> <u>on the Average by All Firms</u>	Market Orientation					
	Domestic			Foreign		
	Total (n=75)	Local (n=39)	Foreign (n=36)	Total (n=18)	Local (n=7)	Foreign (n=11)
(4) Close to major customers	X	X	X	-	-	-
(7) Easy road access	X	X	X	X	X	X
(14) Reliable electrical power	X	X	X	X	X	X
(18) Telephone/telex services	X	X	X	-	-	X
(20) Suitable plot of land	X	X	X	X	X	X
(21) Suitable building	X	X	X	-	-	X
(22) Space for expansion	X	X	X	X	X	X
 <u>Other Factors Considered "Important"</u> <u>by Specific Firm Category</u>						
(1) Plentiful labor supply	-	-	-	X	X	-
(2) Labor with required skills	-	-	-	-	-	X
(5) Close to airport	-	-	-	-	-	X
(6) Close to maritime port	-	-	-	X	X	X
(17) Public transportation to plant site	-	-	-	X	X	X
(23) Property available for lease	-	X	-	X	X	X
(24) Low cost of land	-	-	-	-	-	X
(25) Government guidance/persuasion	-	-	-	-	-	X
(28) Infrastructure especially designed for industry	-	-	-	-	-	X

However, it appears that certain cost-related factors are important in location decision to be able to effectively compete in the international market. Prominent among these are factors relating to cheap labor of given skills, access to air and maritime ports, access to plant site, and low cost of land. A further observation is that among foreign market-oriented firms, foreign firms appear to adopt a broader set of criteria than do local firms. Included in such set of criteria are “government guidance/persuasion” and “infrastructure especially designed for industry.”

As regards input supply orientation of firms, the data in Table 5 are summarized below. On the whole, foreign supply-oriented (or import-dependent) firms tend to attach greater importance to factors related to transportation cost and land cost compared with

domestic supply-oriented firms. Within each broad firm category, we also note differential emphasis placed by local versus foreign firms on factors other than the given basic ones identified for all firms.

<u>Factors Considered "Important"</u> <u>on the Average by All Firms</u>	Input Supply Orientation					
	Domestic			Foreign		
	Total (n=43)	Local (n=28)	Foreign (n=15)	Total (n=39)	Local (n=11)	Foreign (n=28)
(4) Close to major customers	X	X	X	X	X	X
(7) Easy road access	X	X	-	X	X	X
(14) Reliable electrical power	X	X	X	X	X	X
(18) Telephone/telex services	X	X	X	-	-	X
(20) Suitable plot of land	X	X	X	X	X	X
(21) Suitable building	X	X	-	-	-	X
(22) Space for expansion	X	X	X	X	X	X
 <u>Other Factors Considered "Important"</u> <u>by Specific Firm Category</u>						
(1) Plentiful/cheap labor	-	-	-	X	X	-
(3) Close to major suppliers	-	-	X	-	-	-
(5) Close to airport	-	-	-	-	X	-
(6) Close to maritime port	-	-	-	-	X	-
(15) Public water supply	-	-	X	-	X	-
(17) Public transportation to plant site	-	X	-	X	X	X
(23) Property available for lease	-	X	-	-	-	X
(24) Low cost of land	-	-	-	X	X	-
(28) Infrastructure especially designed for industry	-	X	-	-	-	X

In order to determine the relative importance of specific location factors for different types of firms, a further disaggregation is done into the following four categories according to both market and input supply orientations: (a) firms catering mainly to the domestic market and relying mainly on domestic inputs; (b) firms catering mainly to the domestic but relying mainly on foreign inputs; (c) firms catering mainly to the foreign market but relying mainly on domestic inputs; and (d) firms catering mainly to the foreign market and relying mainly on foreign inputs. Because of limited sub-

sample sizes, it is not possible to distinguish between local and foreign firms for each category. The data are presented in Table 6 and distilled below for easier inspection.

<u>Factors Considered "Important"</u> <u>on the Average by All Firms</u>	<u>Firm Category</u>			
	<u>Domestic Market</u>		<u>Foreign Market</u>	
	<u>Domestic</u> <u>Input</u> <u>(n=36)</u>	<u>Foreign</u> <u>Input</u> <u>(n=27)</u>	<u>Domestic</u> <u>Input</u> <u>(n=6)</u>	<u>Foreign</u> <u>Input</u> <u>(n=12)</u>
(4) Close to major customers	X	X	-	-
(7) Easy road access	X	X	X	-
(14) Reliable electrical power	X	X	X	X
(18) Telephone/telex services	X	X	-	-
(20) Suitable plot of land	X	X	-	X
(21) Suitable building	X	-	-	-
(22) Space for expansion	X	X	-	X
 <u>Other Factors Considered "Important"</u> <u>by Specific Firm Category</u>				
(1) Plentiful/cheap labor	-	-	-	X
(5) Close to airport	-	-	-	X
(6) Close to maritime port	-	-	X	X
(17) Public transportation to plant site	-	X	X	X
(23) Property available for lease	X	-	-	-
(24) Low cost of land	-	X	X	X

The data show a clearer differentiation in the factors affecting choice of location by type of firm. Domestic market-oriented firms, irrespective of input source, tend to follow the basic pattern depicted on the average for all firms. Foreign market-oriented firms, on the other hand, tend to adopt a different set of criteria, emphasizing less those factors adopted by all firms on the average but more those factors related to labor, land and transport costs. This pattern is especially evident for firms catering mainly to the foreign market and relying mainly on imported inputs. However, foreign market-oriented firms of either input source constitute a relatively small proportion of total firms; hence, the factors affecting their choice of location may not be sufficiently reflected in the

average pattern characterizing all firms. These firms are mainly fabricated metal products and textile establishments, as show in Table 2a.

We now turn to an examination of factors affecting the choice of location by broad industrial type, i.e., manufacturing versus non-manufacturing. The data are presented in Table 7 and are summarized below for ready reference.

<u>Factors Considered "Important"</u> <u>on the Average by All Firms</u>	<u>Manufacturing</u>			<u>Non-Manufacturing</u>		
	Total (n=49)	Local (n=20)	Foreign (n=29)	Total (n=51)	Local (n=30)	Foreign (n=21)
(4) Close to major customers	X	X	X	X	X	X
(7) Easy road access	X	X	X	X	X	-
(14) Reliable electrical power	X	X	X	-	-	X
(18) Telephone/telex services	X	X	X	X	X	X
(20) Suitable plot of land	X	X	X	X	X	-
(21) Suitable building	-	-	-	X	X	X
(22) Space for expansion	X	X	X	-	X	-
 <u>Other Factors Considered "Important"</u> <u>by Specific Firm Category</u>						
(1) Plentiful/labor supply	-	X	-	-	-	-
(2) Labor with required skills	X	X	-	-	-	-
(3) Close to major suppliers	-	-	-	-	-	X
(17) Public transportation to plant site	X	X	-	-	-	-
(23) Property available for lease	X	-	X	X	X	X
(24) Low cost of land	-	X	-	-	-	-
(28) Infrastructure especially designed for industry	X	X	X	-	-	-

The data suggest that, in addition to the seven basic factors considered “important” by all firms in general, local manufacturing firms place greater importance to factors related to labor, site suitability, transportation and infrastructure than do foreign manufacturing firms and non-manufacturing firms overall.

Manufacturing firms can be further disaggregated by market and input supply orientation as was done earlier for all firms. Although the small sample sizes constrain

meaningful comparisons, the results do show a further differentiation of the importance, different types of manufacturing firms attach to specific location factors. These are worth noting below, as distilled from Table 8.

<u>Factors Considered "Important"</u> <u>on the Average by All Firms</u>	Manufacturing Firms			
	Domestic Market		Foreign Market	
	Domestic Input (n=10)	Foreign Input (n=19)	Domestic Input (n=5)	Foreign Input (n=10)
(4) Close to major customers	X	X	-	X
(7) Easy road access	X	X	-	X
(14) Reliable electrical power	X	X	X	X
(18) Telephone/telex services	X	-	-	-
(20) Suitable plot of land	X	X	-	X
(21) Suitable building	-	-	-	-
(22) Space for expansion	X	X	X	X
 <u>Other Factors Considered "Important"</u> <u>by Specific Firm Category</u>				
(1) Plentiful/cheap labor	-	X	-	X
(5) Close to airport	-	X	X	-
(6) Close to maritime port	-	X	X	-
(16) Disposal of waste	-	X	-	-
(17) Public transportation to plant site	-	X	X	X
(23) Property available for lease	X	-	-	-
(24) Low cost of land	X	X	X	X
(25) Government guidance/persuasion	-	-	X	-
(26) Financial incentives	-	-	X	-
(28) Infrastructure especially designed for industry	X	X	-	-
(31) Presence of related industries	X	-	-	-

As mentioned above, the second half of the 60s can be considered a watershed in Philippine development planning in that regional development became an explicit policy goal. If we set 1967 as the demarcation year, we could determine if there was any difference in location decisions before and after that year. The data are tabulated accordingly in Table 9 and are made concise below.

<u>Factors Considered "Important"</u> <u>on the Average by All Firms</u>	<u>Before 1967</u>			<u>1967 and After</u>		
	Total (n=31)	Local (n=18)	Foreign (n=13)	Total (n=64)	Local (n=29)	Foreign (n=35)
(4) Close to major customers	X	X	X	X	X	X
(7) Easy road access	X	X	X	X	X	X
(14) Reliable electrical power	X	X	X	X	X	X
(18) Telephone/telex services	X	X	X	X	X	X
(20) Suitable plot of land	X	X	X	X	X	X
(21) Suitable building	-	-	X	X	-	X
(22) Space for expansion	X	X	X	X	X	-
<u>Other Factors Considered "Important"</u> <u>by Specific Firm Category</u>						
(3) Close to major suppliers	-	X	-	-	-	-
(17) Public transportation to plant site	X	X	-	-	-	-
(23) Property available for lease	-	-	-	X	-	-
(24) Low cost of land	-	-	X	-	-	-

It appears that the more recently established firms based their location decision on much the same set of factors as did the older firms, whether local or foreign. More significantly, direct government intervention expressed in development plans after 1967 do not seem to have mattered at all, thus confirming our earlier observation.

Of the 100 sample firms, 82 are located in Metro Manila. These firms put much weight on the seven basic location factors that have figured prominently. It is of interest to see what factors firms located outside Metro Manila consider important, and how their behavior differed from Metro Manila-based firms. The results are given in Table 10 and are condensed below.

<u>Factors Considered "Important"</u> <u>on the Average by All Firms</u>	<u>Location</u>					
	<u>Metro Manila</u>			<u>Outside Metro Manila</u>		
	Total (n=82)	Local (n=39)	Foreign (n=43)	Total (n=18)	Local (n=11)	Foreign (n=7)
(4) Close to major customers	X	X	X	-	-	-
(7) Easy road access	X	X	X	-	-	-
(14) Reliable electrical power	X	X	X	X	X	-

(18) Telephone/telex services	X	X	X	-	-	-
(20) Suitable plot of land	X	X	X	X	X	X
(21) Suitable building	X	X	X	-	-	-
(22) Space for expansion	X	X	X	X	X	X

Other Factors Considered "Important"
by Specific Firm Category

(15) Public water supply	-	-	-	X	X	-
(16) Disposal of waste	-	-	-	X	X	-
(23) Property available for lease	-	-	-	X	X	X
(24) Low cost of land	-	X	-	-	-	X
(25) Government guidance/persuasion	-	-	-	-	-	X

As might be expected, firms located outside Metro Manila generally adopted location criteria quite different from those followed by Metro Manila firms. These firms are mainly natural resource-based firms (as shown in Table 2b) and they place much value mainly on social overhead capital (SOC), which is oftentimes wanting in the regions.

IV. FACTORS AFFECTING FUTURE LOCATION

As already mentioned, it is worth noting that, in general, direct government interventions appear to be relatively unimportant in the location decision of firms. Of the five items under “government influences,” “government guidance/persuasion” was “important” only to foreign firms which located outside Metro Manila (n=7) or to manufacturing firms catering mainly to foreign markets but relying on domestic inputs (n=5); “financial incentives” was considered “important” only by the latter type of manufacturing firms. “Infrastructure especially designed for industry” was considered “important” by manufacturing firms (n=49), particularly those catering to the domestic market (n=29).

What about prospective location decisions? The respondents were asked to rate the importance of seven specific government measures designed to influence firms to locate outside Metro Manila in the future. Of the seven policy measures, only one – “government bans” – stands out as “important” to the majority of firms, both in the aggregate and in more specific firm categories. Among specific firm categories, “government regulations” (e.g., those relating to pollution control) is considered “important” by manufacturing firms in general (n=49), while “financial pressures” and “financial incentives” are considered “important” by foreign market-oriented firms with domestic input source (n=5), and by foreign firms outside Metro Manila (n=7). These points can be gleaned from the data in Tables 3 through 10.

V. SUMMARY AND CONCLUSION

This paper has examined, through a sample survey of 100 local and foreign firms drawn from the top 1,000 corporations in the Philippines, the factors that have a critical bearing on location decision, in the context of the government’s regional development goal. The overall finding is that out of 34 factors that are commonly thought to influence location decision, only seven are considered as decisive by the majority of firms. These determinants are largely of the social overhead capital (SOC) type and include: (a) closeness to major customers; (b) easy road access; (c) reliable electrical power; (d) adequate telephone/telex services; (e) availability of a suitable plot of land; (f) availability of a suitable building; and (g) adequate space for expansion. If (a) and (b) as well as (e), (f) and (g) are combined, as seems logical, then there are only four critical location determinants, which can be characterized as access or transport (a and b), power

(c), information and communication (d), and physical plant requirements (e, f and g). These factors apply (more or less equally) to local and foreign firms, implying that there is hardly any difference in their location behavior. It may be noted that, contrary to common perception, cheap labor is not among the critical considerations for location although it may carry some weight for specific types of firms.

Another significant finding is that direct government interventions are generally not considered as either decisive or of major importance in location choice. This supports the results of earlier studies in developing countries.

Because specific types of firms may have particular location needs, the data were disaggregated, as far as can be permitted by the small sample size, by major firm characteristics. The results indicate that manufacturing firms, especially those relying on either foreign markets or imported inputs, generally consider a different set of location criteria from other firms. For example, factors related to the cost of transport (closeness to air and maritime ports, and adequacy of public transportation to plant site) are given greater importance by these firms.

As to future location decisions, among possible government interventions, only “government bans” was considered decisive or highly important by a majority of firms in general, and by manufacturing firms in particular, both local and foreign. Also, manufacturing firms, both local and foreign, appear to be quite sensitive to government restrictions (e.g., pollution control) in their prospective location decisions.

In assessing the results of this study in the context of public policy, it is important to bear in mind that the data are for the most part *ex post*; that is, the responses on the relative importance of various location determinants were obtained from firms of given

characteristics that have already decided to locate in their current sites. In effect, the data tell us what factors were considered important by the firms represented in the sample which have located mostly in Metro Manila. As has been pointed out, the importance of some location factors tend to be firm-specific. Thus, if the composition of firms were in fact different from those represented in the sample, then the set of location factors that would be considered important will probably be different and, correspondingly, the location of firms could also differ from that actually observed.

Policies designed to influence the location of firms must therefore weigh not only the factors considered most important by the composition of firms in this study but also the relevant industrial structure. It would be too simplistic to suggest that to encourage firms to locate outside Metro Manila, public policy measures should be geared towards making the regions more attractive in terms of, say, just the seven (or four) factors singled out. Such a view assumes that the present composition of firms, which is heavily represented by import-substituting and import-dependent firms, is in fact desirable. Past studies have already shown that such industrial structure has not been conducive to sustained long-term growth given the stage of Philippine economy development.

Just as the current geographical location of firms has been shaped largely indirectly by public policy in the past, the influence of policies on future firm location will also tend to be indirect. We have seen that direct policies have had very little influence on location decisions. It seems that basic SOC has to be in place before direct government influences can work, as may be suggested by a comparative evaluation of these interventions in developing countries vis-à-vis more developed countries.

Policies aimed to correct for unintended distortions and biases in the composition of firms to be established could indirectly shape their spatial structure in view of the finding that the importance of certain location factors tends to be firm-specific.

When these unwanted distortions and biases are rectified, we might gradually see the emergence of a more spatially dispersed industrial structure to the extent that, by virtue of location criteria, certain establishments would tend to locate in the regions. Given the desired composition of industries, policies to make certain regions outside Metro Manila attractive as alternative centers, could then be pursued more efficiently to reinforce the nature pull of these areas.

Table 1
 Classification of the Top 1,000 Firms in the Philippines
 By Type of Ownership and By Industry:
 Universe and Sample

Industry	Universe			Sample		
	Total (n=1,000)	Local (n ₁ =836)	Foreign (n ₂ =164)	Total (n=100)	Local (n ₁ =50)	Foreign (n ₂ =50)
Agriculture, Fishery, Forestry	22	22	0	1	1	0
Mining & Quarrying	24	21	3	2	1	2
Manufacturing:	(404) ^{a/}	(312) ^{a/}	(92) ^{a/}	(49) ^{a/}	(20) ^{a/}	(29) ^{a/}
Basic metals	27	25	2	2	2	0
Chemicals, Petroleum, Coal						
Rubber, & Plastic Products	102	59	43	17	4	13
Fabricated Metal Products	68	46	22	11	3	8
Food, Beverages & Tobacco	96	81	15	10	5	5
Non-Metallic Mineral Products	27	27	0	2	2	0
Paper & Paper Products, Printing						
& Publishing	22	19	3	2	1	1
Textile, Wearing Apparel & Leather	42	36	6	4	2	2
Wood & Wood Products	17	17	0	1	1	0
Other Manufacturing	3	2	1	0	0	0
Electricity, Gas & Water	5	5	0	0	0	0
Construction	54	52	2	4	3	2
Transportation, Storage &						
Communications	57	53	4	4	3	2
Wholesale & Retail Trade	253	235	18	19	14	5
Financing, Insurance, Real						
Estate & Business Services	157	112	45	20	7	13
Community, Social and Personal						
Services	24	24	0	1	1	0
Total	1,000	836	164	100	50	50

a/ Total manufacturing firms

Table 2a
 Distribution of Sample Firms By Industry and By Location of Plant/Major
 Activity, and Year of Establishment, 1985

Industry	Location of Industry						Year of Establishment					
	Metro Manila			Outside Metro Manila			Before 1967			1967 & After		
	T	L	F	T	L	F	T	L	F	T	L	F
Agriculture, Fishery, Forestry	0	0	0	1	1	0	1	1	0	0	0	0
Mining & Quarrying	0	0	0	2	1	1	1	1	0	1	0	1
Manufacturing:	(37)	(14)	(23)	(12)	(6)	(6)						
Basic metals	2	2	0	0	0	0	1	1	0	1	1	0
Chemicals, Petroleum, Coal Rubber, & Plastic Products	13	2	11	4	2	2	8	3	5	6	0	6
Fabricated Metal Products	9	3	6	2	0	2	0	0	0	11	3	8
Food, Beverages & Tobacco	7	4	3	3	1	2	6	2	4	4	3	1
Non-Metallic Mineral Products	1	1	0	1	1	0	1	1	0	1	1	0
Paper & Paper Products	1	0	1	1	1	0	0	0	0	2	1	1
Textile, Wearing Apparel & Leather	4	2	2	0	0	0	3	2	1	1	0	1
Wood & Wood Products	1	1	0	0	0	0	0	0	0	1	1	0
Other Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0
Electricity, Gas & Water	0	0	0	0	0	0	0	0	0	0	0	0
Construction	3	2	1	1	1	0	1	1	0	3	2	1
Transportation, Storage & Communications	3	2	1	1	1	0	1	1	0	3	2	1
Wholesale & Retail Trade	18	13	5	1	1	0	4	2	2	13	10	3
Financing, Insurance, Real Estate & Business Services	20	7	13	0	0	0	4	3	1	16	4	12
Community, Social and Personal Services	1	1	0	0	0	0	0	0	0	1	1	0
Total	82	39	43	18	11	7	31	18	13	64	29	34

T = All firms; L = Local firms; F = Foreign firms

Table 2b
 Distribution of Firms By Industry and By
 Market and Supply Orientations, 1985

Industry	Market Orientation			Supply Orientation			Domestic		Foreign		
	Domestic			Foreign			Market		Market		
	T	L	F	T	L	F	T	L	DS	FS	
Agriculture, Fishery, Forestry	0	0	0	1	1	0	0	0	0	0	1
Mining & Quarrying	2	1	1	0	0	0	1	1	0	0	0
Manufacturing:											
Basic metals	2	2	0	0	0	0	1	1	0	1	0
Chemicals, Petroleum, Coal Rubber, & Plastic Products	13	2	11	2	0	2	4	1	3	12	10
Fabricated Metal Products	3	1	2	8	2	6	1	0	1	9	2
Food, Beverages & Tobacco	9	5	4	1	0	1	5	2	3	4	2
Non-Metallic Mineral Products	2	2	0	0	0	0	2	2	0	0	0
Paper & Paper Products	1	0	1	1	1	0	2	1	1	0	0
Textile, Wearing Apparel & Leather	2	2	0	2	0	2	0	0	0	3	1
Wood & Wood Products	0	0	0	1	1	0	1	1	0	0	0
Other Manufacturing	0	0	0	0	0	0	0	0	0	0	0
Electricity, Gas & Water	0	0	0	0	0	0	0	0	0	0	0
Construction	3	2	1	1	1	0	2	1	1	1	1
Transportation, Storage & Communications	2	2	0	0	0	0	1	1	0	0	0
Wholesale & Retail Trade	18	14	4	0	0	0	13	11	2	3	1
Financing, Insurance, Real Estate & Business Services	18	6	12	1	1	0	10	6	4	5	0
Community, Social and Personal Services	0	0	0	0	0	0	0	0	0	0	0
Total	75	39	36	18	7	11	43	28	15	39	11

T = All firms; L = Local firms; F = Foreign firms; DS = Domestic supply orientation; FS = Foreign supply orientation

Table 3
Reasons for Choice of Location: Local and Foreign Firms, 1985

Factors	Index of Importance ^{a/}		
	Total ^{b/} (n=100)	Local (n=50)	Foreign (n=50)
(A) <u>Labor Supply</u>			
(1) Plentiful/cheap labor	1.63(31)	1.88(34)	1.56(16)
(2) Labor with required skills	2.05(35)	2.06(36)	2.02(32)
(B) <u>Accessibility</u>			
(3) Close to major suppliers	2.00(34)	1.98(32)	2.08(42)
(4) Close to major customers	2.58(62)*	2.58(62)*	2.60(62)*
(5) Close to airport	1.58(21)	1.56(20)	1.68(24)
(6) Close to maritime port	1.91(29)	1.94(30)	1.78(26)
(7) Easy road access	2.62(51)*	2.66(60)*	2.44(56)*
(8) Easy rail access	1.21(6)	1.22(6)	1.18(6)
(C) <u>Urban/Public Services</u>			
(9) Quality of local basic schools	1.30(8)	1.30(8)	1.32(6)
(10) Locally available technical training	1.70(19)	1.72(20)	1.62(16)
(11) Technical/maintenance services	1.82(26)	1.82(26)	1.82(26)
(12) Consulting, computing, accounting	1.85(26)	1.88(28)	1.70(20)
(13) Employment agencies	1.24(7)	1.22(6)	1.34(10)
(14) Reliable electrical power	2.77(67)*	2.72(62)*	3.00(72)*
(15) Public water supply	2.24(42)	2.24(42)	2.26(40)
(16) Disposal of waste	1.91(32)	1.92(32)	1.88(34)
(17) Public transportation to plant site	2.34(45)	2.36(46)	2.24(42)
(18) Telephone/telex services	2.71(64)*	2.70(62)*	2.76(72)*
(19) Health facilities	1.89(30)	1.88(30)	1.94(30)

^{a/} Respondents were asked to rate importance of factors as follows: 4 = Decisive; 3 = major importance; 2 = some importance; 1 = unimportant. Index of importance are mean scores. Number in parenthesis is the percentage of respondent firms claiming the factor as decisive or of major importance to location decision

^{b/} Index of importance and percentage in parentheses are obtained after appropriate sampling weights. The sub-sample of local and foreign firms, respectively, are self-weighting. Weighted indices and percentage subject to rounding errors.

Table 3 (cont.)

Factors	Index of Importance ^{a/}		
	Total ^{b/} (n=100)	Local (n=50)	Foreign (n=50)
(D) <u>Site</u>			
(20) Suitable plot of land	2.81(70)*	2.88(72)*	2.48(62)*
(21) Suitable building	2.34(55)*	2.32(50)*	2.42(58)*
(22) Space for expansion	2.61(61)*	2.66(62)*	2.34(54)*
(23) Property available for lease	2.15(44)	2.16(44)	2.08(42)
(24) Low cost of land	2.14(45)	2.18(48)	1.94(32)
(E) <u>Government Influences</u>			
(25) Government guidance/persuasion	1.79(28)	1.74(26)	2.06(40)
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.73(25)	1.72(24)	1.80(32)
(27) Financial pressure on alternative locations (penalties, taxes)	1.67(23)	1.70(24)	1.54(18)
(28) Infrastructure especially designed for industry	2.07(41)	2.10(42)	1.94(38)
(29) Industrial estates/districts	1.83(30)	1.82(30)	1.86(32)
(F) <u>Other Factors</u>			
(30) Limited local competition for products	1.71(25)	1.80(28)	1.28(10)
(31) Presence of related industries	1.94(29)	1.94(30)	1.94(26)
(32) Local tradition	1.18(4)	1.18(4)	1.20(4)
(33) Attractive living environment for managers/administrative staff	1.76(24)	1.74(24)	1.84(26)
(34) Personal or family reasons of owners/managers	1.56(17)	1.64(20)	1.18(4)

Table 3 (cont.)

Factors	Index of Importance ^{a/}		
	Total ^{b/} (n=100)	Local (n=50)	Foreign (n=50)
(G) <u>Future Government Policy Measures</u>			
If the government were to adopt the following measures to influence firms to locate outside of Manila region, how important do you think they would be in your next locational decision?			
(35) Government guidance/persuasion	1.94(34)	1.94(34)	1.94(34)
(36) Government bans	2.41(54)*	2.40(54)*	2.46(54)*
(37) Government regulations (e.g. pollution)	1.98(35)	1.94(34)	2.18(42)
(38) Financial pressures (penalties, taxes)	1.96(27)	1.96(26)	1.96(32)
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	2.02(34)	1.98(32)	2.22(42)
(40) Improvements to infrastructure	1.98(33)	1.96(32)	2.06(42)
(41) Establishments of industrial estates, districts	1.65(18)	1.60(14)	1.92(38)

Table 4
Reasons for Choice of Location: Local and Foreign Firms By Market Orientation, 1985a/

Factors	All Firms		Local Firms		Foreign Firms	
	Local	Foreign	Local	Foreign	Local	Foreign
	Market (n=75)	Market (n=18)	Market (n=39)	Market (n=7)	Market (n=36)	Market (n=11)
(A) Labor Supply						
(1) Plentiful/cheap labor	1.72(23)	2.54(54)*	1.79(31)	2.57(57)*	1.33(8)	2.45(45)
(2) Labor with required skills	1.97(34)	2.11(28)	2.00(36)	1.86(14)	1.81(22)	2.91(73)*
(B) Accessibility						
(3) Close to major suppliers	1.96(35)	1.85(23)	1.95(33)	1.71(14)	2.00(42)	2.27(45)
(4) Close to major customers	2.82(69)*	1.63(28)	2.82(69)*	1.57(29)	2.81(69)*	1.82(27)
(5) Close to airport	1.52(17)	1.95(39)	1.53(18)	1.71(29)	1.42(11)	2.73(73)*
(6) Close to maritime port	1.77(23)	2.43(57)*	1.79(23)	2.43(57)*	1.61(19)	2.45(55)*
(7) Easy road access	2.67(62)*	2.67(61)*	2.72(64)*	2.71(57)*	2.39(50)*	2.55(73)*
(8) Easy rail access	1.25(7)	1.04(2)	1.26(8)	1.00(0)	1.19(6)	1.18(9)
(C) Urban/Public Services						
(9) Quality of local basic schools	1.19(5)	1.46(4)	1.18(5)	1.43(0)	1.28(3)	1.55(18)
(10) Locally available technical training	1.62(17)	1.93(19)	1.64(18)	1.86(14)	1.50(11)	2.18(36)
(11) Technical/maintenance services	1.75(24)	2.00(26)	1.74(23)	2.00(29)	1.78(28)	2.00(18)
(12) Consulting, computing, accounting	1.78(23)	2.09(39)	1.79(23)	2.14(43)	1.69(19)	1.91(27)
(13) Employment agencies	1.27(8)	1.22(4)	1.26(8)	1.14(0)	1.33(8)	1.45(18)
(14) Reliable electric power	2.81(63)*	2.76(72)*	2.77(62)*	2.71(71)*	3.06(72)*	2.91(73)*
(15) Public water supply	2.27(39)	1.89(41)	2.26(38)	1.86(43)	2.33(42)	2.00(36)
(16) Disposal of waste	1.94(33)	1.65(19)	1.95(33)	1.57(14)	1.89(33)	1.91(36)
(17) Public transportation to plant site	2.33(43)	2.43(57)*	2.34(44)	2.43(57)*	2.17(39)	2.45(55)*
(18) Telephone/telex services	2.75(68)*	2.48(37)	2.74(67)*	2.43(29)	2.81(75)*	2.64(64)*
(19) Health facilities	1.88(31)	1.80(17)	1.87(31)	1.71(14)	1.94(33)	2.09(27)
(D) Site						
(20) Suitable plot of land	2.80(71)*	2.89(63)*	2.90(78)*	2.86(57)*	2.28(53)*	3.00(82)*
(21) Suitable building	2.55(59)*	1.41(13)	2.56(59)*	1.14(0)	2.44(58)*	2.27(55)*
(22) Space for expansion	2.59(60)*	2.91(72)*	2.64(62)*	3.00(71)*	2.31(53)*	2.64(73)*
(23) Property available for lease	2.26(49)	2.09(37)	2.31(51)*	2.00(29)	2.00(36)	2.36(64)*
(24) Low cost of land	2.11(43)	2.74(78)*	2.15(46)	2.86(86)*	1.86(28)	2.36(55)*

a/ See notes in Table 3.

Table 4 (cont.)

	All Firms		Local Firms		Foreign Firms	
	Local Market (n=75)	Foreign Market (n=18)	Local Market (n=39)	Foreign Market (n=7)	Local Market (n=36)	Foreign Market (n=11)
(E) <u>Government Influences</u>						
(25) Government guidance/persuasion	1.83(30)	1.65(24)	1.79(28)	1.43(14)	2.06(39)	2.36(55)*
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.73(24)	1.89(33)	1.72(23)	1.86(29)	1.81(31)	2.00(45)
(27) Financial pressure on alternative locations (penalties, taxes)	1.74(24)	1.48(17)	1.77(26)	1.43(14)	1.56(17)	1.64(27)
(28) Infrastructure especially designed for industry	2.20(45)	1.50(24)	2.26(46)	1.26(14)	1.92(36)	2.18(55)*
(29) Industrial estates/districts	1.91(34)	1.46(15)	1.90(33)	1.43(14)	1.97(36)	1.55(18)
(F) <u>Other Factors</u>						
(30) Limited local competition for products	1.76(27)	1.19(4)	1.85(31)	1.14(0)	1.28(8)	1.36(18)
(31) Presence of related industries	2.01(31)	1.52(11)	2.03(31)	1.43(14)	1.92(31)	1.82(0)
(32) Local tradition	1.20(6)	1.09(2)	1.21(6)	1.00(0)	1.17(3)	1.36(9)
(33) Attractive living environment for managers/administrative staff	1.82(28)	1.67(28)	1.82(26)	1.57(29)	1.83(28)	2.00(27)
(34) Personal or family reasons of owners/managers	1.48(13)	1.52(13)	1.54(15)	1.57(14)	1.14(3)	1.36(9)
(G) <u>Future Government Policy Measures</u>						
(35) Government guidance/persuasion	1.97(36)	1.89(33)	1.97(36)	1.86(29)	1.97(33)	2.00(45)
(36) Government bans	2.31(48)	2.61(76)*	2.26(46)	2.71(86)*	2.61(61)*	2.27(45)
(37) Government regulations (e.g. pollution)	1.96(35)	2.20(41)	1.90(33)	2.29(43)	2.33(44)	1.91(36)
(38) Financial pressures (penalties, taxes)	1.93(25)	2.11(41)	1.92(23)	2.14(43)	2.00(33)	2.00(36)
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	1.95(29)	2.52(65)*	1.90(26)	2.57(71)*	2.25(44)	2.36(45)
(40) Improvements to infrastructure	2.02(32)	1.89(41)	2.00(31)	1.86(43)	2.11(42)	2.00(36)
(41) Establishments of industrial estates/districts	1.74(21)	1.30(6)	1.69(18)	1.14(0)	1.97(39)	1.82(27)

Table 5
Reasons for Choice of Location: Local and Foreign Firms By Input Supply Orientation, 1985a/

Factors	All Firms		Local Firms		Foreign Firms	
	Local Inputs (n=43)	Foreign Inputs (n=39)	Local Inputs (n=28)	Foreign Inputs (n=11)	Local Inputs (n=15)	Foreign Inputs (n=28)
(A) Labor Supply						
(1) Plentiful/cheap labor	1.62(20)	2.33(56)*	1.64(21)	2.64(63)*	1.40(7)	1.71(21)
(2) Labor with required skills	2.00(30)	2.23(46)	2.04(32)	2.18(45)	1.67(13)	2.32(46)
(B) Accessibility						
(3) Close to major suppliers	2.05(37)	1.93(30)	2.04(36)	1.91(27)	2.20(53)*	1.96(36)
(4) Close to major customers	2.63(62)*	2.32(54)*	2.61(61)*	2.27(55)*	2.80(73)*	2.43(54)*
(5) Close to airport	1.32(8)	2.11(48)	1.32(7)	2.18(55)*	1.33(13)	1.96(26)
(6) Close to maritime port	1.73(29)	2.15(47)	1.71(18)	2.27(55)*	1.87(27)	1.89(22)
(7) Easy road access	2.67(62)*	2.58(59)*	2.71(65)*	2.55(55)*	2.20(40)	2.64(68)*
(8) Easy rail access	1.18(4)	1.19(8)	1.18(14)	1.18(9)	1.20(7)	1.21(7)
(C) Urban/Public Services						
(9) Quality of local basic schools	1.30(8)	1.29(1)	1.29(7)	1.27(0)	1.40(13)	1.32(4)
(10) Locally available technical training	1.61(15)	1.89(23)	1.61(14)	2.00(27)	1.67(20)	1.68(14)
(11) Technical/maintenance services	1.74(21)	1.99(31)	1.75(21)	2.09(36)	1.60(20)	1.79(21)
(12) Consulting, computing, accounting	1.86(28)	1.90(23)	1.89(29)	2.00(27)	1.53(27)	1.71(14)
(13) Employment agencies	1.10(1)	1.36(10)	1.07(0)	1.36(9)	1.40(13)	1.36(11)
(14) Reliable electric power	2.61(61)*	3.15(80)*	2.57(61)*	3.18(82)*	2.93(67)*	3.07(75)*
(15) Public water supply	2.17(41)	2.28(47)	2.14(38)	2.36(55)*	2.47(53)*	2.11(32)
(16) Disposal of waste	1.94(37)	1.98(33)	1.93(36)	2.09(36)	2.07(47)	1.75(25)
(17) Public transportation to plant site	2.36(48)	2.46(59)*	2.39(50)*	2.55(64)*	2.07(27)	2.29(50)*
(18) Telephone/telex services	2.69(68)*	2.60(49)	2.68(68)*	2.54(36)	2.80(67)*	2.71(75)*
(19) Health facilities	1.77(28)	1.89(28)	1.75(29)	1.91(27)	1.93(27)	1.86(29)
(D) Site						
(20) Suitable plot of land	2.92(74)*	2.65(63)*	2.96(75)*	2.73(64)*	2.53(67)*	2.50(61)*
(21) Suitable building	2.37(56)*	2.08(38)	2.39(57)*	1.91(27)	2.13(47)	2.43(61)*
(22) Space for expansion	2.44(57)*	2.95(75)*	2.46(57)*	3.18(82)*	2.20(53)*	2.50(61)*
(23) Property available for lease	2.26(49)	2.02(41)	2.29(50)*	1.91(36)	2.00(40)	2.25(50)*
(24) Low cost of land	2.08(43)	2.35(58)*	2.07(43)	2.55(63)*	2.13(47)	1.96(29)

a/ See notes in Table 3.

Table 5 (cont.)

Factors	All Firms		Local Firms		Foreign Firms	
	Local Inputs (n=43)	Foreign Inputs (n=39)	Local Inputs (n=28)	Foreign Inputs (n=11)	Local Inputs (n=15)	Foreign Inputs (n=28)
<u>(E) Government Influences</u>						
(25) Government guidance/persuasion	1.99(40)	1.65(19)	1.96(39)	1.45(9)	2.20(47)	2.04(39)
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.74(28)	1.82(24)	1.75(29)	1.82.18	1.60(20)	1.82(36)
(27) Financial pressure on alternative locations (penalties, taxes)	1.77(29)	1.64(20)	1.82(32)	1.64(18)	1.27(0)	1.64(25)
(28) Infrastructure especially designed for industry	2.21(48)	1.93(41)	2.25(50)	1.82(36)	1.80(27)	2.14(50)*
(29) Industrial estates/districts	1.82(30)	1.86(34)	1.79(29)	1.91(36)	2.13(40)	1.75(29)
<u>(F) Other Factors</u>						
(30) Limited local competition for products	1.85(29)	1.49(2)	1.93(32)	1.55(18)	1.07(0)	1.39(14)
(31) Presence of related industries	2.05(30)	1.73(20)	2.07(32)	1.64(18)	1.80(13)	1.93(3)
(32) Local tradition	1.23(7)	1.17(1)	1.21(7)	1.18(0)	1.40(7)	1.14(4)
(33) Attractive living environment for managers/administrative staff	1.71(25)	1.84(27)	1.71(29)	1.82(27)	1.67(20)	1.89(25)
(34) Personal or family reasons of owners/managers	1.44(13)	1.62(21)	1.46(14)	1.82(27)	1.20(0)	1.21(7)
<u>(G) Future Government Policy Measures</u>						
(35) Government guidance/persuasion	1.84(30)	1.99(36)	1.82(29)	2.00(36)	2.07(40)	1.96(36)
(36) Government bans	2.20(44)	2.36(55)*	2.18(43)	2.27(55)*	2.40(53)*	2.54(57)*
(37) Government regulations (e.g. pollution)	1.86(30)	2.11(39)	1.82(29)	2.09(36)	2.27(40)	2.14(43)
(38) Financial pressures (penalties, taxes)	1.94(26)	1.96(29)	1.93(25)	2.00(27)	2.07(33)	1.89(32)
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	1.95(30)	2.07(39)	1.93(29)	2.00(36)	2.13(40)	2.21(43)
(40) Improvements to infrastructure	1.95(34)	2.10(43)	1.93(32)	2.09(45)	2.20(47)	2.11(39)
(41) Establishment of industrial estates/districts	1.68(20)	1.67(18)	1.64(18)	1.55(9)	2.00(40)	1.93(36)

Table 6
Reasons for Choice of Location: Market and Input Supply Orientations of Firms, 1985^{a/}

Factors	Domestic Market		Foreign Market	
	Domestic Supply (n=36)	Foreign Supply (n=29)	Domestic Supply (n=6)	Foreign Supply (n=12)
(A) Labor Supply				
(1) Plentiful/cheap labor	1.58(19)	2.06(49)	2.05(33)	2.86(68)*
(2) Labor with required skills	1.91(30)	2.29(49)	2.11(11)	2.10(39)
(B) Accessibility				
(3) Close to major suppliers	1.99(36)	2.00(38)	1.95(33)	1.78(14)
(4) Close to major customers	2.80(67)*	2.75(71)*	1.83(39)	1.50(21)
(5) Close to airport	1.36(8)	1.91(42)	1.11(5)	2.50(61)*
(6) Close to maritime port	1.50(11)	2.11(46)	2.78(67)*	2.21(50)*
(7) Easy road access	2.66(60)*	2.69(69)*	3.17(95)*	2.36(39)
(8) Easy rail access	1.21(5)	1.25(11)	1.00(0)	1.07(4)
(C) Urban/Public Services				
(9) Quality of local basic schools	1.18(5)	1.18(0)	1.39(5)	1.50(4)
(10) Locally available technical training	1.55(13)	1.71(20)	1.44(50)	2.25(29)
(11) Technical/maintenance services	1.70(21)	1.76(25)	1.33(0)	2.43(43)
(12) Consulting, computing, accounting	1.82(26)	1.64(11)	1.56(28)	2.43(46)
(13) Employment agencies	3.12(1)	1.36(1)	1.00(0)	1.36(7)
(14) Reliable electric power	2.70(63)*	3.22(82)*	2.39(67)	3.00(75)*
(15) Public water supply	2.20(39)	2.42(47)	0.72(33)	2.00(46)
(16) Disposal of waste	1.93(35)	2.17(44)	1.72(33)	1.61(11)
(17) Public transportation to plant site	2.32(45)	2.49(60)*	2.50(56)	2.39(57)*
(18) Telephone/telex services	2.73(71)*	2.60(54)*	2.28(33)	2.61(39)
(19) Health facilities	1.77(30)	2.15(54)*	2.72(72)	2.75(83)*
(D) Site				
(20) Suitable plot of land	2.97(77)*	2.42(56)*	2.55(44)	3.11(75)*
(21) Suitable building	2.52(62)*	2.31(47)	1.05(0)	1.64(21)
(22) Space for expansion	2.39(54)*	2.89(75)*	2.67(67)*	3.07(75)*
(23) Property available for lease	2.30(52)*	2.07(44)	2.33(39)	1.93(36)
(24) Low cost of land	2.03(41)	2.15(54)*	2.72(72)*	2.75(83)*

a/ See notes in Table 3.

Table 6 (cont.)

Factors	Domestic Market		Foreign Market	
	Domestic Supply (n=36)	Foreign Supply (n=29)	Domestic Supply (n=6)	Foreign Supply (n=12)
<u>(E) Government Influences</u>				
(25) Government guidance/persuasion	1.94(38)	1.78(22)	2.05(39)	1.39(4)
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.76(27)	1.75(22)	1.78(39)	1.96(29)
(27) Financial pressure on alternative locations (penalties, taxes)	1.82(30)	1.76(25)	1.61(28)	1.39(11)
(28) Infrastructure especially designed for industry	2.35(52)*	2.22(53)*	1.72(33)	1.35(18)
(29) Industrial estates/districts	1.94(34)	1.96(40)	1.16(5)	1.64(21)
<u>(F) Other Factors</u>				
(30) Limited local competition for products	1.84(30)	1.68(22)	1.28(0)	1.14(7)
(31) Presence of related industries	2.06(28)	1.89(31)	1.67(28)	1.43(0)
(32) Local tradition	1.26(8)	1.22(0)	1.11(0)	1.07(4)
(33) Attractive living environment for managers/administrative staff	1.75(25)	1.91(25)	1.61(28)	1.71(29)
(34) Personal or family reasons of owners/managers	1.39(11)	1.51(20)	1.05(0)	1.82(21)
<u>(G) Future Government Policy Measures</u>				
		(n=27)		
(35) Government guidance/persuasion	1.82(30)	2.07(38)	2.00(33)	1.82(32)
(36) Government bans	2.04(36)	2.33(49)	2.89(89)*	2.43(68)*
(37) Government regulations (e.g. pollution)	1.77(27)	2.16(42)	2.60(56)*	2.00(32)
(38) Financial pressures (penalties, taxes)	1.84(21)	2.07(31)	2.67(67)*	1.75(25)
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	1.77(22)	2.07(34)	3.22(95)*	2.07(46)
(40) Improvements to infrastructure	1.97(34)	2.18(44)	1.83(39)	1.93(43)
(41) Establishment of industrial estates/districts	1.73(23)	1.82(24)	1.16(5)	1.39(7)

Table 7
Reasons for Choice of Location: Local and Foreign Firms by Type of Establishment, 1985 ^{a/}

Factors	All Firms		Local Firms		Foreign Firms	
	Manufac- turing (n=49)	Others (n=51)	Manufac- turing (n=20)	Others (n=30)	Manufac- turing (n=29)	Others (n=21)
(A) Labor Supply						
(1) Plentiful/cheap labor	2.16(48)	1.57(12)	2.25(55)*	1.63(20)	1.86(2)	1.14(5)
(2) Labor with required skills	2.36(52)*	1.82(23)	2.40(53)*	1.83(23)	2.24(41)	1.71(19)
(B) Accessibility						
(3) Close to major suppliers	2.18(43)	1.86(27)	2.25(45)	1.80(28)	1.93(34)	2.29(52)*
(4) Close to major customers	2.26(51)*	2.83(70)*	2.20(50)*	2.83(70)*	2.45(55)*	2.81(71)*
(5) Close to airport	1.84(36)	1.39(9)	1.80(35)	1.40(10)	1.97(39)	1.29(5)
(6) Close to maritime port	2.11(44)	1.77(18)	2.10(45)	1.83(20)	2.14(41)	1.29(5)
(7) Easy road access	2.59(60)*	2.65(59)*	2.60(60)*	2.70(60)*	2.55(62)*	2.29(43)*
(8) Easy rail access	1.29(10)	1.15(3)	1.30(10)	1.17(3)	1.28(10)	1.05(0)
(C) Urban/Public Services						
(9) Quality of local basic schools	1.43(13)	1.20(4)	1.45(15)	1.20(3)	1.38(7)	1.24(5)
(10) Locally available technical training	1.67(19)	1.73(19)	1.65(20)	1.77(20)	1.76(17)	1.43(14)
(11) Technical/maintenance services	1.86(27)	1.80(25)	1.90(30)	1.77(23)	1.66(13)	2.05(38)
(12) Consulting, computing, accounting	1.79(26)	1.89(27)	1.85(30)	1.90(27)	1.59(14)	1.86(29)
(13) Employment agencies	1.26(10)	1.22(4)	1.25(10)	1.20(3)	1.31(10)	1.38(10)
(14) Reliable electric power	3.16(78)*	2.47(46)	3.15(90)*	2.43(43)	3.21(79)*	2.71(62)*
(15) Public water supply	2.26(44)	2.23(40)	2.25(45)	2.23(40)	2.31(41)	2.19(38)
(16) Disposal of waste	2.10(43)	1.77(24)	2.15(45)	1.77(23)	1.93(38)	1.81(29)
(17) Public transportation to plant site	2.39(50)*	2.30(48)	2.40(50)*	2.33(43)	2.34(48)	2.10(33)
(18) Telephone/telex services	2.61(57)*	2.78(68)*	2.60(55)*	2.77(67)*	2.66(66)*	2.90(81)*
(19) Health facilities	1.99(29)	1.81(30)	2.00(30)	1.80(30)	1.97(28)	1.90(33)
(D) Site						
(20) Suitable plot of land	2.86(72)*	2.78(69)*	2.85(70)*	2.90(73)*	2.90(79)*	1.90(30)
(21) Suitable building	1.98(38)	2.61(61)*	1.90(35)	2.60(60)*	2.24(48)	2.67(71)*
(22) Space for expansion	2.92(78)*	2.38(48)	3.00(80)*	2.43(50)*	2.62(69)*	1.95(33)
(23) Property available for lease	1.83(32)	2.39(53)*	1.65(25)	2.50(57)*	2.45(55)*	1.52(24)
(24) Low cost of land	2.44(57)*	1.91(37)	2.50(60)*	1.97(40)	2.24(45)	1.52(14)

a/ See notes in Table 3.

Table 7 (cont.)

Factors	All Firms		Local Firms		Foreign Firms	
	Manufac- turing (n=49)	Others (n=51)	Manufac- turing (n=20)	Others (n=30)	Manufac- turing (n=29)	Others (n=21)
(E) <u>Government Influences</u>						
(25) Government guidance/persuasion	1.87(29)	1.73(28)	1.80(25)	1.70(27)	2.14(41)	1.95(38)
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.79(26)	1.69(25)	1.80(25)	1.67(23)	1.76(31)	1.86(33)
(27) Financial pressure on alternative locations (penalties, taxes)	1.79(28)	1.59(19)	1.85(30)	1.60(20)	1.59(21)	1.48(14)
(28) Infrastructure especially designed for industry	2.18(51)*	2.00(34)	2.15(50)*	2.07(37)	2.28(55)*	1.48(14)
(29) Industrial estates/districts	1.88(28)	1.78(32)	1.85(25)	1.80(33)	2.00(38)	1.67(24)
(F) <u>Other Factors</u>						
(30) Limited local competition for products	1.68(26)	1.74(25)	1.80(30)	1.80(27)	1.28(10)	1.29(10)
(31) Presence of related industries	1.82(30)	2.03(29)	1.85(35)	2.00(27)	1.72(10)	2.24(48)
(32) Local tradition	1.19(2)	1.18(6)	1.15(0)	1.20(7)	1.34(7)	1.00(0)
(33) Attractive living environment for managers/administrative staff	1.69(20)	1.81(27)	1.65(20)	1.80(27)	1.83(21)	1.86(33)
(34) Personal or family reasons of owners/managers	1.71(24)	1.46(9)	1.85(30)	1.50(13)	1.21(3)	1.14(5)
(G) <u>Future Government Policy Measures</u>						
(35) Government guidance/persuasion	2.04(33)	1.87(35)	2.00(30)	1.90(37)	2.17(49)	1.62(24)
(36) Government bans	2.88(73)*	2.06(40)	2.90(75)*	2.07(40)	2.79(66)*	2.00(38)
(37) Government regulations (e.g. pollution)	2.47(54)*	1.61(20)	2.50(55)*	1.57(20)	2.38(52)*	1.90(24)
(38) Financial pressures (penalties, taxes)	2.21(35)	1.77(21)	2.25(35)	1.77(20)	2.07(34)	1.81(29)
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	2.31(45)	1.80(25)	2.30(45)	1.77(23)	2.34(45)	2.05(38)
(40) Improvements to infrastructure	2.19(42)	1.82(27)	2.15(40)	1.83(27)	2.31(48)	1.71(29)
(41) Establishment of industrial estates/districts	1.86(21)	1.50(15)	1.80(15)	1.47(13)	2.07(41)	1.71(29)

Table 8
Reasons for Choice of Location by Market and Supply Orientations of Manufacturing Firms, 1985^{a/}

Factors	Domestic Market		Foreign Market	
	Domestic Supply (n=10)	Foreign Supply (n=19)	Domestic Supply (n=5)	Foreign Supply (n=10)
(A) Labor Supply				
(1) Plentiful/cheap labor	1.57(7)	2.33(56)*	2.15(15)	2.44(61)*
(2) Labor with required skills	1.77(33)	2.07(00)	1.92(46)	1.66(22)
(B) Accessibility				
(3) Close to major suppliers	2.07(43)	2.77(70)*	1.38(15)	1.22(5)
(4) Close to major customers	2.40(60)*	2.12(54)*	1.15(8)	3.34(95)*
(5) Close to airport	12.0(0)	2.37(58)*	2.30(54)*	1.49(22)
(6) Close to maritime port	1.60(20)	2.72(67)*	2.85(92)*	2.27(33)
(7) Easy road access	2.64(70)*	2.33(63)*	2.08(46)	3.06(78)*
(8) Easy rail access	1.23(3)	1.33(14)	1.00(0)	1.11(5)
(C) Urban/Public Services				
(9) Quality of local basic schools	1.03(0)	1.21(0)	1.15(8)	1.50(5)
(10) Locally available technical training	1.03(0)	1.65(14)	1.23(8)	2.11(16)
(11) Technical/maintenance services	1.17(0)	1.89(30)	1.08(0)	2.39(39)
(12) Consulting, computing, accounting	1.17(0)	1.62(14)	1.77(39)	2.39(45)
(13) Employment agencies	1.00(0)	1.44(14)	1.00(0)	1.27(11)
(14) Reliable electric power	3.30(93)*	3.30(86)*	2.92(92)*	3.00(89)*
(15) Public water supply	1.96(27)	2.47(47)	2.00(46)	1.44(16)
(16) Disposal of waste	1.70(27)	2.42(56)*	2.00(46)	1.38(16)
(17) Public transportation to plant site	1.53(7)	2.56(61)*	2.70(77)*	2.61(61)*
(18) Telephone/telex services	2.40(57)*	2.46(46)	2.39(46)	2.38(33)
(19) Health facilities	1.60(17)	2.00(35)	1.54(0)	1.92(16)
(D) Site				
(20) Suitable plot of land	3.27(97)*	2.74(70)*	1.99(23)	2.89(61)*
(21) Suitable building	1.87(40)	2.07(37)	1.08(0)	1.99(33)
(22) Space for expansion	3.20(93)*	2.93(79)*	2.15(54)*	2.84(61)*
(23) Property available for lease	2.47(60)*	1.88(37)	1.69(15)	1.60(27)
(24) Low cost of land	2.47(57)*	2.44(58)*	2.23(61)*	2.62(73)*

a/ See notes in Table 3.

Table 8 (cont.)

Factors	Domestic Market		Foreign Market	
	Domestic Supply (n=10)	Foreign Supply (n=19)	Domestic Supply (n=5)	Foreign Supply (n=10)
<u>(E) Government Influences</u>				
(25) Government guidance/persuasion	2.03(40)	1.86(21)	2.08(54)*	1.60(22)
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.93(37)	1.77(19)	2.08(54)*	1.66(16)
(27) Financial pressure on alternative locations (penalties, taxes)	1.87(33)	1.91(30)	1.85(39)	1.33(16)
(28) Infrastructure especially designed for industry	2.30(53)*	2.28(56)*	2.00(46)	1.55(24)
(29) Industrial estates/districts	2.07(23)	1.95(39)	1.23(8)	1.45(5)
<u>(F) Other Factors</u>				
(30) Limited local competition for products	1.67(33)	1.80(3)	1.00(0)	1.22(11)
(31) Presence of related industries	2.30(53)*	1.89(28)	1.15(0)	1.38(0)
(32) Local tradition	1.13(3)	1.28(0)	1.15(0)	1.11(5)
(33) Attractive living environment for managers/administrative staff	1.70(23)	1.75(14)	1.35(39)	1.55(16)
(34) Personal or family reasons of owners/managers	1.37(17)	1.61(23)	1.08(0)	2.01(34)
<u>(G) Future Government Policy Measures</u>				
(35) Government guidance/persuasion	2.06(33)	2.30(47)	2.00(46)	1.72(22)
(36) Government bans	2.93(53)*	2.62(60)*	2.85(85)*	2.11(50)*
(37) Government regulations (e.g. pollution)	2.60(60)*	2.44(53)*	2.70(77)*	2.00(22)
(38) Financial pressures (penalties, taxes)	2.17(20)	2.16(35)	2.92(92)*	1.60(11)
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	2.37(40)	2.11(37)	3.31(92)*	2.11(45)
(40) Improvements to infrastructure	2.20(40)	2.42(53)*	1.35(15)	1.89(39)
(41) Establishment of industrial estates/districts	2.33(40)	1.97(28)	1.23(8)	1.61(11)

Table 9
Reasons for Choice of Location: Local and Foreign Firms by Year of Establishment, 1985 ^{a/}

Factors	All Firms		Local Firms		Foreign Firms	
	Before 1967 (n=31)	1967 & After (n=64)	Before 1967 (n=18)	1967 & After (n=29)	Before 1967 (n=13)	1967 & After (n=35)
(A) Labor Supply						
(1) Plentiful/cheap labor	2.10(41)	1.63(22)	2.17(44)	1.66(24)	1.62(15)	1.51(14)
(2) Labor with required skills	2.34(43)	1.87(28)	2.39(44)	1.83(28)	2.00(31)	2.03(31)
(B) Accessibility						
(3) Close to major suppliers	2.32(49)	1.76(23)	2.39(50)*	1.66(17)	1.85(38)	2.23(46)
(4) Close to major customers	2.58(56)*	2.57(64)*	2.61(56)*	2.55(66)*	2.38(62)*	2.63(60)*
(5) Close to airport	1.54(21)	1.51(17)	1.56(22)	1.44(14)	1.46(15)	1.77(3)
(6) Close to maritime port	2.14(38)	1.73(23)	2.17(39)	1.76(24)	1.92(31)	1.63(20)
(7) Easy road access	2.65(66)*	2.59(53)*	2.67(67)*	2.62(52)*	2.54(62)*	2.49(57)*
(8) Easy rail access	1.20(7)	1.13(1)	1.17(6)	1.14(0)	1.46(15)	1.09(3)
(C) Urban/Public Services						
(9) Quality of local basic schools	1.43(15)	1.20(4)	1.44(17)	1.17(3)	1.31(0)	1.31(9)
(10) Locally available technical training	1.85(29)	1.62(15)	1.89(33)	1.62(14)	1.54(0)	1.63(20)
(11) Technical/maintenance services	1.75(21)	1.85(28)	1.78(22)	1.83(28)	1.54(15)	1.94(31)
(12) Consulting, computing, accounting	1.85(26)	1.81(27)	1.89(28)	1.83(28)	1.62(15)	1.74(23)
(13) Employment agencies	1.34(11)	1.11(2)	1.33(11)	1.07(0)	1.38(8)	1.26(9)
(14) Reliable electric power	2.90(67)*	2.69(61)*	2.89(67)*	2.62(59)*	3.00(69)*	2.97(71)*
(15) Public water supply	2.32(44)	2.15(38)	2.33(44)	2.14(38)	2.23(38)	2.20(37)
(16) Disposal of waste	2.20(45)	1.70(22)	2.22(44)	1.69(21)	2.08(46)	1.74(26)
(17) Public transportation to plant site	2.45(53)*	2.26(39)	2.50(56)*	2.24(38)	2.08(38)	2.34(46)
(18) Telephone/telex services	2.84(71)*	2.62(57)*	2.89(72)*	2.55(52)*	2.46(62)*	2.89(77)*
(19) Health facilities	1.94(28)	1.77(25)	1.94(28)	1.72(24)	1.92(31)	1.94(29)
(D) Site						
(20) Suitable plot of land	3.08(78)*	2.67(66)*	3.11(78)*	2.76(69)*	2.85(77)*	2.31(54)*
(21) Suitable building	2.00(35)	2.47(59)*	2.00(33)	2.45(59)*	2.00(46)	2.54(60)*
(22) Space for expansion	2.54(61)*	2.61(59)*	2.56(61)*	2.69(62)*	2.46(62)*	2.26(49)
(23) Property available for lease	1.84(28)	2.27(50)*	1.83(28)	2.31(52)*	1.92(31)	2.09(43)
(24) Low cost of land	2.16(41)	2.06(44)	2.11(39)	2.14(48)	2.54(54)*	1.71(26)

^{a/} See notes in Table 3.

Table 9 (cont.)

Factors	All Firms		Local Firms		Foreign Firms	
	Before	1967 &	Before	1967 &	Before	1967 &
	1967	After	1967	After	1967	After
	(n=31)	(n=64)	(n=18)	(n=29)	(n=13)	(n=35)
(E) <u>Government Influences</u>						
(25) Government guidance/persuasion	1.66(19)	1.83(33)	1.61(17)	1.76(31)	2.00(38)	2.11(43)
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.80(22)	1.65(27)	1.83(22)	1.59(24)	1.54(23)	1.91(37)
(27) Financial pressure on alternative locations (penalties, taxes)	1.80(21)	1.54(20)	1.83(22)	1.55(21)	1.54(15)	1.49(17)
(28) Infrastructure especially designed for industry	2.01(40)	2.10(41)	2.00(39)	2.14(41)	2.08(46)	1.94(37)
(29) Industrial estates/districts	1.91(34)	1.74(26)	1.89(33)	1.72(24)	2.08(38)	1.80(31)
(F) <u>Other Factors</u>						
(30) Limited local competition for products	1.90(35)	1.55(18)	2.00(39)	1.62(21)	1.23(80)	1.26(90)
(31) Presence of related industries	1.92(27)	1.94(33)	1.94(28)	1.93(34)	1.77(24)	2.00(29)
(32) Local tradition	1.17(5)	1.18(4)	1.17(6)	1.17(3)	1.23(0)	1.20(6)
(33) Attractive living environment for managers/administrative staff	1.67(21)	1.82(28)	1.67(22)	1.79(28)	1.69(15)	1.91(31)
(34) Personal or family reasons of owners/managers	1.53(11)	1.52(20)	1.56(11)	1.62(24)	1.38(7)	1.11(3)
(G) <u>Future Government Policy Measures</u>						
(35) Government guidance/persuasion	1.93(30)	1.91(33)	1.89(28)	1.93(34)	2.23(46)	1.80(29)
(36) Government bans	2.59(57)*	2.34(51)*	2.56(56)*	2.34(55)*	2.85(69)*	2.31(49)
(37) Government regulations (e.g. pollution)	2.22(46)	1.83(29)	2.17(44)	1.79(28)	2.62(54)*	2.00(34)
(38) Financial pressures (penalties, taxes)	2.07(34)	1.91(23)	2.06(33)	1.90(21)	2.15(38)	1.94(31)
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	2.06(36)	1.99(32)	2.00(33)	1.97(31)	2.46(54)*	2.11(37)
(40) Improvements to infrastructure	2.12(37)	1.89(31)	2.06(33)	1.90(31)	2.54(62)*	1.89(31)
(41) Establishment of industrial estates/districts	1.79(21)	1.55(14)	1.72(17)	1.48(10)	2.23(54)*	1.83(31)

Table 10
Reasons for Choice of Location: Local and Foreign Firms by Location of Firms, 1985^{a/}

Factors	All Firms		Local Firms		Foreign Firms	
	Metro	Outside	Metro	Outside	Metro	Outside
	Manila (n=82)	MM (n=18)	Manila (n=39)	MM (n=11)	Manila (n=43)	MM (n=7)
(A) Labor Supply						
(1) Plentiful/cheap labor	1.76(28)	2.08(42)	1.82(31)	2.09(45)	1.49(16)	2.00(14)
(2) Labor with required skills	2.09(37)	1.92(27)	2.10(38)	1.91(27)	2.02(33)	2.00(29)
(B) Accessibility						
(3) Close to major suppliers	2.02(35)	1.92(29)	2.00(33)	1.91(27)	2.09(42)	2.00(43)
(4) Close to major customers	2.77(68)*	1.87(37)	2.79(69)*	1.82(36)	2.65(65)*	2.29(43)
(5) Close to airport	1.64(21)	1.36(18)	1.62(21)	1.36(18)	1.74(26)	1.29(14)
(6) Close to maritime port	1.86(25)	2.11(45)	1.90(26)	2.09(45)	1.70(23)	2.29(43)
(7) Easy road access	2.77(65)*	2.08(37)	2.82(67)*	2.09(36)	2.51(51)*	2.00(43)
(8) Easy rail access	1.21(5)	1.24(8)	1.21(5)	1.27(18)	1.21(7)	1.00(0)
(C) Urban/Public Services						
(9) Quality of local basic schools	1.27(7)	1.44(10)	1.26(8)	1.45(9)	1.33(5)	1.29(14)
(10) Locally available technical training	1.75(22)	1.53(10)	1.77(23)	1.55(9)	1.65(16)	1.43(14)
(11) Technical/maintenance services	1.84(26)	1.76(24)	1.82(26)	1.83(27)	1.91(30)	1.29(0)
(12) Consulting, computing, accounting	1.84(27)	1.89(24)	1.85(28)	2.00(27)	1.81(23)	1.00(0)
(13) Employment agencies	1.22(6)	1.32(8)	1.18(5)	1.36(9)	1.40(12)	1.00(0)
(14) Reliable electric power	2.88(66)*	2.32(56)*	2.85(64)*	2.27(55)*	3.05(73)*	2.71(71)*
(15) Public water supply	2.22(39)	2.32(52)*	2.21(38)	2.36(55)*	2.30(42)	2.00(29)
(16) Disposal of waste	1.86(27)	2.13(52)*	1.85(26)	2.18(55)*	1.91(35)	1.71(29)
(17) Public transportation to plant site	2.46(48)	1.89(34)	2.49(49)	1.91(36)	2.33(47)	1.71(14)
(18) Telephone/telex services	2.56(69)*	2.13(42)	2.85(67)*	2.18(45)	2.93(81)*	1.71(14)
(19) Health facilities	1.90(29)	1.86(32)	1.87(28)	1.91(36)	2.02(35)	1.43(0)
(D) Site						
(20) Suitable plot of land	2.74(67)*	3.08(82)*	2.82(69)*	3.09(82)*	2.40(58)*	3.00(86)*
(21) Suitable building	2.42(54)*	2.00(40)	2.38(51)*	2.09(45)	2.60(67)*	1.29(0)
(22) Space for expansion	2.65(60)*	2.45(63)*	2.72(62)*	2.45(64)*	2.33(53)*	2.43(57)*
(23) Property available for lease	2.07(41)	2.45(55)*	2.08(41)	2.45(55)*	2.02(40)	2.43(57)*
(24) Low cost of land	2.25(49)	1.71(31)	2.33(54)*	1.64(27)	1.88(28)	2.29(57)*

a/ See notes in Table 3.

Table 10 (cont.)

Factors	All Firms		Local Firms		Foreign Firms	
	Metro	Outside	Metro	Outside	Metro	Outside
	Manila (n=82)	MM (n=18)	Manila (n=39)	MM (n=11)	Manila (n=43)	MM (n=7)
(E) <u>Government Influences</u>						
(25) Government guidance/persuasion	1.75(26)	1.97(39)	1.69(23)	1.91(36)	2.00(37)	2.43(57)*
(26) Financial incentives (subsidies, loans, grants, tax rebates)	1.68(24)	1.92(29)	1.67(23)	1.91(27)	1.77(30)	2.00(43)
(27) Financial pressure on alternative locations (penalties, taxes)	1.59(21)	2.00(32)	1.59(21)	2.09(36)	1.58(21)	1.29(0)
(28) Infrastructure especially designed for industry	2.05(40)	2.18(45)	2.08(41)	2.18(45)	1.91(37)	2.14(43)
(29) Industrial estates/districts	1.86(33)	1.71(21)	1.87(33)	1.64(18)	1.79(30)	2.29(43)
(F) <u>Other Factors</u>						
(30) Limited local competition for products	1.67(23)	1.89(33)	1.74(26)	2.00(36)	1.33(12)	1.00(0)
(31) Presence of related industries	1.97(29)	1.84(32)	1.95(28)	1.91(36)	2.05(30)	1.29(0)
(32) Local tradition	1.15(3)	1.32(10)	1.15(3)	1.27(9)	1.12(2)	1.71(14)
(33) Attractive living environment for managers/administrative staff	1.71(22)	1.94(34)	1.67(21)	2.00(36)	1.91(28)	1.43(14)
(34) Personal or family reasons of owners/managers	1.45(13)	1.96(32)	1.51(15)	2.09(36)	1.19(5)	1.14(0)
(G) <u>Future Government Policy Measures</u>						
(35) Government guidance/persuasion	1.94(35)	1.95(29)	1.95(36)	1.91(27)	1.88(33)	2.29(43)
(36) Government bans	2.39(52)*	2.50(63)*	2.38(51)*	2.45(64)*	2.40(53)*	2.86(57)*
(37) Government regulations (e.g. pollution)	1.99(35)	1.94(35)	1.95(33)	1.91(36)	2.19(42)	2.14(29)
(38) Financial pressures (penalties, taxes)	1.95(26)	2.00(31)	1.97(26)	1.91(27)	1.84(28)	2.71(57)*
(39) Financial incentives (subsidies, tax rebates, loans, etc.)	2.00(34)	2.08(31)	1.97(33)	2.00(27)	2.14(40)	2.71(57)*
(40) Improvements to infrastructure	1.97(35)	1.98(27)	1.95(33)	2.00(27)	2.09(42)	1.86(29)
(41) Establishment of industrial estates/districts	1.67(19)	1.58(11)	1.62(16)	1.55(9)	1.93(37)	1.86(29)