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CENTER DISCUSSION PAPER NO. 182

COLOMBIAN IMPORTS AND IMPORT CONTROLS IN 1970/71:

SOME QUANTIFIABLE FEATURES\*

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#### Chapter VI

Colombian Imports and Import Controls in 1970/71: Some Quantifiable Features

A description of the procedures followed by Colombian authorities in granting or rejecting import requests produces an impression of overwhelming complexity, particularly to market-oriented economists. It seems hard to understand how a handful of authorities can cope with the estimated 150,000 import requests per year, and even harder to see how such requests can be processed in a sensible and systematic manner.

This essay will seek some light on this question by analyzing 1970 registered imports according to size of importers. It will be seen that familiarity with about 500 major private importers allows import control authorities to be reasonably sure about the destination of half of registered imports. It is not far fetched to suppose that those 500 major importers make up the core of the Colombian socioeconomic system, and that they and INCOMEX authorities know each other fairly well. With half of imports going to 500 companies, and about 20 per cent going to the public sector, only 30 per cent has to be distributed in retail fashion.

This chapter will also attempt a quantification of some aspects of INCOMEX behavior in accepting or rejecting import requests, as revealed in its handling of a sample of such requests during 1971.

Basic data for the type of exercise tackled in this essay are not easily available. The data submitted to INCOMEX with import requests are rich, and potentially constitute a running census of at least the major Colombian industrial and commercial enterprises. It is a pity that such an opportunity for an up-to-date and continuous flow of information is largely wasted.

"Resolution 15" forms are thrown out shortly after INCOMEX decides on the

import request, and only summary information on import registrations and requests appears to be maintained. Putting all of the data contained in Resolution 15 forms into a properly programed computer would provide INCOMEX with a systematic and accessible source of information regarding importers as well as other valuable data for decision-making, and would give the country a clearer idea of its economic structure. Coordination of import controls with tax enforcement and price controls would also become a more practical possibility. Hopefully, this essay will illustrate how rich data available to INCOMEX are.

During the second semester of 1971, INCOMEX officials kindly allowed the examination of about 2,500 license requests under the commercial and industrial categories. The sample includes cases of several requests from the same company. The requests had been either accepted or rejected, totally or partially, by the Junta de Importaciones of INCOMEX. A smaller sample (199) was also taken of requests under the official category. In choosing the sample of requests, no refined sampling method was followed; one basically tried to get information on those requests which were around at the time, and were made available for examination. As during the second semester of 1971 relatively few applications were being rejected, a special effort was made to obtain data on rejected requests. There was also a bias in favor of obtaining requests from as many different companies as possible. There does not appear to exist any particular seasonal pattern to license requests, except a decline in numbers in December and January, so the exclusive use of second semester information should not introduce any particular bias.

From the license requests two types of information were obtained:

a census-like coverage of all imports, exports, etc., for each company

(not plant) in 1970, and data on the specific import request for the second

semester of 1971 (amount, rejection or acceptance, reasons for rejections, etc.). The former type of information will be discussed first.

#### Major Colombian importers in 1970

Following INCOMEX categories, major private importers can be subdivided into an industrial and a commercial group. While "Resolution 15" forms give no information on the ownership of the company making the import request, a somewhat rough-and-ready separation was also made according to presumed nationality.  $\frac{1}{2}$ 

In general, it was presumed that a company was Colombian-owned unless there was firm evidence to the contrary. Only companies for which foreign ownership was 50 per cent or more were placed under the category of foreign-owned; all others were regarded as national. There were, however, relatively few joint-ventures in the sample. Note that the definition of foreign-owned companies used here is considerably weaker than that used in the Andean code on foreign investment. Lack of reliable and up-to-date data was the major reason for choosing our weaker definition.

Table VI-1 presents a summary of major industrial importers, classified according to their registered imports during 1970, and as to whether the companies were national or foreign owned. Data on the number of employees, minor exports, and income and sales taxes paid by these companies are also presented. Three subdivisions according to size are made: companies which imported more than one million dollars in 1970; those importing between half a million and one million; and those whose imports ranged between \$100,000 and half a million.

It is not easy to interpret the information presented in Table VI-1.

Neither comparable cross-section nor time-series data are available for

Chenery-like tests of "normality." Even if they were, further analysis involving variables such as industrial structure would be required before establishing whether the degree of concentration shown is more or less than could be expected if import controls did not exist. Nevertheless, Table VI-1 shows a degree of concentration which helps explain the relatively smooth operation of the Colombian import control system. Thus, only 80 industrial companies accounted for 30 per cent of all 1970 registered imports. The same 80 companies accounted for 21.2 per cent of all income and sales taxes paid during 1970 in Colombia, and employed 19.2 per cent of all those engaged in manufacturing in the same year. $\frac{3}{}$  It should be remembered that, given the way the data was obtained, some large importers may not have been taken into account. Thus, the estimates presented in Table VI-1 (and those which follow) for import concentration, as well as for degree of foreign control, should be taken as minimum ones. A further reason for taking these estimates as minimums is that there could be cases of several companies being under the control of a single conglomerate or family group.

Table VI-2 presents data for the commercial category, while Table VI-3 combines information from the previous two tables. There were in 1970 at least 100 companies importing more than one million dollars (with an average of \$3.1 million each), accounting for 34 per cent of all registered imports. Fifty-five foreign owned companies in this group, by themselves represented 20 per cent of all Colombian registered imports in 1970.

The degree of concentration falls off rapidly once companies with imports of less than one million dollars are considered. Thus, the 88 companies, foreign and national, industrial and commercial, which were found to import between half and one million dollars, accounted for only 6 per cent of all imports in 1970, while the 312 companies importing between

\$100,000 and half a million dollars represented an additional 9 per cent of the import bill. In round numbers, one can say that 500 companies handled at least half of Colombian imports. The same companies accounted for 37 per cent of all income and sales tax payments, and 32 per cent of those employed in "modern" commerce and manufacturing.

Given the economic importance of those firms importing more than one million dollars, their names and presumed major activity is given in Annex VI-A. This annex and other data (not shown) indicate the heavy concentration of import-intensive foreign investors in chemicals, pharmaceuticals and metal-mechanic industries, which are typically associated with fairly recent import substitution. National companies are more spread out among different activities.

Table VI-1 indicates that there were in 1970/71 at least 80 industrial companies importing more than one million dollars a year, employing each an average of 923 employees. An additional 63 companies, importing between half and one million dollars, had each an average of 496 employees. Finally, 177 industrial companies in the third category, had an average of 310 employees each. A comparison of these figures with data reported by the Colombian Ministry of Labor and Social Security suggests that the sample succeeded in registering at least the largest Colombian firms, on the assumption that most of the largest firms according to employment are also the largest importers. Thus, the indicated source reports the following number of firms in mining and manufacturing, for December 1970:

Size category	Number of firms
More than 500 employees	84
More than 250 and less than 501 employees	143
More than 100 and less than 251 employees	487

Direct comparison of INCOMEX data with those from the Industrial Census is not possible, as the latter reports on plants, not companies.

Table VI-1 also shows that one can find major industrial exporters among the major importers. It has been estimated  $\frac{5}{}$  that registered Colombian manufactured exports(excluding items such as sugar) reached \$76.7 Million during 1970. The 80 largest importers would thus account for 49 per cent of those exports. The largest 314 industrial importers (excluding several sugar mills) would account for 77 per cent of manufactured exports.

In fact, a closer look at the list of major importers permits a more accurate measure of industrial export concentration. The largest 14 national industrial exporters in the sample (excluding sugar mills) had registered industrial exports of \$26.89 Million in 1970, while the 10 largest foreign-owned exporting industrial companies had \$20.41 Million of exports in 1970. Thus, 24 industrial companies accounted for 62 per cent of all (non-sugar) industrial exports. Foreign-owned companies, by themselves, represented at least 27 per cent of all Colombian industrial exports in 1970.

Some important characteristics of major industrial importers/exporters are highlighted in Table VI-4. Average wages decline with company size as measured by annual imports, but with foreign-owned companies showing higher wages for each size category than national firms. Foreign companies, however, also for each size category, have higher imports per employee than national companies, with imports per employee declining with size for both groups. The 49 foreign-owned industrial companies importing more than one million dollars each show an astounding level of \$6,557 worth of imports per employee, and although their exports per employee are higher than those of

national firms in the same import size category, their "trade deficit" remains far superior to that of any other category. Table VI-4 also shows that, as a rule, large foreign-owned companies are more concentrated in Bogotá than large national firms.

The last two rows of Table VI-4 refer to the 24 major exporters, 10 foreign-owned and 14 national. Perhaps the most striking facts about this group are: (a) the persistence of a "trade deficit," and (b) the large average size of these companies. Neither fact fits well with the typical image of firms producing labor-intensive manufactured exports, and hints that many of the same companies which in the past benefitted (and which still do) from import-intensive import-substitution, now benefit from the newer export-promotion policies. It is nevertheless encouraging that these companies are less concentrated in Bogotá than other groups shown in the same table.

Income and sales taxes paid per employee, as wages and imports per employee, also decline with company size; in contrast with the cases of wages and imports per employee, the national companies show higher tax payments per employee in the two smallest size categories. In spite of their large average size, however, the 24 large exporters show relative small tax payments, a fact largely explained by Colombian export subsidy schemes discussed elsewhere.

In summary, what emerges from this review of major 1970 private importers is a picture of substantial concentration. It is not possible to say from the reviewed data whether such concentration is higher or lower than in other countries, nor whether or not it is encouraged or discouraged by the import control system. More on this below. But the data help explain why the management of import controls is not as impossible

a task as it appears at first sight. Some 500 private companies act as major actors not only in the import field. but also as major exporters and tax collectors  $\frac{6}{}$  for the government.

Major importers under the official category have of course a different nature than those listed under industry and commerce. In our sample of official requests, the following characteristics were isolated:

	Number of institutions	1970 Registered imports (Million US\$)
Registered 1970 imports of more than one		
million dollars	, 19	\$ 130.83
Registered 1970 imports of between half		
and one million dollars	10	7.17
Registered 1970 imports of between \$100,000		
and half a million dollars	<u>16</u>	4.11
Total major official importers	45	\$ 142.11

The largest official importers include institutions such as municipal and national public utilities (electricity, telephones, etc.), public agencies marketing basic foodstuffs (IDEMA) or rural inputs (Caja Agraria), the Ministries of Public Works and Defense, etc.

Combining the largest industrial, commercial and official importers, one can see that during 1970 119 institutions accounted for \$441 Million in registered imports, or 48 per cent of the total import bill.

# Revealed INCOMEX criteria for accepting or rejecting

#### import license requests

The analysis of characteristics of license requests approved or rejected (partly or totally) by INCOMEX during the second semester of 1971

can shed some light on the question of biases created by the import control system, as compared with a regime without quantitative restrictions.

Table VI-5 presents a tabulation of the reasons given by INCOMEX for rejecting import requests in the sample; more than one reason is frequently given for rejection. The potential importer is given a mimeographed sheet in which the listed reasons for rejection are presented, with those applying to his request bearing a check mark.

It may be seen, first of all, that a good share of rejections are only partial, particularly under the industry category. More serious rejections appear to be based on protectionist grounds, as reflected in reasons #1, 2, and, very likely, in 8 and 9. For the commercial category these four reasons add up to 46 per cent of the reasons for rejection, while for industry the corresponding figure is 40 per cent. The commercial requests also seem to be particularly scrutinized for "excessive" imports (reason #11) and tax evasion (reason #13). Industrial requests are watched for overinvoicing (reason #4); here is an area where INCOMEX claims to have saved the country several million dollars, by keeping foreign owned companies, especially those in the pharmaceutical field, from remitting excessive profits to their headquarters abroad via overinvoicing. Such claims appear to be substantially correct. 7/

The average characteristics of approved and rejected import requests in the industrial and commercial categories are laid out in Table VI-6. The thinness of the sample and the particular nature of official requests made it advisable to leave them out. It may be seen from this Table that our sample picked up a much higher average of rejected requests than seems to have been typical during the second semester of 1971. Thus, 42 per cent of the industrial requests, and 62 per cent of commercial requests appear as rejected, at a time when it was said that only about 10 per cent

of all requests were being turned down. (In the smaller sample of official requests, only 30 per cent were rejected.) The sample is probably also biased in the direction of overrepresenting larger firms and larger import requests.

The large standard deviations shown in Table VI-6 warn of the difficulty in generalizing with confidence about the characteristics of accepted and rejected requests. Note also that the listed characteristics omit, due to lack of data, very important features of the import requests: whether or not, for example, the requested import was or was not competitive with some local production, and also whether the requested imports originated in countries having preferential trade agreements with Colombia.

In spite of these limitations, an attempt has been made to establish what characteristics of the import requests, and of the company making them, made INCOMEX more likely to accept such petitions. Naturally, as some important independent variables will be left out of the analysis, we cannot expect to obtain good fits. A less ambitious goal will be to isolate characteristics which significantly influence INCOMEX in the decision to accept or reject each application, ceteris paribus.

The dependent variable, to be statistically explained, is somewhat unusual, as it only takes values of zero (for applications rejected totally or partly) and one (for approved requests). Under these dichotomous circumstances, multivariate probit analysis is known to be a superior technique to the usual least squares multiple regressions. In what follows, results from both types of analysis will be presented, but discussion will focus on the probit results.

Tables VI-7 and VI-8 present the best results obtained, "best" being determined by the number of coefficients which had "interesting" values relative

to their standard errors. Several other independent variables (not shown) were tried, unsuccessfully.

Import requests under the non-reimbursable category, i.e., which do not involve an immediate claim on foreign exchange resources, clearly have a much better chance of being approved than those under the reimbursable category, both under the industrial and commercial classifications. Smaller import requests also have a clearly better chance of being approved, for both the industrial and commercial classifications, than larger requests. A breakdown of requests into ten groups according to the size of requests shows that this relationship is quite smooth, with the percentage of acceptances declining steadily from 77 per cent for the smallest to 36 per cent for the largest, in the case of reimbursable industrial requests. Similar results are obtained for other groups, although commercials show a steeper decline in the acceptance rate. These facts indicate that INCOMEX authorities, besides their protectionist guidelines, still operated during the second semester of 1971 with an eye to rationing foreign exchange.

Do large firms have, <u>ceteris paribus</u>, a better chance of obtaining desired licenses than smaller firms? Size was measured in two ways: number of employees, and value of 1970 import registrations. Both measures gave substantially the same results; one is shown for industrial requests, the other appears in Table VI-8. The hypothesis that chances for approval <u>increase steadily with size</u>, <u>ceteris paribus</u>, receives little support in the industrial category, but stronger support in the commercial case. We will return to this issue below.

Company size is of course highly correlated with variables such as taxes paid, exports, etc. Therefore, some other independent variables were defined relative to the variable used to measure size. Taxes paid, relative

Table VI-11

Industrial: Approvals and Rejections according to employment size and reimbursable or non-reimbursable categories

Number of Employees of	Reimbursable		Non-reimbursable		Grand	Non- reimbursables	
Firm Making the Request	Total Requests	Percentage Approved	Total Requests	Percentage Approved	Total Requests	Percentage Approved	as Percentage of Total
Less than 55	223	56.1 %	24	91.7%	247	59 <b>.5</b> %	9.7%
55-122	236	53.0	20	90.0	256	55.9	7.8
123-245	229	54.6	32	96.9	261	59.8	12.3
246-466	230	45.2	25	92.0	255	49.8	9.8
More than 466	219	60.3	4,5	97.8	264	66.7	17.0
Total	1,137	<u>53.7</u> %	146	94.5%	1,283	58.4%	11.4%

Sources and methods:

See text of the chapter. Total licenses considered in this and the next table differ slightly from those given earlier, due to incomplete data in some requests.

to either imports or employees, significantly increased chances for approval in the case of industrial license requests; somewhat surprisingly, the evidence for such a hypothesis is much weaker in the commercial group. Also surprisingly, a significant negative link appears for industrial requests between minor exports, relative to imports, and chances of approval. This result goes against the usual INCOMEX claims that industrial exporters are favored in the granting of import licenses. However, as will be seen below, a closer look at the data casts doubts about the robustness of this revealed negative link.

The complaint from firms outside Bogotá and Medellín that they face bigger than average hurdles in obtaining licenses receives some support in both Tables VI-7 and VI-8. "Good employers," i.e., those paying higher average wages, seem to do marginally better in obtaining licenses in the industrial category.

The hypotheses dealing with the relationships between chances of approval vs. size, geographical location and minor exports deserve a closer look, to be taken in the next section, which will focus mainly on the industrial category and will also examine interrelationships among independent variables.

Among the independent variables performing very poorly (and not shown in Tables VI-7 and VI-8) was a dummy for foreign ownership. Thus, the INCOMEX claim that there is no discrimination in their handling of requests from foreign owned and national companies, ceteris paribus, is supported by our data.

In the sample of 199 official requests, not included in the previous analysis, there was an overall acceptance rate of 70.2 per cent. Among

non-reimbursable requests, the acceptance rate was 88.5 per cent, while the corresponding rate was 63.7 per cent for reimbursable requests. Of all official requests, 26.3 per cent were submitted under the non-reimbursable category. These figures reflect substantial external financing of public sector investment projects.

#### Company size, regions, exports and imports: a closer look

Tables VI-9 and VI-10 present a summary of the information contained in our sample for industrial companies, according to their employment and minor exports, respectively. One striking fact emerges from both tables: the percentage of requests falling under the non-reimbursable category is higher for the largest companies (and exporters). It was seen earlier that requests under the non-reimbursable category have a much higher chance of being accepted than those under the reimbursable classification. In other words, this fact suggests that <u>unadjusted</u> for the non-reimbursable/reimbursable variable, the largest companies and exporters have a better chance of obtaining approvals, thanks to their better access to non-reimbursable licenses, associated with links to foreign credits or investments. 9/

The relationship between average industrial wage and company size shown in Table VI-9 is not a smoothly increasing one. In fact, the simple correlation coefficient between the logarithm of the average industrial wage and that for the number of employees in the company is only +0.07. Corresponding correlation coefficients between the logarithm of wages with the logarithm of 1970 imports per employee (+0.39), and just the logarithm of 1970 imports (+0.33), are more significant. The correlation coefficient between the logarithm of the average wage and the dummy for foreign ownership is -0.39, confirming the tendency noted earlier for foreign-owned companies to pay higher average wages.  $\frac{10}{}$ 

Neither Table VI-10 nor partial correlation coefficients yield smooth relationships between size of minor exports and average industrial wages. Table VI-10 shows that, as a group, exporters pay <a href="https://www.night.n

Before examining more systematically the interrelationships among independent variables, Tables VI-11 and VI-12 explore the relationship between company size and share of requests approved, separating requests into the key reimbursable and non-reimbursable groups. One table measures size according to employment, while the other uses registered imports in 1970 for that purpose. Looking just at the reimbursable category, it may be seen that the largest companies have in both tables the highest percentages of approved requests. Interestingly, the next highest percentage of approvals in both tables are those for the <a href="mailtest">smallest</a> companies. The advantage of the very largest companies in percentage of approvals goes up, of course, when both reimbursable and non-reimbursable requests are lumped together.

Tables VI-13 and VI-14 bring in the geographical distinction found to be significant earlier, combining it with minor exports and size, as measured by employment (and experimenting with different ranges for the latter). The superior record of Bogotá/Medellín over the rest of the country in percentage of requests approved is clearest in companies within the 200-500 employees range, and among significant exporters. Indeed, the largest exporters from Bogotá and Medellín have the largest percentage of approvals in Table VI-14, while the largest employers in Bogotá and Medellín have the most successful performance of those shown in Table VI-13. In this

latter table, the runner-up in percentage of approvals is the group made up by the smallest companies outside Bogotá and Medellín.

In the total number of import requests from Bogotá and Medellín under the industrial category, one finds a higher share of requests in the non-reimbursable group than the corresponding share for the rest of the country (12.2 per cent vs. 8.5 per cent). The same is true for the commercial category (10.4 per cent vs. 5.4 per cent). But even if one looks just at the reimbursable requests, the percentage of approvals is higher for Bogotá and Medellín, for both industrial and commercial categories.

Of the total requests from foreign owned industrial companies, 68.4 per cent came from those located in Bogotá and Medellín, while the corresponding percentage for national firms was 76.2. The share of non-reimbursable requests in total requests from foreign owned industrial companies was almost identical to the corresponding share in the requests of national firms. Regardless of how requests are sliced, the percentage of approvals for requests from foreign owned industrial companies come out very close to those from national firms, although usually slightly lower.

Finally, Tables VI-15 and VI-16 show the results of least square multiple regressions trying to explain per employee 1970 imports, minor exports, wages and taxes of all the companies in the sample, whether or not their 1971 requests were approved (and including a given company as many times as it had requests). The 1970 "import functions" for both the industrial and the commercial categories confirm the positive nexus existing among high per employee imports, taxes, wages and minor exports. As argued by some INCOMEX officials, one can view the authorities channelling the still scarce imports, ceteris paribus, toward companies which yield the government high returns in taxes. It is also argued that such companies "deserve" import

permits, as they have shown themselves more efficient (profitable) than the rest, as revealed by their high taxes and wages per employee. The chain of causation, of course, is unclear, and is likely to run both ways, in a manner which is difficult to untangle either statistically or a priori.

Interestingly, once the imports-taxes-wages-exports nexus is taken into account, size by itself (as measured by the number of employees), shows a negative relationship with per employee 1970 imports, for both the industrial and commercial categories. Foreign companies still show a clear tendency to be more import-intensive than national ones. The regional dummy shows industrial companies in Bogotá or Medellín to be more import-intensive than others, but the opposite in the case of (the less important) commercial companies.

The "minor export functions" yielded poorer results (those for commercial companies are not shown). High industrial exporters, however, show significantly higher wages and per employee imports than others, although, unsurprisingly given export tax incentives, not higher per employee taxes. National companies and those outside Bogotá and Medellín show a tendency for higher per employee minor exports.

Besides supporting previous remarks, the regressions for taxes per employee show large industrial companies, and less significantly foreign companies and those in Bogotá and Medellín, tending to pay higher taxes, ceteris paribus. Commercial companies, however, show the opposite effect for scale and location, but a clearer tendency for foreign companies to pay higher per employee taxes.

Higher wages (unadjusted for skills) are paid by foreign owned companies and those in Bogotá or Medellín. Note that for industrial wages size of firm (for the sample range) is insignificant.

#### Conclusions

There is substantial concentration in the distribution of Colombian imports, a concentration which makes the control system easier to manage. The control system, in turn, appears to buttress such concentration, as it gives the largest companies, particularly those located in Bogotá or Medellín, a better chance of obtaining licenses. This conclusion is strengthened by the fact that it was obtained even though it could not take into account the "discouraged firm" effect. In other words, data on actual import requests were generated by a group of firms which had some hope of receiving a license; this group of companies has an average size which is larger than that for all industrial firms. Discouraged firms which do not bother to apply are in all likelihood small ones.

Nevertheless, the bias toward import concentration arising solely from preferential treatment of the largest firms, and those in Bogotá and Medellín, ceteris paribus, does not appear quantitatively very strong. Access to foreign credits and investments, allowing imports without the immediate use of foreign exchange, seems a more powerful force in biasing the operation of import controls in favor of the largest (and best connected) companies. One may speculate that much of this concentrating influence would survive a possible elimination of import controls.

This essay has also called attention to the fact that minor industrial exports are even more concentrated in large firms than imports. Given the general tendency of large firms, whatever their industrial activity, to use more capital-intensive methods than smaller ones, some skepticism regarding the magnitude of employment and income-distributional effects of minor export expansion is warranted, at least for the medium-run. This, or course, does not mean that the encouragement of minor exports is a mistaken policy, nor that,

on balance, it may generate somewhat more modern-sector employment than a comparable amount of import-substitution. It does suggest, however, that for a given overall growth rate, the employment difference may only be marginally superior, so long as the 1970 industrial and export structure is maintained.

### Footnotes to Chapter VI

- \* This chapter owes much to Jose Francisco Escandon, and the INCOMEX authorities who allowed him to gather information on a sample of import requests. Very valuable help was also provided by Lillian Barros, Stephen Kadish, Christina Lanfer and Van Whiting.
- In establishing company ownership, heavy reliance was placed on knowledgeable Colombians, and on the following: (a) United States Department of Commerce, Bureau of International Commerce, American Firms, Subsidiaries and Affiliates—Colombia (May, 1970), Washington D.C., (b) The Fortune Directory; The 300 largest industrials outside the U.S., in Fortune, August 1972, pp. 152-61; and (c) American Encyclopedia of International Information, Volume 2, Directory of American Firms Operating in Foreign Countries, 7th Edition, by Juvenal L. Angel, 1969.
- 2/ In several cases, a given company in the sample had import requests listed by INCOMEX under both the industrial and commercial categories. In all such cases, for the purposes of the Tables shown in this chapter, the company was placed only under the industrial category. The same procedure was followed in the few cases for which a company was listed under both the industrial and the official categories (e.g., Acerias Paz del Rio).
- Total income and sales taxes paid during 1970 amounted to 7,220 Million pesos, as reported in the Revista Jel Banco de la República. Total national tax revenues were 12,591 Million pesos in the same year. The number of workers and employees engaged in manufacturing and registered with the Colombian Social Security Institute was 384.6 thousand in December 1970. See Gabriel Turbay M., "Una Política Industrial Para Estimular Las Exportaciones y Fomentar el Empleo," Mimeographed, FEDESARROLLO, May 1972, Table 9. The equivalent

amount for the commercial sector was 203.0 thousand. For both commerce and manufacturing, the employment figures are limited mostly to their "modern" segments, leaving out the "informal sector."

- 4/ See Gabriel Turbay M., op. cit., Table 9.
- 5/ See FEDESARROLLO, Coyuntura Económica, Volume II, No. 2, July 1972, Table X.2, p. 87.
- 6/ Note that only income and sales tax data have been discussed. These 500 companies must also pay a large share of total import duties.
- See Constantino Vaitsos, "Transfer of resources and preservation of monopoly rents," Harvard Development Advisory Service, Report No. 168, 1970.
- See James Tobin, "The Application of Multivariate Probit Analysis to Economic Survey Data," Cowles Foundation Discussion Paper No. 1, December 1, 1955.

  The condition that the dependent variable must always have a value within the interval zero-one cannot be maintained if its expected value is assumed to be a linear combination of the independent variables, as in multiple regressions.

  "Moreover, the multiple regression model assumes, inappropriately for this case, that the distribution of the dependent variable around its expected value is independent of the level of that expected value." (Tobin, p. 2).
- <sup>9/</sup> The average value of import requests under the industrial non-reimbursable category, however, was only US\$ 8,200, compared to US\$ 12,174 for those in the reimbursable category. In the commercial group the corresponding figures were US\$ 2,285 and US\$ 5,276, respectively.

10/ The following partial correlation coefficients, between the dummy for foreign ownership (0=foreign; 1=national) are also of interest: With logarithm of 1970 imports: -0.52 With logarithm of employees per 1970 imports: +0.46 With logarithm of income and sales taxes per employee: -0.31

Table VI-1

Major Importers in Colombia, 1970; Industrial

Number of Companies	Classification	Registered Imports, 1970 (Million US\$)	Number of Employees (Thousand)	Minor Exports, 1970 (Million US\$)	Income and Sales taxes paid in 1970 (Million Pesos)
49	Foreign-owned; industrial; imports of more than one million dollars	\$ 167.22	25.50	\$ 20.02	563.02
31	National; industrial; imports of more than one million dollars	107.49	48.34	18.98	966.33
80	Industrial; imports of more than one million dollars	\$ 274.71	73.84	\$ 39.00	1,529.40
27	Foreign-owned; industrial; imports of between half and one million dollars	19.76	12.25	3.58	127.92
36	National; industrial; imports of between half and one million dollars	23.59	19.022/	7.231/	221.99
63	Industrial; imports of between half and one million dollars	\$ 43.35	31.27	\$ 10.81	349.91

Table VI-1 cont'd

Major Importers in Colombia, 1970; Industrial

Number of Companies	Classification	Registered Imports, 1970 (Million US\$)	Number of Employees (Thousand)	Minor Exports, 1970 (Million US\$)	Income and Sales taxes paid in 1970 (Million Pesos)
58	Foreign owned; industrial; imports of between \$100,000 and half million dollars	15.43	12.73	\$ 3.19	<b>127.</b> 58
119	National; industrial; imports of between \$100,000 and half million dollars	27.99	42.11	45.90 <sup>1</sup> /	456.08
177	Industrial; imports of between \$100,000 and half million dollars	\$ 43.42	54.84 ———	\$ 49.09	583.86
320	Grand Total	\$ 361.48	159.95	\$ 98.90	2,463.17
134	Foreign owned	202.41	50.48	26.79	818.72
186	National	159.07	109.47	72.11	1,644.45

Sources and method: See text of the chapter for explanation.

 $<sup>\</sup>frac{1}{2}$  Includes sugar exports. A total of six sugar companies included in this table exported \$ 40.0 Million.

 $<sup>\</sup>frac{2}{1}$  Refers to only 35 companies.

Table VI-2

Major Importers in Colombia, 1970; Commercial

Number of Companies	Classification	Registered Imports, 1970 (Million US\$)	Number of Employees (Thousand)	Minor Exports 1970 (Million US\$)	Income and Sales taxe paid in 1970 (Million Pesos)
6	Foreign owned; commercial; imports of more than one million dollars	\$ 14.06	0.88	\$ 0.67	55.78
14	National; commercial; imports of more than one million dollars	25.38	9.522/	1.05	16.43
20	Commercial; imports of more than one million dollars	\$ 39.44	10.40	\$ 1.72	72.21
5	Foreign owned; commercial; imports of between half and one million dollars	4.07	0.83	0	22.69
20	National; commercial; imports of between half and one million dollars	13.33	2.02	0.78	25.81
25	Commercial; imports of between half and one million dollars	\$ 17.40	2.85	\$ 0.78	48.50
13	Foreign owned; commercial; imports of between \$100,000 and half million dollars	3.30	2.01	0.15	15.64
122	National; commercial; imports of between \$100,000 and half million dollars	25.53	<b>13.</b> 04	17.17.17.	56.50
135	Commercial; imports of between \$100,000 and half million dollars	s \$ 28.23	1°.05	\$ 17.32	72.14

Table VI-2 cont'd

# Major Importers in Colombia, 1970; Commercial

Number of Companies	Classification	Registered Imports 1970 (Million US\$)	Number of Employees (Thousand)	Minor Exports, 1970 (Million US\$)	Income and Sales taxes paid in 1970 (Million Pesos)
180	Grand Total	\$ 85.67	28.30	\$ 19.82	192.85
24	Foreign owned	21.43	3.72	0.82	94.11
156	National	64.24	24.58	19.00	98.74

Sources and method: See text of the chapter for explanation.

 $<sup>\</sup>underline{1}/$  Includes exports of association of banana growers.

 $<sup>\</sup>frac{2}{}$  Refers to only 13 companies

<u>Table VI-3</u>

Major Importers in Colombia, 1970; By Size and Nationality

Number of Companies	Classification	Registered imports, 1970 (Million US\$)	Share in total registered imports	Share in total income and sales taxes (1970)
100	Imports of more than one million dollars; national and foreign, industrial and commercial	\$ 314.15	34.1%	22.2%
88	Imports of between half and one million dollars; national and foreign, industrial and commercial	60.75	6.6	5•5
312	Imports of between \$100,000 and half million dollars; national and foreign, industrial and commercial	72.25	7.8	9.1
AND DESCRIPTION OF THE PARTY OF		#11-15	and the state of t	<del>and the state</del>
500	Total of above	\$ 447.15	48.6%	36.8%
(158)	Foreign owned	(223.84)	(24.3)	(12.6)
(342)	National	(223.31)	(24.3)	(24.2)
	Addendum:			
	Official registered imports under the reimbursable category	\$ 145.20	15.8%	

TUDIC VI T

## Some characteristics of major industrial importers, 1970

Classification	Wages per employee (Pesos)	Imports per employee (US dollars)	of companies	Percentage of companies in Medellin	Percentage of companies in Cali	Employees per company	Exports per employee (US dollars)	Income and Sales Taxes paid per employee (Pesos)
Foreign owned; im- ports of more than one million dollars	3,731	6,557	65.3	4.1	18.4	520	785	22 <b>,</b> 077
National; imports of more than one million dollars	2,040	2,224	54.8	25.8	16.1	1,559	393	19,991
Foreign owned; im- ports of between half and one million dollars	2,810	1,613	70.4	25.9	3.7	454	292	10,442
National; imports of between half and one million dollars	1,729	1,206	14 <b>.</b> 14	25.0	16.7	544	370	11,345
Foreign owned; imports of between \$100,000 and half million dollars	2,151	1 <b>,2</b> 12	58.6	5.2	27 <b>.</b> 6	220	251	10,038
National; imports of between \$100,000 and half million dollars	1,537	665	50.4	19.3	9.2	354	1,090	10,830
Foreign owned; large industrial exporters (10 companies)	2,867	3,232	40.0	10.0	40.0	944	2,161	10,562
National; large industrial exporters (14 companies, excluding sugar mills)		1,528	35.7	21.4	14.3	1,801	1,066	9,002

Sources and method: See text of the chapter for explanation.

Table VI-5

Reasons Given by INCOMEX for Rejecting Applications for Import Licenses, and

Tabulation of Sample of Rejected Licenses (totally or in part) during the Second

# Semester of 1971

(Percentages of All Reasons given for Rejection in Each Category)

		Commerce	Industry	Official
1.	Commodity is produced within Colombia	24.5	15.9	13.3
2.	Requested item can be replaced by similar Colombian goods	5.5	3.2	<b>3.</b> 6
3.	Quantity requested is excessive	0.6	0.3	1.2
4.	Foreign price is excessive	0.6	4.8	2.4
5.	Quantity and/or value requested is excessive relative to past record	re 0.9	2.1	0
6.	Import or approval category temporarily restricted	2.5	0.8	4.8
7.	Inadequate information given to justify need for requested import, modification or addition	ed 1.3	1.4	4.8
8.	Inadequate product description (lack of catalogues, etc.)	6.1	9.0	3.6
9.	Lack of exact and detailed product specification in the request, as per existing regulations		11.5	12.0
10.	Adequate stocks of products are found domestically	0.6	0.1	0
11.	Requests for identical or similar products have been approved recently to petitioner	13.4	4.6	1.2
12.	There is shortage of foreign exchange	0.1	0	0
13.	Requested imports out of proportion with taxes paid	5 <b>.7</b>	0.8	0
14.	Tax information missing	0.2	0.4	0
15.	Data on imports provided by petitioner do nagree with those of INCOMEX	ot 0.5	0	1.2
16.	Excessive expenditures	0.2	0.1	1.2

Table VI-5 cont'd

		Commerce	Industry	Official				
17.	Data on sale prices, destined for price control agency, are lacking	0	0 .	0				
18.	Other special reasons	9.4	11.3	44.6				
19.	Percentage of request granted:	17.6	33.5	6.0				
•	20%	(0.4)	(0.3)	(0)				
	25%	(0.1)	(0.6)	(0)				
	30%	(2.4)	(0.7)	(0)				
	40%	(3.2)	(3.7)	(1.2)				
	50%	(5.1)	(16.2)	(4.8)				
	60%	(3.4)	(6.1)	(0)				
	70%	(0.2)	(0.3)	(0)				
	Unspecified	(2.8)	(5.6)	(0)				
	Total	100%	100%	100%				
Add	Addendum:							
a)	Requests for which more than one reason was given for rejection (totally or partly)	81	<b>7</b> 5	14				
ъ)	Total of reasons given for rejecting requests (totally or partly), including partial approvals	849	710	83				

Sources and Method: See text.

<u>Table VI-6</u>

<u>Average characteristics of Rejected (totally or partially) and Approved import requests;</u>

<u>Sample taken during the second semester of 1971</u>

(Standard deviations in parentheses)

	Industrial			Commercia1			
	Rejected	Approved	Pooled	Rejected	Approved	Pooled Pooled	
Number of company employees	362	518	452	173	194	181	
	(705)	(1,178)	(1,012)	(612)	(701)	(647)	
Monthly payroll (thousand pesos)	893	1,210	1,075	462	569	502	
	(1,753)	(2,421)	(2,174)	(1,323)	(2,801)	(2,021)	
Import registrations in 1970 (thousand US\$)	936	1,269	1,118	1,607	780	1,288	
	(2,316)	(3,366)	(2,963)	(26,372)	(3,293)	(20,804)	
Unused 1970 import registrations (thousand US\$)	12	9	10	7	8	7	
	(42)	(28)	(35)	(23)	(44)	(33)	
Value of requested license (thousand US\$)	15.6	9.1	11.7	7.0	1.9	5.0	
	(26.8)	(27.6)	(27.3)	(13.5)	(9.6)	(12.4)	
Income taxes paid in 1970 (thousand pesos)	2,605	3,506	3,132	1,130	1,012	1,082	
	(8,240)	(9,595)	(9,069)	(4,651)	(3,774)	(4,335)	
Sales taxes paid in 1970 (thousand pesos)	3,097	4,498	3,915	764	96 <b>3</b>	839	
	(29,331)	(31,230)	(30,473)	(3,601)	(4,591)	(4,009)	
Minor exports in 1970 (thousand US\$)	178	357	286	45	20	36	
	( 87 <b>3)</b>	(2,034)	(1,660)	<b>(</b> 582 <b>)</b>	<b>(</b> 94)	(460)	
Average monthly wages (pesos)	2,429	2,594	2,522	2,513	2,442	2,483	
	(1,797)	(3,577)	(2,972)	(2,456)	(1,683)	(2,192)	
Simple 1970 trade balance(deficit; thousand US\$)	752	912	840	1,562	760	1,253	
	<b>(2,</b> 368)	(3,783)	(3,262)	(26,379)	(3,294)	(20,810)	
Percentage of licenses in non-reimbursable group	1.5	18.4	11.2	4.4	17.8	9.6	
	(12.1)	(38.7)	(31.6)	(24.1)	(38.3)	(31.0)	

## Table VI-6 cont'd

## Average characteristics of Rejected (totally or partially) and Approved import requests;

## Sample taken during the second semester of 1971

## (Standard deviations in parentheses)

	Industrial			Commercial		
	Rejected	Approved	Pooled	Rejected	Approved	Pooled
Number of requests in sample	. 535	750	1,285	749	466	1,215
Number of requests from foreign-owned companies	205	266	471	134	75	209
Number of requests from Bogotá or Medellín	382	559	941	561	373	934

Table VI-7

Industrial Category: Regressions "Explaining" Approval (1) or Rejection (0)

of Import Requests in Sample

(Ratio of coefficients to their standard errors in parentheses)

	Least Squares Regression	Probit <u>Analysis</u>
Constant	0.470	-0.080
		(0.19)
Non-reimbursable (1) or reimbursable (0) category	0.312	1.408
	(7.42)	(7.33)
Log of value of all import registrations in 1970	0.008	0.028
	(1.05)	(1.01)
Log of employees per 1970 imports	0.001	0.020
	(0.10)	(0.52)
Log of value of requested imports	-0.070	-0.229
	(9.46)	(9.60)
Log of 1970 income and sales taxes paid per 1970		
imports	0.023	0.051
	(2.40)	(3.22)
Log of 1970 minor exports per 1970 imports	-0.002	-0.043
	(0.24)	(2.55)
Log of average wage	0.026	0.076
	(1.47)	(1.43)
Percentage of 1970 import registrations unused	-0.0001	-0.0007
	(1.50)	(1.27)
Bogota or Medellin (1) or elsewhere (0)	0.060	0.143
	(2.06)	(1.66)
R <sup>2</sup>	0.142	
F-statistic	23.40	

Table VI-8

# Commercial Category: Regressions "Explaining" Approval (1) or Rejection (0) of Import Requests in Sample

(Ratio of coefficients to their standard errors in parentheses)

	Least Squares Regression	Probit <u>analysis</u>
Constant	0.730	1.018
		(2.57)
Non-reimbursable (1) or reimbursable (0) category	0.160	0.535
	(4.12)	(4.02)
Log. of number of employees	0.021	0.098
	(2.71)	(2.65)
Log. of value of 1970 import registrations per		
employee	-0.001	0.003
	(0.11)	(0.11)
Log. of value of requested imports	-0.156	-0.538
	(20.73)	(16.89)
Log. of 1970 income and sales taxes paid per		
employee	0.018	0.017
	(1.80)	(0.66)
Log. of 1970 minor exports per employee	0.006	0.037
	(0.39)	(1.17)
Log. of average wage	-0.010	-0.042
	(0.70)	(0.78)
Percentage of 1970 import registrations unused	0.000	0.000
• • • • • • • • • • • • • • • • • • •	(0.05)	(0.05)
Bogotá or Medellín (1) or elsewhere (0)	0.058	0.210
	(2.01)	(2.03)
R 2	0.304	, <del></del>
F-statistic	58.39	

Table VI-9

Industrial\*: Average characteristics of import requests of companies according to size of company, as measured by employment

by employment						
Employment in Company	Number of requests	Percentage of requests in Non-reimbursable category	Average Wage (Pesos)	Income and Sales taxes paid per Worker in 1970 (Pesos)	Minor Exports per Worker in 1970 (UE \$)	Registered Imports per Worker in 1970 (US \$)
Less than 25	133	9.8%	1,970	7,064	42	3,026
25-49	95	9.5	3,419	11,898	1,617	2,746
50-74	87	5.7	2,075	11,234	466	3,613
75-99	104	11.5	2,911	8,555	815	9,044
100-199	<b>22</b> 8	9.2	2,147	15,333	316	3,266
200-499	383	11.5	2,587	10,864	489	2,739
500-999	140	13.6	2,707	15,693	176	3,388
More than 1,000	115	20.0	2,196	17,629	846	1,801
<u>Total</u>	1,285	11.4%	2,379	15,546	623	2,488

Sources and method: See text. It should be remembered that a given company may have more than one request in the sample.

<sup>\*</sup> Includes sugar mills

Table VI-10

Industrial\*: Average characteristics of import requests of companies according to size of minor exports

1970 Minor Exports (Thousand US\$)	Number of requests	Percentage of requests in Non-reimbursable Category	Average Wage (Pesos)	1970 Income and Sales taxes paid per worker (Pesos)	1970 Minor Exports per worker (US dollars)	1970 Regtstered Imports per Worker (US dollars)	Workers per Company
0	747	10.3%	2,228	20,596	0	2,860	<b>3</b> 88
0-49	251	11.6	2,569	9,837	<b>50</b> 8	2,231	314
50-399	179	12.3	2,329	9,775	611	3,352	287
400-999	57	12.3	3,467	11,821	1,173	3,228	579
> 1,000	51	21.6	2,343	10,928	2,237	1,278	2,533
Total	1,285	11.4%	2,379	15,546	623	2,488	453

Sources and method: See text.

<sup>\*</sup>Including sugar mills

Table VI-12

Industrial: Approvals and rejections according to levels of registered imports in 1970, and reimbursable or non-reimbursable categories

Imports in	Reimb	ursable	Non-Rei	mbursable	Grand	l Total	Non- reimbursal
1970 (Thousand US\$)	Total Requests	Percentage Approved	Total Requests	Percentage Approved	Total Requests	Percentage Approved	
Less than 50	252	56.3 <b>%</b>	41	87.8%	293	60 <b>.8%</b>	14.0%
50-200	245	54.7	22	95.5	267	58.1	8.2
200-500	224	55.4	25	100.0	249	59.8	10.0
500-2,000	272	46.3	32	100.0	304	51.6	10.5
More than 2,000	144	59.0	26	92.3	170	64.1	15.3
<u>Total</u>	1,137	53.7%	146	94.5%	1,283	58.4%	11.4%

Sources and method: See text of chapter.

Industry: Approvals and Rejections according to employment size and geographical location

Table VI-13

Number of Employees of	Bogotá or Medellín		Elsewhere		Total	
Firm Making the Request	Total requests	Percentage Approved	Total requests	Percentage Approved	Total requests	Percentage Approved
Less than 50	184	58.2%	43	62.8%	227	59.0%
50-99	146	57.5	45	57.8	191	57.6
100-199	168	56.0	60	61.7	228	5 <b>7.</b> 5
200-299	144	54.9	67	46.3	211	52.1
300-499	116	61.2	56	44.6	172	55.8
More than 500	183	68.3	71	60.6	254	66.1
Total	941	59.5%	342	55 <b>.3</b> %	1,283	58.4%
	<del></del>			<del></del>	<del></del>	<del></del>

Sources and method: See text.

Industry: Approvals and Rejections according to registered minor exports in 1970 and geographical location

Table VI-14

Minor exports in 1970	Bogotá or Medellín		Elsewhere		Total	
(Million US\$)	Total requests	Percentage Approved	Total requests	Percentage Approved	Total requests	Percentage Approved
Zero	588	60.4%	<b>1</b> 59	59.1%	747	60.1%
1-49	177	53.7	73 .	63.0	250	56.4
50-399	114	62.3	65	41.5	179	54.7
400 or more	62	64.5	45	46.7	107	57.0
	-	CTT-10TION Committees	·	·		***************************************
<u>Total</u>	941	59.6%	342	55.0%	1,283	58.4%

Sources and method: See text.

Table VI-15

# Industrial: Multiple Regressions "Explaining" Imports, Exports, Wages and Taxes per Employee

(Ratio of coefficients to their standard errors in parentheses)

#### DEPENDENT VARIABLES

Independent Variables	Log. of 1970 Registered Imports per Employee	1970 Registered Minor Exports per Employee	Log. of 1970 Income and Sales Taxes per Employee	Log, of Average Wage
Constant	-1.652	-1.751	-1.570	7.808
Log. of number of				
employees	-0.112	0.023	0.099	-0.006
	(3.86)	(0.51)	(2.03)	(0.45)
Foreign owned (0) or				
national (1)	-1.376	0.276	-0.189	-0.470
	(14.61)	(1.74)	(1.11)	(9.70)
Bogota or Medellin (1)				
or elsewhere (0)	0.165	-0.581	0.244	0.086
	(1.81)	(4.09)	(1.59)	(1.91)
Log. of average wage	0.389	0,319	0.254	<del>-</del> .
	(6.99)	(3.62)	(2.69)	
Log. of income and sales				
taxes per employee	0.140	-0.017	-	0.022
	(8.60)	(0.63)		(2.69)
Log. of 1970 registered				
imports per employee		0.149	0.391	0.095
		(3.44)	(8.60)	(6.99)
1970 registered minor				
exports per employee	0.061	-	-0.019	0.032
	(3.44)		(0.63)	(3.62)
2				
$R^2$	0.320	0.037	0.113	0.215
F-statistic	100.25	8.11	27.05	58.39
Observations	1,283	1,283	1,283	1,283

Table VI-16

Commercial: Multiple Regressions "Explaining" Imports,

Wages and Taxes per Employee

(Ratio of coefficients to their standard errors in parentheses)

#### DEPENDENT VARIABLES

Independent Variables	Log. of 1970 Registered Imports per Employee	Log. of 1970 Income and Sales Taxes per Employee	Log of Average Wage
Constant	-0.217	1.705	7.448
Log. of number of employees	-0.185 (6.44)	-0.087 (2.55)	0.062 (3.78)
Foreign owned (0) or national (1)	-0.625 (4.70)	-0.589 (3.77)	-0.433 (5.77)
Bogota or Medellin (1) or elsewhere (0)	-0.289 (2.93)	-0.128 (1.10)	0.248 (4.46)
Log. of average wage	0.242 (4.82)	0.001 (0.02)	-
Log. of income and sales taxes per employee	0.512 (26.00)	-	0.000 (0.00)
Log. of 1970 registered imports per employee	<del>-</del>	0.701 (26.00)	0.078 (4.82)
1970 registered minor exports per employee	0.002 (2.27)	-0.002 (2.77)	0.001 (1.11)
R <sup>2</sup>	0.448	0.422	0.136
F-statistic	163.17	146.76	31.76
Observations	1,215	1,215	1,215

# Annex VI-A

# Companies importing during 1970 more than One Million Dollars

Nan	<u>ne</u>	Presumed major activity
I.	Foreign-owned; Industrial	
1.	Abonos Colombianos, S.A. (I.P.C.)	Fertilizers
2.	Aluminio Alcan De Colombia, S.A.	Aluminum products
3.	Armco Colombiana, S.A.	Construction materials and welding equipment
4.	BASF Química Colombiana, S.A.	Chemicals
5.	Bayer de Colombia S.A.	Pharmaceuticals
6.	Bristol Farmaceutica S.A.	Pharmaceuticals
7.	Carton de Colombia, S.A.	
	(Container Corporation of America)	Paper products
8.	Cela Colombiana LTDA.	Printing
9.	Celanese Colombiana, S.A.	Textiles (Synthetic fibers)
10.	Ciba Colombiana, S.A.	Pharmaceuticals
11.	Colgate Palmoliva, S.A.	Soap, toothpaste, chemicals
12.	Cyanamid De Colombia, S.A.	Chemicals
13.	Dow Química De Colombia, S.A.	Chemicals
14.	Du Pont de Colombia, S.A.	Chemicals
15.	Eli Lilly Interamericana, Inc.	Pharmaceuticals
16.	Enka De Colombia, S.A.	Tires
17.	E.R. Squibb and Sons, S.A.	Pharmaceuticals
18.	Eternit Colombiana, S.A.	
	(Johns Mansville Corporation)	Construction materials
19.	Fabrica Chrysler Colombiana De	
		· · · · · · · · · · · · · · · · · · ·

Automobiles

Automotores, S.A.

20.	Fabrica De Hilazas Vanylon, S.A.	Textiles (Synthetic fibers)
21.	General Electric De Colombia, S.A.	Electrical equipment
22.	Goodyear De Golombia, S.A.	Tires
23.	Hilanderias Medellin, S.A.	
	(Branch River Wool Combing Co.)	Textiles
24.	Hilos Cadena	Textiles
25.	Hoechst Colombiana, S.A.	Chemicals and Drugs
26.	I.B.M. De Colombia, S.A.	Office Machines
27.	Icollantas S.A. (B.F. Goodrich)	Tires
28.	Industrias Phillips De Colombia, S.A.	Electrical equipment
29.	International Petroleum Colombia Ltda.	
w <sup>2</sup>	(I.P.C.)	Petroleum refining
30.	Laboratorios Life, S.A.	Pharmaceuticals
31.	Laboratorios Undra, S.A.	Pharmaceuticals
32.	Monomeros Colombo-Venezolanos, S.A.*	Petrochemicals
33.	Monsanto Colombiana, Inc.	Chemicals
34.	Olivetti Colombiana, S.A.	Office machines
35.	Organizacion Farmaceutica Americana	
	(Foremost McKesson)	Pharmaceuticals
36.	Petroquímica Colombiana, S.A.	
	(Diamond Shamrock Co.)	Petro chemicals
37.	Polímeros Colombianos, S.A.	Synthetic fibers, chemicals
38.	Productos Quaker, S.A.	Foodstuffs
39.	Productora De Papeles, S.A. (Grace)	Paper products
40.	Química Schering Colombiana, S.A.	Chemicals
41.	Rhinco Productos Químicos, S.A.	Chemicals

42.	Sandor Colombiana Ltda.	Pharmaceuticals
43.	Siemens Colombiana, S.A.	Telephone material and electronics
44.	SOFASA (Renault-IFI)	Automobile engines
45.	Texas Petroleum Co.	Petroleum products
46.	The Sidney Ross Co. of Colombia	Pharmaceuticals
47.	Uniroyal Croydon, S.A.	Tires
48.	Aluminio De Colombia, Ltda.	
	(Reynolds Metals)	Aluminum products
49.	Productos Roche, S.A.	Chemicals and drugs
		•
* Th:	is is a joint Colombo-Venezuelan venture, wit	h public sector participation.
Th	us, its nature is quite different from the re	st of the companies in this list.
N.B.	Companies placed by INCOMEX under both the	Industrial and Commercial
	categories are here listed only under "Indu	
II.	Foreign-owned; Commercial	
1.	Distribuidora Nissan, Ltda.	
2.	Distribuidora Toyota, Ltda.	
3.	Kodak Colombiana, Ltda.	•••
4.	Productos Quimicos Esso, Inc.	•••
5.	Shell Colombiana, S.A.	
6.	Union Carbide Colombiana, S.A.	

11	I. National; Industrial	
1.	Acerías Paz Del Rio, S.A.	Steel
2.	Bavaria, S.A.	Beer
3.	Britilana Benrey Ltda.	?
4.	Cano Isaza y Cia.	?
5.	Cales y Cementos De Toloviejo, S.A.	Construction materials
6.	Carvajal y Cia.	Printing
7.	Casa Editorial El Tiempo	Publishing
8.	Cementos del Caribe, S.A.	Cement
9.	Cia. Colombiana De Alcalis	Chemicals
10.	Cia. Colombiana De Tabaco	Cigarettes
11.	Cia. Colombiana De Tejidos (Coltejer)	Textiles
12.	Cia. Pintuco	Paints
13.	Consorcio Metalurgico Nacional, S.A.	Metals
14.	Corporacion de Acero (Corpacero)	Steel products
15.	David y Eduardo Puyana	Liquor and cigaretts
16.	Detergentes Limitada	Detergents
17.	Empresa Siderurgica, S.A.	Steel products
18.	Fabrica De Hilados y Tejidos Del Hato	Textiles
19.	Fabrica Nacional De Chocolates, S.A.	Food products
20.	Gaseosas Posada Tobon, S.A.	Beverages
21.	IFI-Concesion de Salinas	Mining of salt
22.	Leonidas Lara e hijos	Agricultural machinery and autos
23.	Lloreda, Jabones y Glicerina Ltda.	Soaps, detergents
24.	Planta Colombiana De Soda	Chemicals
25.	Productos Fitosanitarios De Colombia, S.A.	?

26. Rosemberg Hermanos e Hijos

Toiletries and soap

27.	Siderurgica Del Pacifico, S.A.	Steel products
28.	Vitabono, S.A.	Fertilizers
29.	Empresa Colombiana de Cables, S.A.	Steel cables
30.	Tejidos Leticia Ltda.	Textiles
31.	Facomec, S.A.	Electrical equipment
IV.	National; Commercial	
1.	Almacenes Angel, S.A.	
2.	Avianca	
3.	Central Colombiana Auto-Agricola Ltda.	
4.	Corpal	
5.	Distribuidora Quimica Holanda-Colombia,	
	S.A.	
6.	Distribuidora Saja Ltda.	
7.	Drogueria Gutierrez	
8.	Ingenieros Civiles Asociados	<b></b>
9.	Jorge Manuel Gomez (Jomago)	
10.	Nepomuceno Cartagena e Hijos	
11.	Pfaff De Colombia, S.A.	
12.	Praco Ltda.	
13.	Almacen El Motorista	
14.	Distribuidora Pantecnica, S.A.	