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LATIN AMERICA: TRADE OF CAPITAL GOODS AND THE  
NEED FOR EXPORT FINANCING \*/

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The poor performance of Latin American countries in the international markets last decade is often referred as explaining a good part of the mediocre economic results achieved in the 1980s. Significant fall in market prices for several commodities, coupled to lack of competitiveness in a number of specific manufactured products as well as the lack of financial conditions to overcome these difficulties have all contributed to reduce even more the possibilities of solving the crucial debt problem, with all the well known consequences.

As far as manufactured exports are concerned, in several countries the simultaneity of the fiscal and the external debts led to a sort of vicious circle in which the reduced export value worsens the financial constraints and these, on their turn, allow for smaller amounts of resources to finance trade.

As it is well known, for the export of several manufactured products credit conditions are often at least as important as price. Access to credit for the financing of working capital and the granting of supplier's credit are vital elements for the export activity.

Capital goods rank high among those products for which financing conditions determine a good part of the export possibilities. The production of custom-built goods often require long periods of time and depend heavily upon the availability of supplier's credit. Series-built products, too, depend on financial factors because the shorter periods of time required for their production do not eliminate the need to provide competitive conditions for commercialization, for products which often have relatively high unit value. If we take into account furthermore that international competition also often requires the provision of engineering projects and other items at favourable conditions, there remains little room for doubt about the need of financial resources to assure a minimum export performance for manufactures in general, and even more so for capital goods.

This work aims at providing the basic information that would be required if medium and long-term credit facilities to stimulate exports of capital goods by Latin American countries were to be

provided by an international agency. The two following sections discuss the available aggregate evidence of the basic structure of production of those goods and the recent trade flows. They are followed by an appraisal of the inferences that might be made from those data in order to inform the drawing of such a credit policy.

#### A. PRODUCTION

Industrialization policies have --among several other consequences for the Latin American (LA) productive sector-- led to a rather diversified structure of production. The capital goods sector, one of the frequent targets of these policies, has been particularly influenced by the adoption of specific stimuli. One of the outcomes of such process is that by 1980 over half of the regional needs of capital goods were met by local supply. Table P.1 illustrates the basic indicators.

A great diversity is found, however, with regard to the local content of production of capital goods in the several countries of the region. According to Table P.1, there seems to be a positive correlation between economic size and the local content of the supply of such goods. Brazil, Mexico, Argentina and Peru all depended upon domestic production to meet more than half of their needs of capital goods, whilst in every other country of the region import shares corresponded to at least two-thirds of consumption.

If one takes into account the fact that Argentina, Brazil and Mexico produce about 90% of all capital goods produced in the region <sup>1/</sup> it turns out that, first, there are marked differences at the individual countries level, and therefore figures for the region as a whole are likely to be misleading. Second, these discrepancies by themselves do give margin for trade among LA countries. Evidence presented later on will show that actually the regional market absorbs most of the Latin American exports of capital goods. But before we go into that some additional points about the production of these goods should be discussed.

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<sup>1/</sup> UN/ECLAC (1989)

It would be helpful --for the evaluation of the Latin American capital goods sector-- to give a rough idea of relative dimensions. The latest systematic figures refer to 1980. Based on the value of investment in machinery and equipment in 19 LA countries that year, plus the available data on imports of capital goods by other seven LA countries it has been estimated (UN/ECLAC (1989), pg.8-10) that in 1980 the Latin American market for capital goods was worth US\$ 67 billion. This means that if we disregard the demand for capital goods by the biggest five economies --the United States, the Soviet Union, Japan, West Germany and the United Kingdom-- the Latin American market for capital goods would have accounted in that year for over one-fourth of the market formed by the remaining economies.

That investment and in fact production as a whole are rather concentrated in sectoral terms. Table P.2 shows the percentage structure of value added in the capital goods sector in 10 selected countries of the region, by type of activity according to the International Standard Industrial Classification.

It is interesting to note that in most countries the activities 3829 and 3839 account for a large part of sectoral value added in the capital goods sector. These activities correspond by and large to the manufacture of Miscellaneous Electrical and Non-Electrical Equipment non specified elsewhere. The systematic high shares of these activities in total sectoral value added would be indicative of a lack of specialization of production at a regional level. This would be a negative aspect to the extent that it reflects inefficient programming, but it may turn out as a positive feature if the means are provided to allow for trade of the intraindustry type.

TABLE P.1 - LATIN AMERICA: PERCENTAGE COMPOSITION OF THE  
DOMESTIC SUPPLY OF CAPITAL GOODS - 1980

	Domestic production	Imports
Argentina	52	48
Bolivia	29	71
Brazil	74	26
Colombia	36	64
Costa Rica	23	77
Chile	12	88
Ecuador	17	83
El Salvador	19	81
Guatemala	27	73
Haití	31	69
Honduras	27	73
Mexico	62	38
Nicaragua	27	73
Panama	32	68
Paraguay	32	68
Peru	53	47
Dominican Republic	27	73
Uruguay	27	73
Venezuela	23	77
Total (19 countries)	57	43

Source: UN/ECLAC (1989), Cuadro 6, pg.19



TABLE P.2 - LATIN AMERICA: PERCENTAGE STRUCTURE OF VALUE ADDED IN THE CAPITAL GOODS SECTOR - 1980

ISIC	Activity	Argentina	Bolivia	Brazil	Chile	Colombia	Ecuador	Mexico	Peru	Uruguay	Venezuela
3813	Manufacture of Structural Metal Products	14.1	14.9	5.3	14.3	17.5	45.8	16.4	8.8	13.8	34.2
3821	Manufacture of Engines and Turbines	7.5	-	0.7	-	0.8	-	0.6	4.8	-	-
3822	Manufacture of Agricultural Machinery	8.9	0.8	3.4	1.6	4.2	-	7.0	3.3	2.5	1.1
3823	Manufacture of Metal and Wood Working Machinery	1.5	-	4.5	2.6	1.3	1.0	2.2	0.8	-	1.7
3824	Manufacture of Special Industrial Machinery	14.6	0.3	8.5	1.0	2.5	1.6	10.5	3.9	2.5	1.6
3825	Manufacture of Office, Computing and Accounting Machinery	2.8	-	2.5	1.6	6.0	0.9	4.5	0.8	-	n.a.
3829	Manufacture of Machinery and Equipment Except Electrical, n.e.s.	12.1	65.9	43.3	28.1	7.6	8.5	20.3	22.9	22.5	26.9
3831	Manufacture of Electrical Industrial Machinery	4.2	1.5	9.1	5.5	17.0	4.6	15.3	16.5	11.3	11.8
3839	Manufacture of Electrical Apparatus, n.e.s.	16.2	12.5	10.5	22.9	25.2	34.1	16.7	26.2	21.1	17.6
3841	Ship Building and Repairing	8.2	-	5.4	3.2	3.6	-	0.7	8.6	24.1	0.7
3842	Manufacture of Railroad Equipment	5.8	-	2.5	18.4	1.6	-	3.5	-	-	n.a.
3845	Manufacture of Aircraft	0.9	-	1.6	-	9.5	-	0.1	-	-	n.a.
3851	Manufacture of Professional and Scientific Equipment, n.e.s.	3.2	4.1	2.7	0.8	3.2	3.5	2.2	3.4	2.2	4.4
	TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: UN/ECLAC (1989), Cuadro 10, pag.30.

Other activities with relevant weight are the manufacture of Structural Metal Products and manufacture of Electrical Industrial Machinery. It may be argued that these four activities rank relatively low, if the degree of technological sophistication is to be considered. Indeed, data in Table P.2 show very limited participation of the production of goods like Professional and Scientific Equipment, Engines and Turbines or Metal and Wood Working Machinery.

It remains to see how important the capital goods sector is for the economies of the region.

Table P.3 presents some indicators of the relative weight of this sector for domestic production and in respect to total exports and imports, in 1980.

Except for Argentina, Brazil and Mexico the production of capital goods accounted in 1980 for less than 20% of value added in manufactures in every other country of Latin America listed in Table P.3. Furthermore, it is remarkable that the relative weight of that sector in total manufacturing varies markedly among different countries. The figures actually suggest three types of economies, as far as the production of capital goods is concerned: i) those countries where that sector accounts for over 20% of manufactured production (Argentina, Brazil and Mexico); ii) the countries where capital goods represent more than 10% of manufactures (Colombia, Chile, Ecuador, Paraguay, Peru, Uruguay and Venezuela) and iii) countries where the production of capital goods is less than 10% of manufacturing (Bolivia, Costa Rica, El Salvador and Dominican Republic). Policy recommendations with regard to the capital goods sector should vary in each case.

There are also differences in the share of capital goods imports in total import value for each country. In 1980 that share was higher than 22% in each of the countries in Table P.3 and in some cases (Paraguay) as high as 68%. There is a higher degree of homogeneity in these figures for the several countries and there is no immediate relation between these shares in total imports and the relative weight in manufactured production: rather concentrated

TABLE P.3 - LATIN AMERICA: SOME INDICATORS OF THE  
CAPITAL GOODS INDUSTRY <sup>(a)</sup> - 1980

	I	II	III
Argentina	28.5	25.1	7.5
Bolivia	4.9	42.8	0.0
Brazil	34.8	23.3	18.2
Colombia	14.1	39.4	3.5
Costa Rica	9.9	30.7	3.6
Chile	15.0	28.1	1.3
Ecuador	12.2	53.3	1.2
El Salvador	7.4	24.2	2.0
Mexico	22.8	36.5	4.5
Paraguay	16.6	67.6	0.0
Peru	14.6	30.3	1.8
Dominican Republic	7.1	22.2	0.7
Uruguay	16.7	48.2	5.0
Venezuela	15.4	29.7	0.3

Source: UN/ECLAC (1989), Cuadro 5, pg.16.

(a) Group 38 (Manufacture of Metal Products, Machinery and Equipment) of ISIC, Revision 2.

- I - Value added by the Capital Goods Sector as a share of total value added in manufactures.
- II - Share of Capital Goods imports in total import value.
- III - Share of Capital Goods exports in total export value.

import bills and the dependence upon the external supply of producers' goods make the biggest producers of capital goods in the region also dependent upon the imports of these goods.

The last column shows slightly different outcome, with Brazil and --to a lesser extent-- Argentina presenting the most expressive shares of capital goods in their total exports. But on the whole these shares are quite low and virtually nil in some cases. As the next Section will show, it is likely that these figures might have changed in more recent years for some countries, like Mexico, but their magnitude is certainly about the same as in 1980.

This brief picturing of the regional productive structure of the capital goods sector should be complemented by some indication about the local demand for these goods. It is estimated (UN/ECLAC (1989) pg.11-18) that almost one-tenth of the regional demand comes from the Electrical Energy supply plants, followed (5% each) by the Steel Sector and Basic Chemicals as well as by Oil and Gas plants, Oil Refineries and Shipbuilding. As far as the demand for imported equipment is concerned, most of it consist of Power Generating Machinery, Transportation Equipment and Equipment for the Mining and Building sectors.

Given the structure of capital ownership in the region, this by and large reflects a demand profile determined by large projects of public enterprises or projects with some participation by the public sector.

This lack of specialization and the apparently low degree of technical sophistication, coupled to the dependence upon local demand --largely affected by the financial constraints to the public sector-- as well as the lack of adequate external financial conditions and hence the limited possibilities to provide adequate (competitive) supplier's credit have contributed to reduce the participation of Latin America in the international market for capital goods in recent years, as will be shown in the next Section.

## B. TRADE

Foreign trade by Latin American countries vary substantially according to the different sizes of the several economies as well as to the degree of openness of their domestic markets. Far from being an exception to this generic rule, trade in capital goods is diversified furthermore by the very fact that it depends upon investment decisions, which affect both supply and demand for these goods.

In order to illustrate the regional discrepancies, it could be recalled that in 1980 about 96% of all regional investment in machinery and equipment were made in the eleven countries that form the LAIA (Latin American Integration Association), and also that in 1987 these countries accounted for 92% of total regional exports (even though they account for only 85% of the regional population). There is therefore a case for concentrating the analysis on data for this subset of eleven countries.

Tables T.1 and T.2 show the total export and import values for these countries in 1970, 1983 and 1987. These years were chosen on the grounds that they represent a turning point (1970) when the export promotion policies adopted by most countries of the region started to show positive results, a downturn (1983) of the series of production and trade, largely resulting from the external financial constraints, and the latest year for which detailed data are available.

According to Tables T.1 and T.2, the presence of the region in the international markets for capital goods is far more important as a buyer than as a supplier: in 1987 it imported US\$ 11 billion worth of capital goods, whilst its exports reached only US\$ 5.4 billion. These figures reflect a more favourable export/import ratio than at the beginning of the period; comparing the corresponding data for 1970 and 1987, it follows that LA exports of capital goods have increased (in nominal terms) at an average annual rate of growth of 18%, compared with a corresponding 5% annual growth of its imports of these goods.

Table T.1 shows a strong regional concentration of exporters: in these three years over 90% of capital goods exports originated from Mexico, Brazil and Argentina. Their individual performance are nevertheless quite different. Argentina exported in 1970 about one-fifth of the capital goods exported by these eleven countries; in 1987 its share was only 3%, with a value that corresponded to only two-thirds of its exports in 1983. Mexico increased its share from about 40% in 1970 to over 66% in 1987, consolidating its leadership as the major regional exporter of capital goods. Meanwhile Brazil accounted in 1987 for 30% of the exports, a similar share as in 1970, but lower than the 46% it had achieved in 1983.

Regional exports are heavily (55% in 1970; 47% in 1987) concentrated on Power Generating machinery, followed (30% in 1987) by Metalworking machinery.<sup>2/</sup>

Table T.2 presents a slightly different picturing, from the import side. The three largest countries account for a much lower share (56-59%) of imports than their exports. Venezuela (importing over 15%) and Chile and Colombia (about 6% each in 1987) are also important importers.

The pattern of imports is also less clearly defined. Power Generating machinery represented about half the value of capital goods imports in 1970 and a bit less (40%) in 1983. In 1987 it was surpassed by the imports of Machinery for Particular Industries. Despite the diversification of imports it still can be said that these two items account for about two-thirds of regional imports of capital goods.

Tables T.1 and T.2 show an asymmetric relationship of Latin American countries with the international markets for capital goods, with regional exports corresponding to about half the value of its sectoral imports. Similar asymmetries and differences among

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<sup>2/</sup> The analysis at a disaggregated level is affected by the fact that Mexican trade data are available only at SITC - Revision 1 for 1987 and do not comprise therefore information about SITC Section 74 in that year.

individual countries are also found in terms of geographical concentration of trade flows.

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TABLE T.1 - TOTAL EXPORTS OF CAPITAL GOODS BY SELECTED LATIN AMERICAN COUNTRIES  
(US\$ Thousand)

	Argentina	Bolivia	Brazil	Chile	Colombia	Ecuador	Mexico	Paraguay	Peru	Uruguay	Venezuela	Total
<b>1970</b>												
Power generating machinery (SITC71)	48148	-	63916	1529	3875	28	49701	-	389	352	9389	177327
Machinery for particular industries (SITC72)	8197	-	18546	1268	1011	-	54198	-	758	1222	1975	87175
Metal working machinery (SITC73)	10181	-	14625	7396	689	1	24200	-	20	46	1067	58225
Total	66526		97087	10193	5575	29	128099	-	1167	1620	12431	322727
<b>1983</b>												
Power generating machinery (SITC71)	148720	2	1165640	10443	23997	687	930064	-	12405	2271	21036	2315265
Machinery for particular industries (SITC72)	30257	-	486468	3639	10068	1209	1673675	-	3472	2783	4795	2216366
Metal working machinery (SITC73)	91250	-	1384338	27092	10213	733	505232	-	9719	5574	6814	2040965
Total	270227	2	3036446	41174	44278	2629	3108971	-	25596	10628	32645	6572596
<b>1987</b>												
Power generating machinery (SITC71)	31022	-	667829	613	9668	-	1860898	-	1166	378	167	2571741
Machinery for particular industries (SITC72)	44024	-	431745	3010	9751	1375	184673	41	2057	506	989	678171
Metal working machinery (SITC73)	18804	-	50130	116	1037	506	1556237	-	94	173	389	1627486
General industrial machinery (SITC74)	75029	17	455738	4552	13015	167	-	-	5461	1891	7156	563026
Total	168879	17	1605442	8291	33471	2048	3601808	41	8778	2948	8701	5440424

Source: UN/COMTRADE Database



TABLE T.2 - TOTAL IMPORTS OF CAPITAL GOODS BY SELECTED LATIN AMERICAN COUNTRIES  
(US\$ Thousand)

	Argentina	Bolivia	Brazil	Chile	Colombia	Ecuador	Mexico	Paraguay	Peru	Uruguay	Venezuela	Total
<b>1970</b>												
Power generating machinery (SITC71)	345457	26142	572908	187266	179206	47857	590362	11515	125240	37257	392407	2515617
Machinery for particular industries (SITC72)	97090	9089	227604	79468	70409	15949	281310	4165	34491	7290	135531	962396
Metal working machinery (SITC73)	76826	23155	201548	129676	142208	31390	363471	8449	55027	28443	209877	1270070
Total	519373	58386	1002060	396410	391823	95196	1235143	24129	214758	72990	737815	4748083
<b>1983</b>												
Power generating machinery (SITC71)	762260	122838	1171956	290059	895928	317608	1708381	92521	411340	92939	1039207	6905037
Machinery for particular industries (SITC72)	416577	48957	947230	182199	423940	111035	1608507	53661	215820	67579	500407	4575912
Metal working machinery (SITC73)	279249	30828	622615	133639	596743	107293	1217095	32008	214759	34848	833549	4102626
Total	1458086	202623	2741801	605897	1916611	535936	4533983	178190	841919	195366	2373163	15583575
<b>1987</b>												
Power generating machinery (SITC71)	178025	22234	509454	95528	123678	59633	1931821	10179	84907	8495	344866	3368820
Machinery for particular industries (SITC72)	327322	62649	437559	328869	252403	115575	974219	27500	319381	62975	742991	3651443
Metal working machinery (SITC73)	132251	2234	197055	21898	28487	12159	826886	7651	15945	2405	148780	1395751
General industrial machinery (SITC74)	351395	36964	721629	317794	281619	181779	-	26851	144073	41338	697322	2800764
Total	988993	124081	1865697	764089	686187	369146	3732926	72181	564306	115213	1933959	11216778

Source: UN/COMTRADE Database

In order to identify the main trade flows the analysis concentrates on the six most relevant traders, according to Tables T.1 and T.2: Argentina, Brazil, Chile, Colombia, Mexico and Venezuela. We selected their trade flows of the four SITC Sections considered throughout this work and treated separately their exports to and imports from the other 10 LAIA member countries as well as seven industrial countries: USA, Japan, France, West Germany, Italy, United Kingdom and Spain.

Tables T.3 to T.14 show the basic data.

It can be said that on the whole these Latin American countries depend upon the regional market more as a demander for its exports than as a supplier of the required goods. In all cases the relative weight of imports from regional partners is quite limited, often well below 10 percent of total sectoral imports.

As far as the relative role of the regional market for exports is concerned, however, there are significant differences among different countries. On the one hand, Argentina, Chile and Colombia concentrate most (half or more) of their sectoral exports on the regional market, which also plays a more expressive role on the import side than for the other three countries. In a different pattern, Mexico and Venezuela concentrate most of their trade (both exports and imports) in non-Latin American partners. Brazil presents a mixed pattern: the shares of the regional markets for its exports are quite significant --though not as high as for Argentina, Chile and Colombia-- but have diminished significantly for Power Generating Machinery and for Machinery for Particular Industries, whilst for Metalworking Machinery there is evidence of more intense regional ties recently both for its exports and imports.

Hardly surprising, the most significant intraregional trade flows link the three largest economies of Argentina, Brazil and Mexico, followed by important flows between the former two countries and Chile.

Tables T.9 to T.14 show a quite different picturing. Industrial countries are responsible for three-quarters or more of

the supply of capital goods imported by Latin America in the three years considered here. There is no exception to this generic rule, but it is worth noting that Chile and Colombia have significantly reduced their imports of Metalworking Machinery and the relative share of the industrial countries in their imports of these products.

The relative weight of industrial countries' markets for LA exports of capital goods varies for different countries and for different products. One finds different situations, ranging from the high dependence of Mexican exporters of Metalworking Machinery upon the demand by industrial countries (USA in particular), to the low shares of the developed markets for the exports of Machinery for Particular Industries from Argentina or Metalworking Machinery from Colombia.

Evidence is also mixed with regard to the trends of these shares along time. There are examples of significant systematic increase of the participation of industrial countries in the demand for Power Generating Machinery from Colombia and Brazil, at the same time that these shares have systematically fallen for the exports of Power Generating Machinery from Venezuela and Metalworking Machinery from Brazil.

Two additional points are worth noting on Tables T.3 to T.14. First, for some products in some years there are indications of significant trade flows between two given countries in both directions, that is, one country exports and imports similar products from another at the same period of time. Among other examples, one could refer to the bilateral trade flows between Argentina and Brazil, between Mexico and the United States, as well as Mexico and other countries, like France and West Germany, or Brazil and these industrial countries. Discrepancies in national trade data do not allow more precision in evaluating these figures at this aggregate level, but it can be said that they are certainly indicative of the existence of intraindustry trade, by which countries tend to gain from exploiting their comparative advantages in exporting specific products whilst importing other

products classified as belonging to the same category. It goes without saying that this also reflects specific production and trade strategies from the perspective of large firms that act on a regional scale.

The second important point to stress from these 14 Tables is that on the whole the participation of the largest economies of Latin America in the international market for capital goods has shrunk very significantly in the present decade, both as exporters and as importers of these goods. This fall has been more intense in the regional exports to industrial countries, although intraregional performance has also been poor.

In order to complement this set of evidence, Tables T.15 and T.16 show the items that accounted --in 1983 and 1987-- for half or more of intraregional exports of each SITC Section. One can hardly talk of diversification of trade flows, since the number of items is quite similar in both years (18 in 1983, 16 in 1987). Instead, the presence of 10 products in both lists of items is indicative of a constant pattern of demand, largely concentrated (40%) in General Industrial Machinery.

These data suggest that specific policy action is required in a number of aspects. From a short to medium-term perspective, however, it looks as if the overcoming of financial constraints to trade would be very helpful for the region to resume its presence at the international markets for these goods, at levels comparable to those of the recent past. The following Section discusses this point.

TABLE T.3 - REGIONAL TRADE OF CAPITAL GOODS - ARGENTINA  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
Bolivia	1189	4371	1105	111	19	21
Brazil	11050	7703	9342	21823	78568	17335
Chile	7149	7896	2238	1356	1950	9
Colombia	923	4275	1316	93	117	234
Ecuador	343	2802	233	2	1	-
Mexico	2860	1388	455	1502	11950	60
Paraguay	2737	2895	218	66	6	-
Peru	1473	8228	2323	14	234	4
Uruguay	2743	7393	4518	126	3327	677
Venezuela	1868	1286	496	44	228	3
Total 10 countries	32335	48219	22244	25137	96400	18343
10 Countries/Total (%)	(67,1)	(32,4)	(71,7)	(7,3)	(12,6)	(10,3)
<b>Machinery for particular industries (SITC72)</b>						
Bolivia	464	567	9363	-	123	3225
Brazil	2361	5819	3417	3846	29821	32524
Chile	1322	2784	3500	698	256	385
Colombia	16	372	1350	-	17	16
Ecuador	2	190	161	-	48	62
Mexico	928	425	112	2250	2175	265
Paraguay	482	1309	1011	6	-	-
Peru	83	556	6086	5	67	14
Uruguay	1989	3771	10879	174	1619	636
Venezuela	40	278	610	6	5	-
Total 10 countries	7687	16071	36489	6985	34131	37127
10 Countries/Total (%)	(93,8)	(53,1)	(82,9)	(7,2)	(8,2)	(11,3)

TABLE T.3 - REGIONAL TRADE OF CAPITAL GOODS - ARGENTINA (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
Bolivia	86	2632	1010	-	592	-
Brazil	99	11667	12130	850	31859	11958
Chile	4375	5707	1020	3526	12020	14
Colombia	-	604	388	-	-	-
Ecuador	3	58	16	-	-	-
Mexico	14	29	185	499	52	71
Paraguay	742	502	68	-	6	-
Peru	23	951	1985	-	591	-
Uruguay	3912	1912	439	1	1270	75
Venezuela	72	393	623	-	2	-
Total 10 countries	9326	24455	17864	4876	46392	12118
10 Countries/Total (%)	(91,6)	(26,8)	(95,0)	(6,3)	(16,6)	(9,2)
<b>General industrial machinery (SITC74)</b>						
Bolivia		5814			176	
Brazil		16575			35437	
Chile		6303			221	
Colombia		2921			28	
Ecuador		1135			137	
Mexico		1379			474	
Paraguay		1887			2	
Peru		7926			1	
Uruguay		7184			902	
Venezuela		1425			126	
Total 10 countries		52549			37504	
10 Countries/Total (%)		(70,0)			(10,7)	

Source: UN/COMTRADE Database

TABLE T.4 - REGIONAL TRADE OF CAPITAL GOODS - BRAZIL  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
Argentina	21827	63281	4517	13545	8510	9387
Bolivia	1037	10660	3830	89	-	-
Chile	6891	13350	4659	4	1	-
Colombia	1187	28515	501	2	24	5
Ecuador	577	7930	2105	-	-	-
Mexico	6225	20081	19319	811	329	9871
Paraguay	1054	59215	6006	5	17	-
Peru	1633	19727	5445	25	-	-
Uruguay	2041	10368	2640	134	1617	-
Venezuela	1741	26477	5347	49	-	-
Total 10 countries	44213	259604	54369	14664	10498	19263
10 Countries/Total (%)	(69,2)	(22,3)	(8,1)	(2,6)	(0,9)	(3,8)
<b>Machinery for particular industries (SITC72)</b>						
Argentina	7213	36284	19272	2563	6476	4117
Bolivia	341	4643	20049	-	-	-
Chile	775	9752	19279	18	-	-
Colombia	189	9559	10333	29	12	32
Ecuador	-	5112	4529	-	-	-
Mexico	3014	8862	4099	861	3316	742
Paraguay	862	16033	11321	-	59	-
Peru	441	3968	22121	45	-	-
Uruguay	623	8579	15542	510	1886	12
Venezuela	456	9098	9666	13	2	-
Total 10 countries	13914	111890	136211	4039	11751	4903
10 Countries/Total (%)	(75,0)	(23,0)	(31,5)	(1,8)	(1,2)	(1,1)

TABLE T.4 - REGIONAL TRADE OF CAPITAL GOODS - BRAZIL (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
Argentina	971	65830	19313	552	11690	12407
Bolivia	714	5584	1844	-	-	-
Chile	88	8037	1131	310	-	-
Colombia	41	11208	509	-	-	-
Ecuador	8	6607	635	-	-	-
Mexico	495	12973	6179	475	13216	148
Paraguay	470	5215	1498	41	-	-
Peru	91	16109	863	-	-	-
Uruguay	1981	7056	492	3	2518	11
Venezuela	172	167	449	20	-	-
Total 10 countries	5031	138786	32913	1401	27424	12566
10 Countries/Total (%)	(34,4)	(10,0)	(65,7)	(0,7)	(4,4)	(6,4)
<b>General industrial machinery (SITC74)</b>						
Argentina			17984			18103
Bolivia			12393			-
Chile			13124			3
Colombia			9194			-
Ecuador			6350			-
Mexico			8679			2434
Paraguay			8771			-
Peru			13498			1
Uruguay			11444			565
Venezuela			15672			390
Total 10 countries			117109			21496
10 Countries/Total (%)			(25,7)			(3,0)

Source: UN/COMTRADE Database



TABLE T.5 - REGIONAL TRADE OF CAPITAL GOODS - CHILE  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
Argentina	704	1066	1	4317	5575	2230
Bolivia	5	381	83	-	-	-
Brazil	5	169	-	4707	14081	4855
Colombia	13	245	-	326	170	2
Ecuador	11	199	65	-	-	-
Mexico	31	80	-	761	2171	10
Paraguay	-	4	1	3	-	-
Peru	197	1970	-	65	330	3
Uruguay	43	40	-	25	109	31
Venezuela	6	123	120	11	30	-
Total 10 countries	1015	4277	270	10215	22466	7131
10 Countries/Total (%)	(66,4)	(41,0)	(44,0)	(5,4)	(7,7)	(7,5)
<b>Machinery for particular industries (SITC72)</b>						
Argentina	515	540	214	1058	2860	4542
Bolivia	-	128	262	-	1	-
Brazil	14	264	11	819	11998	25007
Colombia	32	214	-	193	51	18
Ecuador	3	23	122	5	52	1
Mexico	-	20	9	148	2006	205
Paraguay	1	36	-	-	-	16
Peru	36	390	660	6	22	64
Uruguay	97	80	57	5	16	33
Venezuela	-	57	566	6	13	1
Total 10 countries	698	1752	1901	2240	17019	29887
10 Countries/Total (%)	(55,0)	(48,1)	(63,2)	(2,8)	(9,3)	(9,1)

TABLE T.5 - REGIONAL TRADE OF CAPITAL GOODS - CHILE (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
Argentina	3997	13121	-	8633	5602	1242
Bolivia	-	311	1	3	-	-
Brazil	295	15	-	106	4438	961
Colombia	-	7	-	-	10	3
Ecuador	-	277	59	-	5	-
Mexico	961	-	1	1606	77	22
Paraguay	-	7	-	-	-	-
Peru	-	1277	5	9	6916	-
Uruguay	-	-	-	-	73	1
Venezuela	7	-	-	72	-	-
Total 10 countries	5260	15015	66	10429	17121	2229
10 Countries/Total (%)	(71,1)	(55,4)	(56,9)	(8,0)	(12,8)	(10,2)
<b>General industrial machinery (SITC74)</b>						
Argentina			270			6604
Bolivia			460			6
Brazil			37			18714
Colombia			15			61
Ecuador			751			1
Mexico			44			845
Paraguay			30			7
Peru			243			345
Uruguay			90			176
Venezuela			49			16
Total 10 countries			1989			26775
10 Countries/Total (%)			(43.7)			(8,4)

Source: UN/COMTRADE Database

TABLE T.6 - REGIONAL TRADE OF CAPITAL GOODS - COLOMBIA  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
Argentina	4	21	286	807	4589	1304
Bolivia	52	21	-	-	125	-
Brazil	2	14	-	1144	29558	3763
Chile	248	99	-	51	248	-
Ecuador	868	4521	333	-	1114	10
Mexico	60	156	-	823	7239	40
Paraguay	2	8	-	-	24	-
Peru	317	1122	721	16	392	793
Uruguay	-	-	-	24	81	-
Venezuela	926	7888	1062	39	3960	54
Total 10 countries	2479	13850	2402	2904	47330	5964
10 Countries/Total (%)	(64,0)	(57,7)	(24,8)	(1,6)	(5,3)	(4,8)
<b>Machinery for particular industries (SITC72)</b>						
Argentina	6	14	2	34	639	647
Bolivia	10	30	-	-	2	-
Brazil	-	-	30	145	12184	13931
Chile	201	-	12	37	186	-
Ecuador	119	569	1022	3	758	192
Mexico	1	86	-	559	3304	191
Paraguay	-	-	-	-	22	-
Peru	21	2100	1015	130	693	133
Uruguay	-	-	-	19	-	-
Venezuela	112	4400	2010	189	1104	129
Total 10 countries	470	7199	4091	1116	18892	15223
10 Countries/Total (%)	(46,5)	(71,5)	(41,9)	(1,6)	(4,5)	(6,0)

TABLE T.6 - REGIONAL TRADE OF CAPITAL GOODS - COLOMBIA (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
Argentina	-	-	-	-	682	406
Bolivia	-	35	-	-	8	-
Brazil	-	4	-	61	23548	970
Chile	-	7	5	8	65	-
Ecuador	61	275	485	9	167	156
Mexico	-	97	5	2102	528	32
Paraguay	-	-	-	-	19	-
Peru	-	818	223	14	371	-
Uruguay	-	-	-	-	-	19
Venezuela	273	5006	211	3	1986	13
Total 10 countries	334	6242	929	2197	27374	1596
10 Countries/Total (%)	(48,5)	(61,1)	(89,6)	(1,5)	(4,6)	(5,6)
<b>General industrial machinery (SITC74)</b>						
Argentina	-	-	-	-	-	3160
Bolivia	-	24	-	-	-	-
Brazil	-	-	-	-	10388	12
Chile	-	63	-	-	12	314
Ecuador	-	2405	28	-	1251	-
Mexico	-	-	-	-	-	222
Paraguay	-	712	-	-	38	-
Peru	-	-	-	-	-	618
Uruguay	-	-	-	-	-	-
Venezuela	-	3429	-	-	-	-
Total 10 countries	-	6661	-	-	16003	-
10 Countries/Total (%)	-	(51,2)	-	-	(5,7)	-

Source: UN/COMTRADE Database

TABLE T.7 - REGIONAL TRADE OF CAPITAL GOODS - MEXICO  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
Argentina	2194	5140	9309	2382	2268	2496
Bolivia	44	79	82	-	-	36
Brazil	972	1005	11734	5915	17160	26515
Chile	1360	1767	2280	3	21	70
Colombia	1286	6449	3708	48	35	95
Ecuador	122	1030	1779	5	8	36
Paraguay	5	3	97	-	-	-
Peru	708	1610	6049	63	11	71
Uruguay	86	452	1327	20	-	234
Venezuela	11194	6211	4466	45	27	129
Total 10 countries	17971	23746	40831	8481	19530	29682
10 Countries/Total (%)	(36,2)	(2,6)	(2,2)	(1,4)	(1,1)	(1,5)
<b>Machinery for particular industries (SITC72)</b>						
Argentina	1367	1825	2984	335	559	955
Bolivia	4	46	4	-	-	-
Brazil	598	3474	2242	1795	9248	14094
Chile	58	1501	526	288	-	25
Colombia	62	2238	3514	8	142	58
Ecuador	24	979	4782	-	31	86
Paraguay	51	-	147	-	-	-
Peru	118	1462	2752	3	14	8
Uruguay	57	11	51	1	-	-
Venezuela	690	2209	3537	51	54	68
Total 10 countries	3029	13745	20539	2481	10048	15294
10 Countries/Total (%)	(5,6)	(0,8)	(11,1)	(0,9)	(0,6)	(1,6)

TABLE T.7 - REGIONAL TRADE OF CAPITAL GOODS - MEXICO (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
Metalworking machinery (SITC73)						
Argentina	668	12	123	6	14	188
Bolivia	-	6	342	-	-	-
Brazil	297	19668	5586	10	593	6459
Chile	253	137	13299	-	-	-
Colombia	270	449	122	4	107	3
Ecuador	36	17	326	-	-	321
Paraguay	-	-	-	-	-	-
Peru	6	42	109	-	-	-
Uruguay	-	-	711	-	-	4
Venezuela	87	277	405	-	1	9
Total 10 countries	1617	20608	21023	20	715	6984
10 Countries/Total (%)	(6,7)	(4,1)	(1,3)	(0,0)	(0,1)	(0,8)

Source: UN/COMTRADE Database

TABLE T.8 - REGIONAL TRADE OF CAPITAL GOODS - VENEZUELA  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
Argentina	36	52	-	478	1498	492
Bolivia	-	-	-	-	3	-
Brazil	-	42	-	1780	25314	10190
Chile	-	36	-	17	425	92
Colombia	577	1712	51	1000	6977	1150
Ecuador	26	53	-	-	99	4
Mexico	90	-	-	14933	2204	1804
Paraguay	-	-	-	-	-	-
Peru	6	271	6	106	721	201
Uruguay	-	-	-	3	1	-
Total 10 countries	735	2166	57	18317	37242	13933
10 Countries/Total (%)	(7,8)	(10,3)	(34,1)	(4,7)	(3,6)	(4,0)
<b>Machinery for particular industries (SITC72)</b>						
Argentina	59	-	-	37	330	980
Bolivia	-	-	-	-	1	-
Brazil	-	-	-	480	10463	27084
Chile	-	5	18	-	86	445
Colombia	209	262	311	90	3186	1689
Ecuador	-	10	-	-	294	25
Mexico	41	4	3	575	2317	376
Paraguay	23	-	-	-	-	-
Peru	5	30	10	45	159	632
Uruguay	-	-	-	22	7	1
Total 10 countries	337	311	342	1249	16843	31232
10 Countries/Total (%)	(17,1)	(6,5)	(34,6)	(0,9)	(3,4)	(4,2)

TABLE T.8 - REGIONAL TRADE OF CAPITAL GOODS - VENEZUELA (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
Argentina	8	5	-	61	244	539
Bolivia	-	-	-	-	-	-
Brazil	19	37	-	126	101901	932
Chile	54	-	-	12	14	-
Colombia	3	1111	-	189	4406	117
Ecuador	2	55	-	-	1	237
Mexico	149	5	-	70	3272	271
Paraguay	-	-	-	-	-	-
Peru	-	80	-	-	34	69
Uruguay	-	-	-	3	-	-
Total 10 countries	235	1293	-	461	109872	2165
10 Countries/Total (%)	(22,0)	(19,0)	-	(0,2)	(13,2)	(1,5)
<b>General industrial machinery (SITC74)</b>						
Argentina			81			1111
Bolivia			5			-
Brazil			605			16994
Chile			19			20
Colombia			545			3393
Ecuador			220			12
Mexico			69			1034
Paraguay			-			-
Peru			129			596
Uruguay			-			838
Total 10 countries			1673			23998
10 Countries/Total (%)			(23,4)			(3,4)

Source: UN/COMTRADE Database



TABLE T.9 -TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - ARGENTINA  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
United States	8669	11270	3260	115002	254347	41043
Japan	154	5505	10	6490	52206	4309
France	1133	25161	218	17686	50840	15259
West Germany	551	8891	745	59374	130526	59424
Italy	310	8641	-	51977	67875	14862
United Kingdom	707	-	299	30282	2642	109
Spain	188	4418	160	5537	14870	4090
<b>Total 07 countries</b>	<b>11712</b>	<b>63886</b>	<b>4692</b>	<b>286348</b>	<b>573306</b>	<b>139096</b>
<b>07 Countries/Total (%)</b>	<b>(24,3)</b>	<b>(43,0)</b>	<b>(15,1)</b>	<b>(82,9)</b>	<b>(75,2)</b>	<b>(78,1)</b>
<b>Machinery for particular industries (SITC72)</b>						
United States	63	5029	2857	25433	99539	47889
Japan	1	324	60	5687	98830	13205
France	1	1447	166	4585	19509	5375
West Germany	20	612	23	22157	66576	98395
Italy	63	580	902	10594	31117	59248
United Kingdom	1	-	7	3866	84	747
Spain	-	455	20	1636	20633	12462
<b>Total 07 countries</b>	<b>149</b>	<b>8447</b>	<b>4035</b>	<b>73958</b>	<b>336288</b>	<b>237321</b>
<b>07 Countries/Total (%)</b>	<b>(1,8)</b>	<b>(27,9)</b>	<b>(9,2)</b>	<b>(76,2)</b>	<b>(80,7)</b>	<b>(72,5)</b>

TABLE T.9 -TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - ARGENTINA (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
United States	320	5149	383	31208	53945	8574
Japan	-	53	-	433	27131	2964
France	10	282	1	5207	35003	1348
West Germany	200	828	-	9952	26389	17242
Italy	9	19317	19	9337	15947	70984
United Kingdom	2	-	-	873	3	181
Spain	34	118	-	11531	33183	2258
<b>Total 07 countries</b>	<b>575</b>	<b>25747</b>	<b>403</b>	<b>68541</b>	<b>191601</b>	<b>103551</b>
<b>07 Countries/Total (%)</b>	<b>(5,6)</b>	<b>(28,2)</b>	<b>(2,1)</b>	<b>(89,2)</b>	<b>(68,6)</b>	<b>(78,3)</b>
<b>General industrial machinery (SITC74)</b>						
United States			7351			72084
Japan			377			30022
France			257			18558
West Germany			586			70695
Italy			40			50238
United Kingdom			42			259
Spain			64			11280
<b>Total 07 countries</b>			<b>8717</b>			<b>253136</b>
<b>07 Countries/Total (%)</b>			<b>(11,6)</b>			<b>(72,0)</b>

Source: UN/COMTRADE Database

TABLE T.10 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - BRAZIL  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
United States	4804	429114	433884	196659	425413	114636
Japan	8	51498	620	33686	149276	50216
France	4037	13827	900	17152	57983	54492
West Germany	5795	31456	27712	137628	205868	100868
Italy	251	88261	75571	28771	85302	11149
United Kingdom	255	15739	8249	58733	45257	63982
Spain	480	1939	378	960	8000	366
<b>Total 07 countries</b>	<b>15630</b>	<b>621834</b>	<b>547314</b>	<b>473589</b>	<b>977099</b>	<b>395709</b>
<b>07 Countries/Total (%)</b>	<b>(24,4)</b>	<b>(53,3)</b>	<b>(81,9)</b>	<b>(82,7)</b>	<b>(83,4)</b>	<b>(77,7)</b>
<b>Machinery for particular industries (SITC72)</b>						
United States	1081	253792	141596	61792	279832	60754
Japan	-	2266	2251	26685	183749	49612
France	6	3450	12981	8266	90731	15838
West Germany	278	12966	5078	33061	81144	142515
Italy	267	13362	11636	17580	59328	49329
United Kingdom	40	4187	4458	19283	23195	10812
Spain	430	1930	1685	694	957	3167
<b>Total 07 countries</b>	<b>2102</b>	<b>291953</b>	<b>179685</b>	<b>167361</b>	<b>718936</b>	<b>332027</b>
<b>07 Countries/Total (%)</b>	<b>(11,3)</b>	<b>(60,0)</b>	<b>(41,6)</b>	<b>(73,5)</b>	<b>(75,9)</b>	<b>(75,9)</b>

TABLE T.10 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - BRAZIL (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
United States	1216	137355	9847	135426	187266	27272
Japan	-	1828	11	25859	34096	34542
France	13	66479	69	4385	134025	4186
West Germany	3247	24760	2682	7607	78774	64812
Italy	1300	189107	346	12288	9750	21395
United Kingdom	84	3995	49	8055	15108	5801
Spain	25	64	213	16	28204	3317
<b>Total 07 countries</b>	<b>5885</b>	<b>423588</b>	<b>13217</b>	<b>193636</b>	<b>487223</b>	<b>161325</b>
<b>07 Countries/Total (%)</b>	<b>(40,2)</b>	<b>(30,6)</b>	<b>(26,4)</b>	<b>(96,1)</b>	<b>(78,2)</b>	<b>(81,9)</b>
<b>General industrial machinery (SITC74)</b>						
United States			175860			197135
Japan			1200			87719
France			2060			28542
West Germany			20851			173843
Italy			11512			57160
United Kingdom			4147			52251
Spain			1046			2205
<b>Total 07 countries</b>			<b>216676</b>			<b>598855</b>
<b>07 Countries/Total (%)</b>			<b>(47,5)</b>			<b>(83,0)</b>

Source: UN/COMTRADE Database

TABLE T.11 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - CHILE  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
United States	332	2331	186	89653	120157	24519
Japan	-	219	2	5159	25022	13438
France	-	229	-	8052	12918	2542
West Germany	9	24	8	30586	33165	17319
Italy	-	99	-	8790	16692	3375
United Kingdom	102	566	8	12481	9155	14798
Spain	-	167	-	2892	8843	2155
<b>Total 07 countries</b>	<b>443</b>	<b>3635</b>	<b>204</b>	<b>157613</b>	<b>225952</b>	<b>78146</b>
<b>07 Countries/Total (%)</b>	<b>(29,0)</b>	<b>(34,8)</b>	<b>(33,3)</b>	<b>(84,2)</b>	<b>(77,9)</b>	<b>(81,8)</b>
<b>Machinery for particular industries (SITC72)</b>						
United States	225	773	750	30602	47594	61577
Japan	-	6	12	5412	30385	83863
France	-	39	-	8110	19769	6286
West Germany	30	217	2	11106	24970	45675
Italy	-	5	10	3698	3698	20566
United Kingdom	-	7	-	6496	7183	12688
Spain	-	102	-	4473	3901	4990
<b>Total 07 countries</b>	<b>255</b>	<b>1149</b>	<b>774</b>	<b>69897</b>	<b>137500</b>	<b>235645</b>
<b>07 Countries/Total (%)</b>	<b>(20,1)</b>	<b>(31,6)</b>	<b>(25,7)</b>	<b>(88,0)</b>	<b>(75,5)</b>	<b>(71,6)</b>

TABLE T.11 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - CHILE (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
United States	130	1224	48	67972	17375	2968
Japan	-	1045	2	2459	34170	298
France	1	294	-	4681	5472	3165
West Germany	4	33	-	16493	14908	1610
Italy	-	204	-	4962	1614	1885
United Kingdom	-	574	-	7197	756	749
Spain	6	-	-	1878	3649	737
<b>Total 07 countries</b>	<b>141</b>	<b>3374</b>	<b>50</b>	<b>105642</b>	<b>77944</b>	<b>11412</b>
<b>07 Countries/Total (%)</b>	<b>(1,9)</b>	<b>(12,4)</b>	<b>(43,1)</b>	<b>(81,5)</b>	<b>(58,3)</b>	<b>(52,1)</b>
<b>General industrial machinery (SITC74)</b>						
United States			1913			92714
Japan			24			29481
France			5			11634
West Germany			66			52298
Italy			-			16157
United Kingdom			65			13378
Spain			2			11684
<b>Total 07 countries</b>			<b>2075</b>			<b>227346</b>
<b>07 Countries/Total (%)</b>			<b>(45,6)</b>			<b>(71,5)</b>

Source: UN/COMTRADE Database

TABLE T.12 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - COLOMBIA  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
Power generating machinery (SITC71)						
United States	321	2773	5258	90869	419989	54322
Japan	-	-	-	4933	97681	21262
France	-	442	1111	4461	70586	12729
West Germany	-	1	-	23900	62073	5714
Italy	-	5	-	9476	43738	2418
United Kingdom	-	39	-	15525	17361	11947
Spain	-	-	-	6224	23724	3186
Total 07 countries	321	3260	6369	155388	735152	111578
07 Countries/Total (%)	(8,3)	(13,6)	(65,9)	(86,7)	(82,0)	(90,2)
Machinery for particular industries (SITC72)						
United States	147	935	459	24382	123415	81322
Japan	-	72	-	11096	109585	22705
France	-	78	-	4663	16054	8305
West Germany	-	7	-	8288	41192	46321
Italy	-	-	2	2964	15807	21311
United Kingdom	-	-	5	1976	3588	8244
Spain	-	73	30	2271	5254	10602
Total 07 countries	147	1165	496	55640	314895	198810
07 Countries/Total (%)	(14,5)	(11,6)	(16,5)	(79,0)	(74,3)	(78,8)

TABLE T.12 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - COLOMBIA (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
United States	-	1380	-	88156	184483	6721
Japan	-	-	-	10495	140160	1212
France	-	1375	-	747	37209	497
West Germany	3	-	-	3129	12907	3461
Italy	-	-	-	856	11918	2075
United Kingdom	-	-	-	2844	1968	1424
Spain	-	-	10	23865	24846	3693
Total 07 countries	3	2755	10	130092	413491	19083
07 Countries/Total (%)	(0,4)	(27,0)	(1,0)	(91,5)	(69,3)	(67,0)
<b>General industrial machinery (SITC74)</b>						
United States			2554			114552
Japan			-			22769
France			70			12295
West Germany			1			39392
Italy			6			11840
United Kingdom			-			9316
Spain			17			7465
Total 07 countries			2648			217629
07 Countries/Total (%)			(20,3)			(77,3)

Source: UN/COMTRADE Database



TABLE T.13 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - MEXICO  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
Power generating machinery (SITC71)						
United States	28289	754668	1447438	351029	1016363	1185093
Japan	21	24030	13480	17575	77395	157394
France	126	6214	42329	19718	143904	57402
West Germany	282	39315	96585	77528	135889	199181
Italy	14	4918	2282	24820	91188	80486
United Kingdom	57	2876	5936	33330	59470	40228
Spain	18	2890	19306	6004	28434	36749
Total 07 countries	28807	834911	1627356	530004	1552643	1756533
07 Countries/Total (%)	(58,0)	(90,0)	(87,4)	(89,8)	(90,9)	(90,9)
Machinery for particular industries (SITC72)						
United States	50042	1633565	135478	163184	1177606	495224
Japan	1	545	578	21599	134056	108747
France	67	899	332	12396	22512	47557
West Germany	14	1615	1461	16177	53577	87812
Italy	6	741	139	1793	24648	9654
United Kingdom	-	949	110	7877	12751	9236
Spain	1	154	1138	2992	11363	4921
Total 07 countries	50131	1638468	139236	226018	1436513	763151
07 Countries/Total (%)	(92,5)	(97,9)	(7,5)	(80,3)	(89,3)	(78,3)

TABLE T.13 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - MEXICO (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
Metalworking machinery (SITC73)						
United States	19104	343421	1390537	260572	605325	490596
Japan	1	6204	3519	10464	77921	32668
France	345	3694	3034	52511	78290	24718
West Germany	949	88114	35171	22318	52285	137038
Italy	1	83	490	601	7016	6431
United Kingdom	790	89	2254	7467	30087	20819
Spain	6	16	1205	2434	66644	29677
Total 07 countries	21196	441621	1436210	356367	917568	741947
07 Countries/Total (%)	(87,6)	(87,4)	(92,3)	(98,0)	(75,4)	(89,7)

Source: UN/COMTRADE Database

TABLE T.14 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - VENEZUELA  
(US\$ Thousand)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Power generating machinery (SITC71)</b>						
United States	6562	12591	85	215760	614451	197778
Japan	43	-	-	8486	40533	30002
France	16	4	-	9439	32749	4565
West Germany	207	976	-	39264	92568	50904
Italy	31	645	-	33271	86580	13921
United Kingdom	142	58	-	23350	17001	11365
Spain	11	22	-	9756	31652	6866
<b>Total 07 countries</b>	<b>7012</b>	<b>14296</b>	<b>85</b>	<b>339326</b>	<b>915534</b>	<b>315401</b>
<b>07 Countries/Total (%)</b>	<b>(74,7)</b>	<b>(68,0)</b>	<b>(50,9)</b>	<b>(86,5)</b>	<b>(88,1)</b>	<b>(91,5)</b>
<b>Machinery for particular industries (SITC72)</b>						
United States	714	2351	244	61692	193153	300542
Japan	3	9	-	18298	79764	14500
France	15	6	-	2610	52131	23126
West Germany	97	24	-	13647	49821	128534
Italy	11	2	-	6510	24337	126221
United Kingdom	78	-	196	6108	5319	21061
Spain	2	16	-	2342	12338	22631
<b>Total 07 countries</b>	<b>920</b>	<b>2408</b>	<b>440</b>	<b>111207</b>	<b>416863</b>	<b>636615</b>
<b>07 Countries/Total (%)</b>	<b>(46,6)</b>	<b>(50,2)</b>	<b>(44,5)</b>	<b>(82,0)</b>	<b>(83,3)</b>	<b>(85,7)</b>

TABLE T.14 - TRADE OF CAPITAL GOODS WITH SELECTED COUNTRIES - VENEZUELA (Cont.)

	E X P O R T S			I M P O R T S		
	1970	1983	1987	1970	1983	1987
<b>Metalworking machinery (SITC73)</b>						
United States	483	2777	1	131448	284645	41326
Japan	2	-	-	6494	81353	7792
France	33	52	-	4083	67178	4400
West Germany	3	6	-	22653	15010	19697
Italy	9	67	-	11985	30726	22797
United Kingdom	37	-	-	8639	637	1615
Spain	7	193	383	306	15277	22724
<b>Total 07 countries</b>	<b>574</b>	<b>3095</b>	<b>384</b>	<b>185608</b>	<b>494826</b>	<b>120351</b>
<b>07 Countries/Total (%)</b>	<b>(53,8)</b>	<b>(45,4)</b>	<b>(98,7)</b>	<b>(88,4)</b>	<b>(59,4)</b>	<b>(80,9)</b>
<b>General industrial machinery (SITC74)</b>						
United States			1470			367464
Japan			-			31433
France			5			24539
West Germany			5			82942
Italy			43			64919
United Kingdom			52			15966
Spain			7			17221
<b>Total 07 countries</b>			<b>1582</b>			<b>604484</b>
<b>07 Countries/Total (%)</b>			<b>(22,1)</b>			<b>(86,7)</b>

Source: UN/COMTRADE Database

TABLE T.15 - INTRAREGIONAL TRADE IN CAPITAL GOODS - MOST IMPORTANT PRODUCTS  
1983

SITC	Product	Intra-regional Exports	(US\$ Thousand)
7111	Steam and other vapour generating boilers	3531	
7132	Internal combustion piston engines	8605	
7139	Parts, n.e.s. of internal combustion piston engines	12002	
71621	Electric motors	4063	
7223	Track-laying tractors	9058	
7224	Wheeled tractors	16754	
72431	Sewing machines	6405	
72512	Machinery for making or finishing paper or paperboard	8622	
72711	Machinery for the working of cereals or dried vegetables	5224	
72722	Machinery, n.e.s., used in the food and drink industries	7419	
73719	Parts, n.e.s. of converters, ladles, ingot moulds and casting machines	16754	
74132	Industrial and laboratory furnaces and ovens	11454	
7416	Machinery and laboratory equipment for the treatment of materials by a process involving a change of temperature	13869	
7431	Air pumps and air or gas compressors	13265	
74428	Lifting, handling, loading and unloading machinery, n.e.	11332	
74522	Machinery for cleaning or drying bottles	9106	
7492	Taps, cocks, valves and similar appliances	16181	
7493	Transmission shafts, cranks, bearing housings gear boxes, etc.	9903	

Source: UN/ECLAC Database

TABLE T.16 - INTRAREGIONAL TRADE IN CAPITAL GOODS - MOST IMPORTANT PRODUCTS  
1987

SITC	Product	Intra-regional Exports (US\$ Thousand)
7132	Internal combustion piston engines	23451
7139	Parts, n.e.s. of internal combustion piston engines	27706
72122	Combined harvester-threshers	13099
7224	Wheeled tractors	69269
72431	Sewing machines	9411
72842	Machines and mechanical appliances for the rubber and artificial plastic materials industries	9125
73613	Lathes, metalworking	10262
73719	Parts, n.e.s. of converters, ladles, ingot moulds and casting machines	17200
74141	Refrigerators and refrigerating equipment	9310
7416	Machinery and laboratory equipment for the treatment of materials by a process involving a change of temperature	20117
74288	Pumps for liquids, n.e.s.	8376
7431	Air pumps, vacuum pumps and air or gas compressors	36235
74428	Lifting, handling, loading and unloading machinery, n.e.s.	8996
74522	Machinery for cleaning or drying bottles	12935
7492	Taps, cocks, valves and similar appliances	18046
7493	Transmission shafts, cranks, bearing housings, gear boxes, etc.	14103

Source: UN/ECLAC Database

### C. THE ROLE OF TRADE FINANCING.

Economic planning and economic policy making in Latin America have a long standing tradition of stimulating investment and production in specific sectors, often selected on the basis of evidence that the domestic demand was satisfied by imports.

This approach has oriented a large part of the process of industrialization in the region and has led, over time, to an increasingly more elaborated productive structure, with local production of basic inputs and other producer's goods.

The capital goods sector is perhaps the best example of such procedure. Although the origin of the first units may be traced back to the eighteenth century, there is little dispute about the fact that most of the present productive structure results from the stimuli provided under a more recent, deliberate import substitution approach.

From the viewpoint of the region as a whole, similar policy recommendations to stimulate the domestic production of producers' goods were given to every country. At the same time, the lack of a regional approach that might have avoided, say, investment in similar plants in different countries, aiming at the same markets, has led to a regional productive structure with several segments that are hardly efficient. (Complementary recommendations to Latin American countries, regarding the provision of stimuli to non-traditional exports simultaneously to the substitution of imports, as well as more rational integration processes were often disregarded by local authorities). On top of that, differences in the sizes of individual countries have led to a disproportionate concentration of most of the production of capital goods in a few countries.

The demand for capital goods is, broadly speaking, a derived demand. One of the characteristics of production and investment in Latin America --as distinct to other regions-- is that the public sector plays a determining role, and a large part of capital formation is public investment, either directly (large public enterprises in basic sectors) or indirectly (investment by

enterprises where the state has a significant participation). This leads to an additional peculiarity of the capital goods sector in Latin America, which is the relative weight of large plants, to meet the demand derived from large projects.

As a consequence, a significant part of the capital goods sector in Latin America consists of large units, aiming at the provision of machinery and equipment to large projects in the region, where they concentrate most of their sales.

These segments are largely dependent upon investment decisions by the public sector, and are therefore highly sensible to the postponement or lack of such decisions. The binding financial constraint that was the common characteristic of most countries of the region in the 1980s has actually led to sharp falls in investment ratios regionwise <sup>3/</sup> and to levels of capacity utilization that in some cases (manufactures of Fabricated Metal Products, for instance) are reported to be close to only 20 percent.

Other segments of the capital goods sector are less specialized (like Metalworking Machinery or General Industrial Machinery) and the demand for its production is determined by both private and public producers. The agents that may have negative influence on the demand for these products are less easily identifiable, and have to do with the dynamism of the local economy and with external demand.

In both segments of the capital goods sector, it goes without saying that technological updating is an essential part of competitiveness. However, the available information about recent trade performance does not show a very positive record in that regard.

On the one hand, both exports and imports of capital goods have fallen significantly in recent years. On the other hand,

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<sup>3/</sup> For the region as a whole, it is estimated that investment in machinery and equipment corresponded in 1987 to only 70% of the value invested in 1980 (UN/ECLAC (1989), Anexo 2, pag.144).



exports remain largely concentrated in the regional market, which seems indicative of low capacity of penetration in more competitive markets. Furthermore, most of recent intraregional trade of capital goods (the core of external demand for local production) is concentrated on rather miscellaneous products, a strong indication of lack of specialization. The apparently positive outcome from the available data is that there is an increasing margin for trade of an intraindustry type both on an intraregional level and with some industrial countries, and this could induce a higher degree of specialization.

What seems vital is the creation of the basic conditions to make local production competitive to meet existing demand.

From the viewpoint of the producers of large, custom-built machinery and equipment that are typically demanded by large public sector projects the regional market does not seem to present very favourable perspectives in the short run, given the fragile economic conditions of the countries in this region. One alternative would be to explore other markets, and the opportunities to be created by the necessary rebuilding of East European economies look as natural candidates. The lack of resources to allow a competitive position is clearly one of the main limiting factor.

As far as series-built capital goods are concerned, the demand perspectives both at a regional level and from an international standpoint look less bleak. With regard to the former, cautious, well-designed regional integration schedules may actually stimulate quite significantly trade of this type of goods <sup>4/</sup>, whilst there is indication that local production of some types of goods could compete (i.e., are technologically updated) if trade conditions were assured.

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<sup>4/</sup> As the Brazil-Argentina integration process clearly indicates: bilateral trade in the items included in the Agreement increased from US\$ 26 million in 1985 (one year before the signing of the protocols) to US\$ 51 million in 1987 (a year after the protocols were implemented (R.Baumann (1989))).

For both types of capital goods, then, export financing is a major determining factor. The regional experience in this regard is not very rewarding. The amount of resources available to finance trade has always been quite limited: in 1987 investment banks in Latin America have allocated only about 10% of their deposits to finance external trade. Part of the explanation for this limited involvement with trade is found in the very fact that external trade is a very risky activity (and the insurance schemes available in the region for export credit are not too efficient (Baumann/Braga (1986)) and part is due to the domestic legislation in several countries, which tend to limit the participation of investment banks in the export financing activity.

Some mechanisms have actually been designed to finance intraregional trade, but shortage of hard currency by trade partners have often been one of the limiting factors when it comes to clearing bilateral surpluses and deficits. For example, the mechanism of Reciprocal Credit (Convenio de Crédito Recíproco) led Brazil to accumulate in 1980-88 unpaid credits totalling US\$ 3 billion. Similar difficulties are met by the FONPLATA - Fondo Financiero para el Desarrollo de la Cuenca del Plata, a fund created in 1976 to finance projects, studies and other works that would help foster regional integration.

On a national basis, some experiences have succeeded in actually making viable the exports of non-traditional, increasingly sophisticated manufactures. Brazil's FINEX is a good example of it (Baumann/Braga (1986)). But these schemes have often relied upon budgetary resources, which tend to disappear as a consequence of the fiscal crisis having become a common characteristic of most countries in the region since the mid-1980s.<sup>5/</sup>

Other schemes have been tried, like the formation, in 1985, of an association between three local banks of Argentina, Brazil and Mexico (Latinequip) to finance trade of capital goods among these three countries.

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<sup>5/</sup> The disappearance of FINEX in 1990 is again a good example.

But again the amount of resources available is limited and clearly not sufficient and the existing schemes seem to be not adequate for the region as a whole.

Given the above scenario of shortage of resources, and the limited perspectives for overcoming this shortage due to the narrow and selective access that Latin American countries have to international voluntary capital markets, it might be expected that international organizations would help to provide part of the resources required for the region to at least resume the levels of trade in manufactures --and capital goods in particular-- achieved in the recent past.

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