INDUSTRIAL DEVELOPMENT AND STRATEGIES
IN REVOLUTIONARY NICARAGUA

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Introductory Note

The Sandinist Government in Nicaragua has ambitious plans of rapid industrialization of the country after the overthrow of the Somoza dictatorship. The future industrialization will, however, be based on what the Sandinistas call "the logics of the majorities". This is another way of saying that the future process of capital accumulation should be oriented towards satisfying the needs and interests of the large poor majority of the population rather than serving the interests of small privileged groups, as was the case in the past.

With this goal in sight the Sandinistas are at the same time committed to a "mixed economy with political pluralism" and the government has thus far complied with this commitment. As a matter of fact, private capital is still, five years after the downfall of Somoza, the predominant ownership group in industry, accounting for 42% of production (value added) while fully-owned (100%) state companies account for less than 20%. Even if firms are included where state companies have majority shares, state ownership corresponds to just one third of total industrial output.

With increasing problems arising, mainly as a result of foreign backed economic as well as military warfare against the Sandinistas, voices are now heard in Nicaragua advocating the introduction of centralized planning, laying the foundation for a more rational economy, a sine qua non for long-term planning. Such planning might, however, be difficult to reconcile with a mixed economy where private capital plays such a predominant role.

This paper gives a background to the situation of Nicaraguan industry on the eve of the triumph of the revolution in 1979 and briefly discusses the industrial

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development and strategies of revolutionary Nicaragua. Much of the information contained in this paper was collected in Nicaragua during 1983 and the author wishes to thank colleagues and friends at INIES (Instituto de Investigaciones Economicas y Sociales) and the Ministry of Industry in Managua for helpful comments on earlier drafts of this paper.

1. The Heritage from the Past

When the Sandinistas overthrew the Somoza dictatorship in July 1979, establishing a revolutionary power aimed at radically transforming the antiquated economic and social structures of Nicaragua, they were confronted with a challenge that was no doubt more difficult to meet than the very overthrowing of the dictatorship itself. In constructing a new society, a revolutionary, socialist-oriented government is limited by several factors, the most important one being the heritage of the past. There are thus certain parameters within which any government can act, or as Karl Marx put it over a hundred years ago: "Men make their own history, but they do not make it just as they please. They do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past."1 The tremendous difficulties involved in constructing a new society were also recognized by Fidel Castro, when in addressing a rally in Havana on July 1967, he said that "the most difficult task was not the overthrow of Batista and the taking of revolutionary power... The most difficult task is the one we are engaged in today: the building of a new country on the basis of an underdeveloped country, the creation of a new consciousness, a new man."2

But if the problems confronted in Cuba in 1959 were tremendous, they were even more so in Nicaragua twenty years later. After the triumph in July 1979, the Sandinista government was confronted by a brutal reality. Large parts of the country were in ruins, Managua — the capital — had already been practically destroyed by an earthquake in 1972, and large sectors of the industry in the suburbs of Managua had been bombed by Somoza’s air force during the insurrectional phase of the war of liberation. In addition, the Sandinista government inherited from Somoza a foreign debt of 1.6 billion dollars, the highest per capita debt in Latin America, 640 dollars per capita, or almost as much as the per capita income of the country.

In this essay I shall address in particular the problems related to the structural changes in the industrial sector after 1979 and the industrial strategy outlined by the government. But let us first take a look at the overall development of the economy since 1979.

2. The Immediate Task: The Reactivation of the Economy and Renegotiation of the External Debt

In contrast with Cuba, the war of liberation in Nicaragua was very costly in terms of damages to the economy. It has been estimated that the material costs alone — not to speak of the loss of 50,000 dead and 100,000 injured — caused by the

1. Karl Marx, *Eighteenth Brumaire of Louis Bonaparte.*
2. Fidel Castro addressing a rally in Havana on July 26, 1967.
systematic destruction of infrastructure, industries and houses by the infamous Guardia Nacional, amounted to no less than 481 million dollars. It is thus understandable that the paramount objective on the economic front was to reactivate the economy as rapidly as possible to pre-war levels. Another urgent task was to renegotiate the huge external debt of 1.6 billion dollars, another great handicap for independent decision making inherited by the Sandinistas contrasting with the negligible external debt of Cuba in 1959. (It should be added, however, that both Batista and Somoza left with most of the foreign reserves of their respective country.)

In the fall of 1979 the external debt was successfully renegotiated implying a restructuring of the debt on relatively favorable terms through “rolling over” the lion’s shares of the amortizations until after 1985. But even so the debts service payments have already become an increasing burden on the Nicaraguan balance of payments as shown in Table 1. The debts service ratio (to exports) rose from 13.3 percent in 1980 to 34.2 percent in 1981 and is estimated to have been close to half of total export earnings in 1983. Although the debt situation in Nicaragua no doubt is better than that of most of its neighbors in the region, it is still one of the most serious impediments to independent economic planning, making external political pressures on the Sandinistas difficult to discard.

In the Economic Reactivation Plan of 1980 the goal was set to reach in that year the production levels of 1978, and by 1981 the levels attained in 1977, the peak pre-war year. This was to be done through the more efficient use of the considerable reserves of idle capacity supposedly were hidden in both agriculture and industry. In addition, the construction industry would expand at a rapid rate thanks to massive public investment in infrastructure. Thus, while agriculture was expected to be reactivated to 80 percent (in relation to 1978 output level), manufacturing industry to 87 percent, the construction sector was expected to exceed the 1978 level by 36 percent.

1980 was a good year with an increase of GDP by 10 percent and the industrial sector by 12 percent but the growth was not as vigorous as planned and it became clear that a full reactivation of the economy would not be possible within the time limits set. One reason for the slower than expected growth might lie in an overoptimistic estimate of the reserves of unused capacity in industry, similar to what happened in Cuba just after the revolution. We shall later on look at the process of reactivation by three-digit industrial groups, let is suffice here to mention that total industrial output was as of 1983 still 7 percent below the 1978 level.

Table 1 gives some insight into the performance of the economy since 1979. Although the overall growth rate has not been as high as planned, it nevertheless is more favorable than the present trend in the rest of Central America, where growth rates as a rule are on the downhill. One of the main concerns about the Nicaraguan economy is the great trade deficit and its impact on the already strained balance of payment. The trade gap is not so much a result of an oversized import bill (most of the imports are necessary in order to keep the economy growing) but to the disappointing performance of the exports sector. Exports were projected to increase to 676 million dollars in 1981, to 823 million in 1982 and to 969 million in

3. R.S. Weinert, “Nicaragua’s Debt Renegotiation”, Cambridge Journal of Economics, No. 5, 1981.
4. Programa de reactivación económica en beneficio del pueblo, MIPLAN, Managua, 1980.
5. See, for instance, Claes Brundenius, Revolutionary Cuba: The Challenge of Economic Growth with Equity, Westview Press, Boulder, U.S.A. and Heineman, London, 1984.
1983. In reality exports have in no year after 1979 exceeded 500 million dollars. One major reason is unfavorable price movements for Nicaragua's traditional exports such as cotton, coffee, sugar and meat but also natural calamities such as frequent inundations which have destroyed parts of the crops. Finally, the virtual collapse of the Central American Common Market (CACM), where most of Nicaragua's industrial exports usually go, has led to difficult restructuring problems for the Nicaraguan industry as shall be discussed later on.

3. The Nicaraguan Industrial Sector before 1979

The creation of the Central American Common Market (CACM) or the General Treaty of Central American Integration as it is officially called, proved to be a dynamic incentive to an incipient industrialization of the region — at least for a while. Economic growth had in the 1950s been sluggish (except in Costa Rica) and in 1960, on the eve of the creation of the CACM, the manufacturing share of GDP only ranged between 12-15 percent in the countries of the region (that is, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua), or just about the same industrialization degree as in 1950. By 1970 the share of manufacturing value added in GDP had risen to an average of 17.4 percent for the common market members, with the highest ratio in Nicaragua, 21.7 percent.

This means that quite important structural changes in the economy took place in Nicaragua in the 1960s. As seen in Table 2, the growth of the industrial sector was accompanied by a very drastic decline in the agricultural share of GDP, falling from 45.8 percent in 1950 to 23.7 percent in 1960. But in spite of the relatively rapid rate of industrial growth in the period, few new jobs have been created in the industrial sector. Thus, employment in industry as a share of total employment increased only from 11.4 percent in 1950 to 11.7 percent in 1963 and to 12.0 percent in 1971. Even as late as in 1977, the peak year of pre-war economic activity, the ratio was as low as 15.0 percent. With no absorption outlets in urban industry the growing number of migrants from the rural areas have gone into “other activities” as self-employed (and underemployed).

The industrial sectors in Nicaragua that mostly benefited from the Central American integration were in the early 1960s, food, beverages, textiles, chemicals, and metallic products. In the period 1960-65 the industrial sector increased at an annual rate of 14.0 percent. In the following quinquennium the growth rate slowed down to 8.4 percent, still quite a vigorous growth however, and particularly high in the durable consumer goods sector. Then industrial growth started tapering off in the 1970s with an annual rate of 6.0 percent during 1970-75, and down to 4.6 percent in the period 1975-78.

The dynamic effects of Central American integration should not be underestimated but on the other hand the dynamic aspect of the new regional...
division of labor was linked to the inherent logic of capital accumulation in the periphery. The industrial development is as a rule subjected to the interests of minority groups — the landed aristocracy linked to the traditional exports of agricultural products on the world market, and a smaller infant industrial bourgeoisie limited to serve the interests of the same groups and those of foreign investors. Table 3 gives an illustration of the limitations of the dynamics of Nicaraguan integration into the CACM.

Thus, while the share of intermediate goods in manufacturing output (value added) grew from 13.2 percent in 1960 to 21.3 percent in 1970 but this trend stagnated in the 1970s. The only products in the intermediate goods sector that continued growing at an accelerated rate between 1970 and 1978 were chemicals such as oxygen, gas, caustic soda, and PVC products. No less than 56 percent of basic chemicals produced in Nicaragua in 1976 were exported to the Central American market while 5 percent were exported to the rest of the world and 40 percent were consumed locally. In contrast only 8 percent of the food products were exported to the rest of Central America, no less than 41 percent of the food production was exported to the rest of the world and only about half (51 percent) was consumed in Nicaragua.\textsuperscript{12} At the same time there was a growing bill of food imports into Nicaragua, especially from the United States. In spite of integration there was paradoxically also a growing dependency in Central America on extraregional imports of both raw materials and manufactured goods during the 1970s. Thus the use of extraregional imported raw materials, components and other inputs in El Salvador increased from 51.2 percent to 62.8 percent between 1972 and 1975 and from 35.3 percent to 39.9 percent in Guatemala between 1971 and 1976.\textsuperscript{13} The degree of extraregional dependency for the supply of manufactured goods is highest in the durable consumer goods sector (75 percent in 1978) but is also extremely high in the intermediate goods sector (39 percent in 1978), as shown in Table 4 below.

The high degree of import dependency of the durable consumer goods industries is mainly the result of the type of industrialization embodied in the Free Zone industries established in the area in the 1970s (in Managua such a zone was set up in 1976) based on the principles of assembly plants financed with foreign investment and supplied by foreign imported components and produced with cheap local labor.\textsuperscript{14}

4. The Disintegration of Central American Integration

Despite impressive growth of intraregional trade pressures and contradictions growing within the CACM eventually led to its disruption. The treaty establishing the common market had not provided for preferential treatment for relatively less developed countries in the region. By 1968, both Honduras and Nicaragua had expressed dissatisfaction with the way in which the benefits of the integration were being distributed. In their view the other three countries, with more developed industrial sectors, were benefiting most from the intraregional trade. By mid-1969

\textsuperscript{12} See Appendix Table 3.
\textsuperscript{13} Características del proceso y de la política de industrialización de Centroamérica, 1960 a 1980, CEPAL, México, D.F., 1983 (E/CEPAL/MEX/1983/R.3), p. 15.
\textsuperscript{14} See Mario de Franco and Carlos Chamorro, “Nicaragua: Crecimiento industrial y desempleo” in El fracaso de la Integración Centroamericana, EDSCA, San José, 1979.
the situation had rapidly deteriorated and eventually leading to open armed confrontation between El Salvador and Honduras (the so-called football war). Shortly after, Honduras withdrew from the treaty and the future of the CACM was at stake. Despite several efforts, Honduras has not returned as a full-scale member of the treaty. Although growing dissatisfaction with the distribution of benefits of Central American integration no doubt has been one important factor of its gradual disintegration in the 1970s there are still other factors that are more important. The most important factor is the structural limitation of economic integration in the region. For some time there were new markets available for lines of industrial production in the region, especially in intermediate goods as mentioned earlier. But gradually effective demand of final consumer goods has been tapering off as a result of the extremely skewed income distribution in the region. Table 5 gives an idea of this dramatic situation. Thus at the end of the 1970s the poorest half of the population received only 17% of the incomes in Costa Rica, 14.5% in Guatemala, about 13% in Honduras and Nicaragua, and 10% in El Salvador, while on the other side of the extreme the top 20% appropriated between 49% (Costa Rica) and 66% (El Salvador) of the incomes of the region. But these figures do not reveal the extent of extreme poverty in the country concerned. In a recent report by the ECLA (United Nations Economic Commission for Latin America) it has been estimated that of the 20 million people that were residing in Central America in 1980, no less than 13.2 million (or 64%) were living in extreme poverty in the sense that their incomes did not cover their basic needs, and about 8.5 million (41%) did not have enough financial means to cover even the most basic nutritional needs. It is against this background that the decline of intra-regional trade after 1970 should be seen. In the case of Nicaragua the decline has been dramatic as witnessed in Table 6. The Central American share of Nicaraguan exports grew from 4.0% in 1960 to 25.8% in 1970 but then gradually declined to reach a bottom level for the decade of 15.9% in 1979. Most severely hit have industrial sectors been, decreasing as a percentage of total exports. The structural economic crisis that started affecting Central American integration already at the beginning of the 1970s of course, then got gradually worse after 1973 when external shocks such as rapidly increasing oil prices severely reduced the trade surplus. Up to that point the earnings on traditional extraregional exports (primarily agricultural products exported to the United States and Europe) had served as a clearing pool for covering the deficits of some of the countries in their intraregional trade. This was primarily the case of Costa Rica, Honduras and Nicaragua which had all since the late 1960s had large deficits in their trade with the other common markets countries. By 1975 El Salvador had also joined this group of countries with a negative intraregional trade balance and thus Guatemala resulted as the only beneficiary of intraregional trade. By 1979 the trade surplus of Guatemala had increased to 146 million with corresponding deficits for El Salvador (50 million), Honduras (42 million), Nicaragua (2 million), and Costa Rica (42 million). The relatively low figure for Nicaragua is, however, illusory because of the general decline of economic activities in that year because of the final phase of the war of liberation. In 1980 when a vigorous attempt was made to rapidly reactivate the economy the Nicaraguan trade deficit with the other CACM countries increased to a record 225 million dollars.

15. Central America in Crisis: A Program for Action, Task Force Report on Central America, The Washington Institute, Washington, D.C., 1983.
16. Características principales..., op. cit.
17. Edelberto Torres-Rivas, La crisis económica centroamericana — ¿Cual crisis?, INIES-CRIES, Managua, 1983.
5. The Industrial Strategy after 1979

The first strategy in the industrial sector was at first simply to reactivate as rapidly as possible industrial production in all sectors to the pre-war peak level (1977). Because the heavy dependence of most of Nicaragua industries on imported war materials and inputs this meant a tremendous increase in imports in 1980 from both the Central American market partners as well as from the United States, leading to a large trade deficit in that year of 353 million dollars (see Table 1). The boost in Nicaraguan industrial imports from Central America was healthy injection into reactivation of the CACM but the problem was that Nicaragua had no hard currency to pay in cash and the neighboring countries, each day having more economic and financial problems, were getting more and more reluctant to giving credits to the Sandinista government, if not entirely for economic reasons increasingly so for political reasons.

But difficulties in relying on supplies from Central American partners was not the only reason why the government in 1981 started outlining a new industrial strategy. It had become clear that by reactivating indiscriminately all sectors of the economy what one was doing was actually just reviving the old industrial structures inherited from the past. This, it was felt, was not always compatible with the new “logics of the majorities” that the government and the planning authorities were advocating. It was thus decided that industrial activities should be planned by order of priorities. But industrial planning cannot rest on desires and wishful thinking. It must be based on realist assumptions and on the understanding that the planners do not make the plans “under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past,” as Marx so well described the problem (see page 1). This understanding of the heritage of the past, and the limitations this means for planning the future, is also present in the industrial strategy as outlined in 1982. The main aspects of the industrial structure inherited from the past are the following:

a. That industrial growth in the 1960s and 1970s was basically induced by the dynamics and logic of the CACM and through the insertion of Nicaragua within the international division of labour, and Nicaragua was one of the countries benefiting least from Central American integration, as has been mentioned earlier.

b. That the development of the industrial sector did not permit an adequate articulation (through linkages) with the agricultural sector, not only in the sense that industry failed to provide the agricultural sector with means of production or means for increasing the standard of living of the rural population, but also that the export oriented agriculture did not provide sufficient raw materials for the food industry. The import substituting industrialization that did take place was primarily aimed at complementing industries serving the agro-export sector, generating hard currency earnings for the landed oligarchy.

c. The coexistence of relatively bid and medium-sized enterprises with thousands of small, workshop-type, industries representing a great variety of pre-capitalist relations of production, these latter are important not only because of employment creation and the fact that they are overwhelmingly found in the field of production of basic consumer goods, but also that they are heavily dependent on imported raw materials and other inputs. The new industrial policies strive to adapt the industrial process in revolutionary Nicaragua to a new logic — “the logic of the majorities.” This new logic necessitates the transformation and rationalization of the sector in order to overcome the present structural deformations.
Transformation means not only prioritizing between different sectors but also prioritizing between different lines of production within a given sector (for instance, bread instead of cookies, simple clothes instead of fashion clothes). Rationalization means the making better use of disposable resources, both domestic ones and foreign ones.

The process of transformation in revolutionary Nicaragua is based on the following principles:

a. The promotion of the production of means of production for the agricultural sector (such as tools, fertilizers and insecticides) with the aim of increasing productivity and gradually ameliorating the terms of trade between agriculture and industry.

b. Highest priority given to the accelerated production of basic consumer goods (such as basic foods, clothing and medicines).

c. Better articulation between the industrial sector and the agroindustrial exports sector (cotton, coffee and sugar).

d. The creation of a physical-technical infrastructure (such as melting, forging and welding facilities) in support of a growing integration between the production of basic consumer goods and a sector supplying the means of production for that sector.

e. The promotion of potential new export industries based on domestic raw materials (such as wood and paper).

f. The promotion of industries producing spare parts and other inputs (e.g., rubber) to the transportation sector.

g. The promotion of the construction materials industry (e.g., cement) for the construction of roads, dams, schools, hospitals, factories, and popular housing.

h. The promotion of industries supplying the means of production for the expansion of the industries listed above.

The problem with this strategy — however, appealing it might seem — is, of course, that with serious bottlenecks ahead — such as a growing balance of payments deficits — the list of priorities will by necessity have to be reduced, and then the question is — as usual — what comes first? The satisfaction of immediate basic needs or accumulation (the production of capital and intermediate goods) for considerations of long-term, sustained rate of growth? The Cuban experience in the 1960s with possible, at least short-term, trade-off between growth and equity, is a case in point. A basic needs oriented strategy is no doubt no barrier to long term, sustained economic growth, as the Cuban success story of the 1970s and early 1980s tells us, but the most difficult time is the transitional phase, that might last as long as ten to fifteen years. 18

6. Industrial Development after 1979

Industrial growth started tapering off already in 1978 but the real trough came in 1979, the final year of the war of liberation, when industrial output fell by 27%. The sectors most severely affected were the intermediate goods industries and the "engineering goods" sector (consumer durables and capital goods).

In 1980 there was a vigorous recuperation of industrial production in most branches, with overall industrial output up by 11.8%. The momentum was particularly strong in consumer goods output increasing by 16.8% (see Figure 1 and

18. For a discussion of the Cuban experience in this context, see Claes Brundenius, *Revolutionary Cuba*, op. cit.
Table 7), followed by the intermediate goods sector (12.3%). It is true that output of consumer durables and capital goods increased even more (16.8%) but then it should be recalled that this was the sector that had declined most between 1977 and 1979.

By the end of 1981 several industries in the consumer goods sector had regained their pre-war (1977) levels (see Table 8 for details). The apparel (clothing) industry was 14% above the level of 1977 level of output, that of beverages 20% above, and the tobacco industry 12% above. The serious matter, however, was that the supply of domestically produced textiles was lagging behind, resulting in an increasing dependency on imported textile fibres. By the end of 1981 the production of the textiles industry was still 20% below the pre-war level while that of the footwear and apparel industries was 26% above. During the last two years (1982 and 1983) this imbalance has been gradually redressed although not entirely eliminated.

Thus, while recovery has been relatively rapid and successful in most of the basic consumer goods industries, the price has sometimes been excessive in terms of increasing imports of raw materials and other inputs without a matching increase in exports. In fact, exports fell dramatically in 1980 (see Table 1) and have in no year after 1979 exceeded 500 million dollars, to be compared with and export level of more than 600 million dollars in the period 1977-1979. At the same time, imports increased drastically from 389 million dollars in 1979 to 800 million dollars in 1980 and to 897 million dollars resulting in a record trade deficit in 1981 of almost 400 million dollars.

The reason for this disappointing performance of the external trade sector is partly the already mentioned decline of the Central American Common Market as an outlet for Nicaraguan industrial exports (notably chemicals), but the reason is also the decline in world market demand for Nicaragua's traditional agro-industrial exports. Finally, the terms of trade have been extremely unfavorable to Nicaragua during the last years. Thus, the unit value of exports decreased by 1.9% in 1981, by 5.0% in 1982, and by another 5.0% in 1983, or an accumulated decline of by 12.4% during the last three years. 19

As a result, the import capacity of the country has been steadily falling since 1977. In relation to 1977 the import capacity was in 1979 down by 19%, in 1981 it was 25% below, in 1982-30%, and 1983 it is estimated that import capacity level was 37% lower than in 1977.

Since imports have been increasing, and since the country is very short of international reserves, this means that the trade gap had to be covered by foreign credits and loans leading to a corresponding increase in the external debt, already high even by Latin American standards. As of the end of 1983 it is estimated that Nicaragua's outstanding foreign debt is in the neighborhood of 3.4 billion dollars (see Table 1).

In 1982 an attempt was made to curtail imports drastically and imports' licenses were curbed for a lot of consumer goods considered luxury items. But still imports resulted excessive and further cuts were considered in 1983. The problem, however, is that even if imports of luxury goods were eliminated, there still remains a long list of raw materials and inputs which are vital for most of the priority industries. So the question then is to give priorities within the already narrow frame of priorities. And not only priority between sectors but also priority based on ownership and efficiency criteria, for instance between private and state industry, between large-scale and small-scale industry. Such decisions, of course, are bound to have an

19. Balance preliminar de la economía latinoamericana en 1983, ECLA/CEPAL, Santiago de Chile, 29 de diciembre de 1983.
impact on earlier decisions taken, for instance, with the commitment to a “mixed economy with political pluralism.” The specific problems of small-scale industry will be addressed at some length later on.

The foreign exchange constraint has become even further exacerbated by the well-known trade-off dilemma of having to choose between current consumption increase and investment demand in order to satisfy future needs. Thus, both intermediate goods production and capital goods production have fallen behind during the last years, in spite of the fact that both sectors are recognized as the pillars on which future industrial growth will have to be sustained.

In 1983 the level of output of the “capital goods” sector was still 37% below that of 1977 and only 22% above the 1979 bottom level of output. Now there are several reasons for this. First of all, the pre-revolutionary “capital goods” industries largely consisted of assembly plants for the production of consumer durables based on foreign investment and imported foreign technology. These assembly plants were among the most severely hit, and many were actually completely destroyed, by the bombing by Somoza’s air force during the insurrection in 1979. Secondly, a decision was taken at an early stage not to rebuild these assembly plants, but to reconstruct the capital goods sector based on the production of real capital goods, specially machinery and equipment for the agricultural sector. The building up of an indigenous capital goods industry takes time, and Nicaragua is practically starting from scratch.

7. Changes in Relations of Production in Industry after the Revolution

The Somoza clan had concentrated so much of the economic wealth of the country into their own hands that just by confiscating their property after the triumph of the revolution gained control of approximately 25% of industrial output. Since the revolution there have been relatively few nationalizations in industry in addition to the ones mentioned. According to the latest available estimates, wholly state-owned (100%) enterprises controlled a mere 19% of manufacturing value added in 1981 (see Table 8). If mixed enterprises, where the state has the majority of the shares, are added, the figure of state-control over industry would, however, increase to 33%.

As seen (Table 9), the highest shares of state ownership are found textiles, and apparel (clothing), and in wood, basic metals and non electrical machinery, the latter, however, still very small in absolute size. The approximately one-third share of state participation in industry is problematic for two reasons. First of all it is too small in order to constitute a solid and viable base for industrial planning, especially in strategic sectors such as chemicals, paper and transport equipment. On the other hand, it is sufficiently big in order to alienate large sectors of the industrial bourgeoisie who look with growing suspicion at the Sandinista commitment to “a mixed economy based on political pluralism.” This contradiction in the present transitional phase of the Nicaraguan society is by no means easy to solve.

If the industrial bourgeoisie resists accepting the rule of the game and their role as partners in national development plans, drawn up within the framework of the ideology of the Sandinista revolution, and instead start decapitalizing and even taking capital out of the country, the outcome can only be one: increasing confiscation of private property and a subsequent increase in state participation. This, it is true would lead to a more solid base for socialist planning but would no doubt create a vicious circle with increasing distrust of the industrial bourgeoisie in the long-term objectives of the Sandinista revolution, leading to further
confiscations, etc. This situation is particularly fragile since the private sector has such an overwhelming control over the intermediate goods sector — perhaps the most strategic industrial sector in Nicaragua in the presente phase. In that sector the state controls only 27% of output while the private sector controls 73% (see Table 10).

Another problematic dimension of the transitional phase is the large extent of small-scale industry in Nicaragua. However, with proper treatment and with adequate support, these small-scale industries, often of workshop or "cottage" character, could be of great importance in the future, both in terms of important sources of employment creation (and unemployment is still running as high as 13% in Managua four years after the triumph of the revolution).

One difficulty in characterizing small-scale industry, and identifying its problems, is that Nicaragua lacks a comprehensive, all-embracing, census of manufacturing activities. There have been annual industrial surveys (published on a regular basis since 1979) but these only cover establishments with more than 5 persons employed, and in the size group 5-29 the confidence of the sample is rather shaky. Important insights as to the dimensions and problems of small-scale industry were, however, revealed in a Survey of Small-Scale Industry, carried out by the Ministry of Industry in 1980. The survey tried to cover practically all industrial activities employing between 1-29 persons. On the basis of this survey it can be estimated that small-scale industry thus defined accounted for about 24% of the value added of the manufacturing sector, and 30% of manufacturing employment in that year.

The small-scale industries are mainly concerned in the consumer goods sector, such as food, textiles and apparel, leather and footwear, and furniture and wood products. As a matter of fact, these branches accounted for 84% of the gross value of production of all small-scale industries in 1980 and an equal share of employment. A serious problem with small-scale industry is that it is a sector highly dependent on imports of raw materials.

According to the survey, small-scale industry imported goods worth 40 million dollars in 1980, equal to 16% of all imports of industrial goods to the whole industrial sector in that year. This high degree of import dependency of small-scale industry is a problem because of the serious foreign exchange constraint imposed upon the Nicaraguan economy at present.

Small-scale entrepreneurs have traditionally in Nicaragua been able to exchange local for foreign currency without problems, and then simply go over the border to, for instance, Costa Rica, and purchase the goods they need for their activities. Since May 1983, however, the government has imposed severe restrictions on the purchase of foreign exchange and the small-scale entrepreneur now has to line up in the state bank with the rest of the people soliciting foreign exchange, filling out numerous forms of applications. Although this move by the government is no doubt understandable (one could even say that it was inevitable and long overdue) in view of the necessity to get the black market under control, it is still a fact that this measure hardly increased the popularity of the government among the small business people.

8. The Collapse of the Central American Market

Ironically, a serious recession started hitting Nicaragua's partners in the CACM just when the ambitious plans for rapid construction were announced in Managua.
Thus, while per capita income increased by 7.5% in Nicaragua in 1980, it went down by 0.6% in Honduras, declined by 1.7% in Costa Rica, and fell drastically in El Salvador by 12.2%. However, this recession did not have immediate negative effects on intra-regional trade. Central American total intraregional trade turnover even increased by 28% in absolute terms, and from 19% to 22% in terms of total trade (see Table 11).

This renewed momentum of intra-regional trade was only of a temporary character, unfortunately. The revitalization could to a large extent be explained by the vigorous industrial recovery in Nicaragua during 1980 after the through in 1979, with gross value of industrial output increasing by 12% (see Appendix Table 2).

The economic crisis in the region is a serious handicap for Nicaragua's development plans in the future because of the considerable degree of integration of large sectors of industry in Nicaragua with those of the other members of the Central American Common Market. This dependency on industrial linkages or complementarities, with other industries in the Central American market is indicated by the trade flows of industrial goods in 1980, shown in Table 12.

Thus, 44% of Nicaragua's industrial imports (ISTC groups 5-8) in 1980 came from the CACM, and no less than 88% of its industrial exports went to that same region. In the case of industrial exports dependency on the CACM is thus almost total, ranging from 80-100%. About two-thirds of the industrial exports go to Costa Rica (45%) and Guatemala (20%). With respect to imports of industrial goods the dependency on CACM is lower, although still quite important. Imports of industrial goods from the region accounted in 1980 for 12% of the total in the case of machinery and transport equipment, for 31% chemicals, for 65% of intermediate goods (other than chemicals), and for 78% in the case of other manufactured goods (mostly consumer durables).

Because of the relatively high degree of integration of the Nicaraguan industries with those of the CACM members, the revitalized industrial growth in Nicaragua in 1980 provided the CACM with a temporary momentum, although just postpoing its final collapse. The problem for Nicaragua was, however, that while in 1980 accounting for no less than 28% of total intraregional imports, its corresponding share of intraregional exports fell to bottom level of 6% (see Table 11). The net result was a record intraregional trade deficit for Nicaragua of 225 million dollars (see Table 13).

The dilemma that Nicaragua is confronted with could be summarized as follows. Nicaragua's CACM trading partners are, in spite of growing political differences, still very much interested in exporting to the more dynamic Nicaraguan market. However, since industrial activity in all the CACM —except in Nicaragua — has been declining during the last three years, there is no corresponding interest in buying industrial goods — and least of all from Nicaragua. During the last three years (1981-83) GDP per capita has declined by 20% in Costa Rica, by 22% in El Salvador, by 13% in Guatemala, and by 10% in Honduras (while declining only 1% in Nicaragua).

Hundreds of industrial plants in the region have been paralyzed or even permanently closed down and those that remain are operating with an idle capacity of over 50%. Since Nicaragua lacks foreign exchange (hard currency) to pay for its industrial imports from the region, there is now growing resistance of the CACM members to sell on the Nicaraguan market by offering, for instance, extended credit

20. Ibid.
21. Ibid.
lines. The result has been that the region has plunged into an even worse recession leading to the virtual collapse of the Central American Common Market. In the last few years there have, however, been attempts to resurrect the market through bilateral barter trade agreements comprising some hundred industrial products and Nicaragua has also been a partner in such agreements.

A contributing factor explaining the collapse of the CACM is no doubt also the skewed distribution of benefits from past integration efforts. As shown in Table 13 trade deficits and surpluses have been very unevenly distributed since the 1960s. Up until the end of the 1960s these differences were not so great, although increasingly so for Nicaragua and Honduras leading to armed skirmishes between the latter country and El Salvador in 1969 (trade relations between those countries have still not been fully restored). By the middle of the 1970s trade balances started getting worse also for El Salvador and Costa Rica leaving Guatemala with the only straight record of positive trade balances throughout the whole period since the creation of the Common Market.

9. Trade Vulnerability - A Dilemma Confronting Long-Term Industrial Planning

At the beginning of 1984 encouraging news emerged in Managua about an amazing upturn in the Nicaraguan economy during 1983. According to these reports the economy fared remarkably well last year in spite of dismal initial predictions in view of bad weather and increases in contra intrusions on Nicaraguan territory. If the new figures released by MIPLAN, the Ministry of Planning, hold there would be a growth of GDP of 5% rather than the 2% earlier disclosed (see Table 1).22 This upsurge of growth is, according to the same source, mainly the result of a remarkably good performance of the agricultural sector which increased by 14.3%. On the other hand, industrial production apparently went down by 4.8% (compared with an earlier predicted growth of 7%).

The relatively satisfactory performance of the Nicaraguan economy in spite of deep recession in the region, has led to strong pressure on the government in Managua to abandon plans prepared on an ad hoc annual emergency basis, in favor of long-term (or perhaps rather they should be called medium-term) centralized plans ranging from four to five years. One argument in favor of long-term planning is that the country cannot take for granted that generous levels of foreign aid will be flowing into the country in the long run, and that accordingly Nicaragua must plan future projects strictly in terms of the country’s actual and potential domestic resources.

The question remains, however, if it makes sense to have centralized, long-term planning in a country that has still not fully recovered pre-war levels and where the private sector still maintains a dominating position in many key sectors. In Cuba after the revolution there was also an enthusiastic and ambitious attempt to launch a five-year plan in 1960 to cover the period 1961-65. An outline of a plan was sketched by Michal Kalecki, the late Polish economist.23 It was very appealing and looked very convincing on paper. Very soon, however, the harsh realities of the transitional phase (with an increasing isolation of Cuba backed up with a US-

22. Latin American Regional Reports (London), 17 February, 1984 (RM-84-02).
23. Michal Kalecki, “Hypothetical Outline of the Five-Year Plan 1961-65 for the Cuban Economy,” in Essays on Developing Economies, Hassocks, 1976.
embargo on trade with the island) soon kept up with wishful thinking, the plan was never put into serious practice and was soon replaced by annual plans.

A major dilemma confronting long-term, and even medium-term, planning in a small country like Nicaragua, is the vulnerability of the economy on external trade. The collapse of CACM and the difficulties this implies to Nicaragua, as already discussed, is a case in point. But the matter is not only CACM integration — it is also the still high degree of dependency on imports of industrial goods from the United States. Although dependency on U.S. imports has decreased since the revolution, the U.S. share of Nicaraguan industrial imports still in 1982 accounted for over one-third of the total (see Table 14).

Dependency on the U.S. is highest in chemicals which is a strategic branch in the Nicaraguan industrial strategy. The US import share was 61% before the revolution and is now down to 39% but this is still an excessively high ratio. To a certain extent there has in the past few years been a reorientation of Nicaragua’s trade, away from the CACM an the United States (see Table 15). Thus, the share of CACM and the United States in total exports from Nicaragua fell from 46% in 1978 to 37% in 1982, while the corresponding share of imports declined from 55% to 34% in the same period. The change in exports orientation is mainly explained by new markets in Spain and Japan. The more important change in origin of imports is to some extent by the growing importance of imports of industrial goods from de CMEA (Council of Mutual Economic Assistance) countries (Soviet Union, Eastern Europe and Cuba). But even if the increase of imports from these latter countries is large in absolute terms, imports from the socialist countries still only accounted for 11.5% of total imports in 1982, with Cuba being the most important individual country.

10. The Need for New Complementary Trade Links

Because of the economic crisis in Central America and the political dangers of depending too much on US imports, it is today a vital Nicaraguan interest not only to diversify trade but also to find reliable trading partners that to some extent at least have industries that are complementary to those, existing or planned, in Nicaragua.

This search for new trading partners is not an easy task. Many countries are, of course, willing to take over the US share. Unfortunately, there are not so many countries that are interested in buying from Nicaragua in the present recession. The result has been that Nicaragua has had to rely increasingly on medium-term and long-term loans and credits. Over half of the credits since 1979 have been granted by the socialist countries, while the OECD area only accounts for 11% of the credits given (see Table 16). In the case of long-term loans, the share of the West is only 8%.

Against this background it is perhaps not surprising that Nicaragua is gradually increasing its trade relations with the socialist countries. And in particular is this the case with Cuba. Before the revolution there was no trade at all between Cuba and Nicaragua. In 1982 Cuba exported goods worth 30 million dollars to Nicaragua, accounting for 4% of total Nicaraguan imports. Cuba could no doubt be a most interesting trading partner for Nicaragua and this is so because of the present dynamics of the Cuban industrialization drive.

After very sheggish growth of industrial production in the 1960s, there was a real breakthrough of Cuban industrialization in the 1970s and the rhytm of growth is
continuing in the 1980s during the second five-year plan (1981-1985) at a sustained level. This sustained growth is contrasted with the deep recession in Central America. Cuban manufacturing output was estimated to account for almost half of total manufacturing production in the Caribbean basin region in 1982 (see Table 17), and on a per capita basis it was three times larger than in Central America, and 3.5 times larger than in the neighbors in the Caribbean.

Especially impressive is the Cuban growth trend with regard to the development of a capital goods industry, which expanded at an annual rate of 18.4% between 1970 and 1978, and at 10.0% between 1978 and 1982 (see Table 18). By 1982 it is estimated that Cuban capital goods output was 3.6 times larger than total capital goods production in the Central American Common Market.

Nicaragua is just now planning the construction of a number of new industries and Cuba will no doubt play an important part in these plans. Cuba is already an important partner and supplier of capital goods and construction materials for the building of a new sugar mill in Nicaragua (the Malacotoya Project). In 1982, no less than 51% of the 30.6 million dollars worth of imports from Cuba were made up of construction materials (most important being cement), while most the remainder consisted of various types of capital goods, including tractors and machines (see Appendix Table 6).

One problem in Cuban/Nicaraguan trade at present is the few types of industrial goods that Nicaragua has to offer in return (that are not competitive with Cuban products). In the longer-run, however, there should be a large market, for instance, for cotton textiles on the Cuban market. Most of Cuba’s textile and apparel industry is based on imported synthetic fibres from the Soviet Union, due to the difficulties of cultivating cotton in Cuba for climatic reasons. There would thus seem to be enough reasons to expect a very fruitful industrial cooperation between Nicaragua and Cuba in the future.

Although the immediate prospects for rapid industrialization might look quite gloomy, there are, however, in a longer perspective, pretty good chances of accelerated and sustained industrial growth. One necessary condition is that trade links be diversified and that industrial complementarities with other countries in the region will be strengthened. Another condition is that credits for imports of essential industrial goods in the first, very vulnerable, phase of reconstruction and restructuring of industry, be extended to Nicaragua on soft terms. In this respect encouraging news came out in June, 1984, when it was reported that Nicaragua had reached a refinancing agreement with 130 creditor banks on apparently generous terms, allowing Nicaragua to pay off its 800 million private debt at an effective rate of just 2%.24 (The agreement is similar to the 1980 agreement earlier referred to).

This new agreement no doubts gives Nicaragua some additional relief but the most ominous sign is still, of course, that increasing economic and military warfare by foreign- backed contras, might force the Sandinistas more and more towards the preparation of a War Economy rather than laying the foundation for long-term plans of sustained economic growth.

24. See, Latin America Regional Reports (Mexico and Central America), 8 June, 1984 (RM-84-05), p. 8.
FIGURE 1
Industrial Development in Nicaragua by Major Industrial Groups, 1960-83

Source: Appendix Tables.
# TABLE 1

The Nicaraguan Economy 1977-83: Some Macro Economic Indicators

| Year | GDP (million U.S. Dollars*) | Annual change (%) | Exports (mill. dollars fob) | Imports (mill. dollars fob) | Trade Balance (mill. dollars) | Current Accounts Balance | External Debt (mill. dollars) | Debt service as % of exports | Oil bill as % of exports |
|------|-----------------------------|-------------------|----------------------------|-----------------------------|-------------------------------|--------------------------|----------------------------|------------------------------|--------------------------|
| 1977 | 2691                        | 5.9               | 636                        | 704                         | -68                           | -192                     | 1300                       | 6.9                          | n.d.                     |
| 1978 | 2481                        | -7.8              | 646                        | 965                         | 93                            | -34                      | 1426                       | 7.3                          | 13.8                     |
| 1979 | 1826                        | -26.4             | 616                        | 693                         | 227                           | 154                      | 1453                       | n.d.                         | 13.2                     |
| 1980 | 2023                        | 10.0              | 450                        | 749                         | -353                          | -512                     | 1579                       | 13.3                         | 34.9                     |
| 1981 | 2204                        | 8.5               | 500                        | 797                         | -397                          | -571                     | 2163                       | 34.2                         | 37.6                     |
| 1982 | 2173                        | -1.4              | 429                        | 897                         | -217                          | -393                     | 2789                       | 47.3                         | 47.4                     |
| 1983*| 2216                        | 2.0               | 440                        | 756                         | -270                          | -530                     | 3400                       | 49.6                         | 40.2                     |

* Preliminary figures.

Sources: MIPLAN, Balance preliminar de la economía latinoamericana en 1983, ECLA/CEPAL, Santiago de Chile, January 1984; Informe 1983 del Banco Interamericano de Desarrollo, Washington, D.C., 1983.

# TABLE 2

Sector Shares of Gross Domestic Product and Employment

| Year | Shares of GDP (%) | Shares of total employment (%) |
|------|-------------------|--------------------------------|
|      | 1950   | 1960   | 1970   | 1978   | 1950   | 1963   | 1971   | 1977   |
| Primary Sector* | 45.8     | 23.4     | 21.8     | 25.0     | 67.7     | 59.6     | 46.6     | 42.1     |
| Secondary Sector | 14.6     | 19.9     | 27.1     | 31.8     | 15.0     | 15.9     | 16.3     | 19.5     |
| of which:        |          |          |          |          |          |          |          |          |
| Manufacturing    | 10.2     | 14.8     | 21.7     | 25.7     | 11.4     | 11.7     | 12.0     | 15.0     |
| Construction     | 2.2      | 2.1      | 3.3      | 3.2      | 3.6      | 4.2      | 4.3      | 4.3      |
| Tertiary Sector  | 39.6     | 57.7     | 51.1     | 43.2     | 17.3     | 24.5     | 37.3     | 45.0     |
| Commerce         | 19.2     | 21.2     | 20.5     | 15.3     | 6.1      | 8.3      | 9.6      | 12.8     |
| Other Activities | 20.8     | 36.5     | 30.6     | 27.9     | 11.2     | 16.2     | 27.7     | 32.2     |

* Agriculture, Forestry and Fishing

Sources: Fundamentos para la política industrial nicaragüense, Managua, 1975 and Programa de reactivación económica en beneficio del pueblo, MIPLAN, Managua, 1980.
|                | 1960  | %    | 1970  | %    | 1978  | %    |
|----------------|-------|------|-------|------|-------|------|
| **Non-Durable Consumer Goods**          |       |      |       |      |       |      |
| of which:  |       |      |       |      |       |      |
| Food        | 183.9 | 49.2 | 431.2 | 40.3 | 617.0 | 37.8 |
| Textiles    | 27.8  | 7.4  | 61.8  | 5.8  | 89.5  | 5.5  |
| Leather     | 5.3   | 1.4  | 11.7  | 1.1  | 10.4  | 0.6  |
| Footwear and Clothing          |       |      |       |      |       |      |
| **Intermediate Goods**          |       |      |       |      |       |      |
| of which:  |       |      |       |      |       |      |
| Wood        | 20.0  | 5.3  | 38.8  | 3.6  | 58.3  | 3.6  |
| Paper       | 1.3   | 0.3  | 11.6  | 1.1  | 32.2  | 2.0  |
| Rubber      | 1.3   | 0.3  | 5.3   | 0.5  | 6.4   | 0.4  |
| Petroleum Products | ----- | ----- | 33.0 | 3.1 | 50.7 | 3.1 |
| Chemicals   | 14.3  | 3.8  | 85.9  | 8.0  | 160.5 | 9.8  |
| **Durable Consumer Goods and Capital Goods** |       |      |       |      |       |      |
| Metal Products | 9.1  | 2.4  | 86.4  | 7.1  | 122.6 | 7.5  |
| Machinery and Equipment          |       |      |       |      |       |      |
| Electrical and Non-electrical    | 0.6   | 0.2  | 16.3  | 1.5  | 40.0  | 2.4  |
| Transport Equipment              | 0.3   | 0.1  | 2.9   | 0.3  | 6.3   | 0.4  |
| **TOTAL INDUSTRY**                | 374.0 | 100.0| 1081.0| 100.0| 1737.4| 100.0|

Source: Appendix Tables.

### TABLE 4

Extraregional Imports of Industrial Goods as Percent of Apparent Consumption of Industrial in the Central American Common Market, Selected Years 1960-70

| Supply Coefficients | Total  | Non-Durable Consumer Goods | Intermediate Goods | Durable Consumer Goods and Capital Goods |
|---------------------|--------|---------------------------|-------------------|----------------------------------------|
| **1960**            |        |                           |                   |                                        |
| Extraregional       | 33.2   | 8.3                       | 59.0              | 79.1                                   |
| Regional            | 66.8   | 91.7                      | 41.0              | 20.9                                   |
| **1970**            |        |                           |                   |                                        |
| Extraregional       | 28.3   | 5.3                       | 38.1              | 73.0                                   |
| Regional            | 71.7   | 94.7                      | 61.9              | 27.0                                   |
| **1975**            |        |                           |                   |                                        |
| Extraregional       | 29.0   | 6.1                       | 32.4              | 76.7                                   |
| Regional            | 71.0   | 93.9                      | 67.6              | 23.3                                   |
| **1978**            |        |                           |                   |                                        |
| Extraregional       | 31.5   | 6.8                       | 39.3              | 75.1                                   |
| Regional            | 68.5   | 93.2                      | 60.7              | 24.9                                   |
| **1979**            |        |                           |                   |                                        |
| Extraregional       | 30.9   | 7.1                       | 38.2              | 74.0                                   |
| Regional            | 69.1   | 92.9                      | 61.8              | 26.0                                   |

Source: Caracteristicas principales del proceso y de la politica de industrializacion de Centroamerica, 1960 a 1980 (CEPAL), Mexico, D.F., 26 de noviembre de 1982.
## TABLE 6
The Rise and Fall of Central American Integration, 1960-79

| Year | Nicaragua | Central America |
|------|-----------|-----------------|
|      | Total exports (million US$) | 67.8 | 443.8 |
|      | % to Central America | 4.0 | 6.8 |
|      | Manufacturing exports (million US$) | 2.3 | 28.2 |
|      | % of total exports | 3.7 | 6.4 |
|      | % to Central America | 17.4 | 52.8 |
| 1970 | 178.6 | 1098.0 |
|      | 25.8 | 26.1 |
|      | 39.3 | 283.8 |
|      | 22.0 | 25.8 |
| 1976 | 541.9 | 3007.7 |
|      | 21.7 | 21.6 |
|      | 110.6 | 747.4 |
|      | 20.4 | 24.8 |
| 1979 | 566.6 | 4484.8 |
|      | 15.9 | 20.2 |
|      | 80.3 | 1050.9 |
|      | 14.2 | 23.8 |
|      | 90.2 | 77.8 |

Sources: *Características principales del proceso y de la política de industrialización de Centro América, 1960 a 1980, CEPAL, México, D.F., 26 de noviembre de 1982.*

## TABLE 5
Income Distribution in Central America around 1980
(1980 US dollars)

| Income Strata | Costa Rica Average Income | El Salvador Average Income | Guatemala Average Income | Honduras Average Income | Nicaragua* Average Income |
|---------------|---------------------------|----------------------------|--------------------------|-------------------------|--------------------------|
| Poorest 20%   | 4.0 | 309 | 2.0 | 81 | 5.3 | 194 | 4.3 | 141 | 3.0 | 108 |
| Next 30%      | 17.0 | 876 | 10.0 | 271 | 14.5 | 365 | 12.7 | 245 | 13.0 | 312 |
| Next 30%      | 30.0 | 1547 | 22.0 | 597 | 26.1 | 638 | 23.7 | 446 | 26.0 | 613 |
| Richest 20%   | 49.0 | 2039 | 66.0 | 2687 | 54.1 | 1964 | 59.3 | 1394 | 58.0 | 2100 |

*1977

Source: *La Crisis en Centroamérica: Origenes, Alcances y Consecuencias, ECLA/CEPAL, México D.F., 23 Febrero 1983.*
### TABLE 7

Structural Changes and Growth of Nicaraguan Industry by Major Industrial Branches, 1977-83

| GROUPS                      | 1977  | 1978  | 1979  | 1980  | 1981  | 1982  | 1983  |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Non-Durable Consumer Goods |       |       |       |       |       |       |       |
| Share                       | 66.5  | 67.9  | 73.6  | 72.7  | 73.6  | 75.7  | 75.1  |
| Index (1977 = 100)          | 100.0 | 102.4 | 80.5  | 94.0  | 97.8  | 101.6 | 108.2 |
| Intermediate Goods          |       |       |       |       |       |       |       |
| Share                       | 26.3  | 24.6  | 21.3  | 22.2  | 21.7  | 19.6  | 20.1  |
| Index (1977 = 100)          | 100.0 | 93.8  | 58.9  | 72.5  | 72.8  | 66.7  | 73.2  |
| Consumer Durables and Capital Goods |       |       |       |       |       |       |       |
| Share                       | 7.2   | 7.5   | 5.2   | 5.1   | 4.7   | 4.7   | 4.8   |
| Index (1977 = 100)          | 100.0 | 103.5 | 51.8  | 60.5  | 56.9  | 57.9  | 63.2  |
| TOTAL                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Index (1977 = 100)          | 100.0 | 100.2 | 72.7  | 85.9  | 88.3  | 89.3  | 95.7  |

Source: Appendix Table 1.
TABLE 8
Nicaragua: Indexes of Gross Value of Industrial Production - 1960-83 (1977 = 100)

| ISIC | Branch                  | 1960 | 1970 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983* |
|------|-------------------------|------|------|------|------|------|------|------|------|-------|
| 311/312 | Food                  | 27.2 | 71.8 | 100.0 | 105.3 | 88.5 | 88.3 | 91.2 | 103.4 | 109.4 |
| 313   | Beverages               | 17.3 | 47.1 | 100.0 | 102.0 | 81.6 | 120.4 | 116.9 | 108.1 | 109.3 |
| 314   | Tobacco                 | 36.2 | 58.7 | 100.0 | 97.0  | 75.7 | 112.1 | 108.1 | 93.4  | 94.3  |
| 321   | Textiles                | 24.2 | 67.3 | 100.0 | 96.8  | 60.7 | 57.7 | 79.4 | 82.1  | 107.9 |
| 322/324 | Footwear and Apparel    | 58.7 | 111.8 | 100.0 | 86.9  | 49.2 | 114.2 | 125.6 | 115.4 | 123.1 |
| 331   | Wood and Cork           | 29.7 | 55.0 | 100.0 | 79.9  | 47.1 | 49.0  | 51.3 | 44.1  | 42.6  |
| 332   | Furniture               | 22.0 | 76.6 | 100.0 | 97.8  | 67.0 | 60.8  | 64.1 | 55.7  | 46.9  |
| 341   | Paper and Paper Products| 3.5  | 38.7 | 100.0 | 110.4 | 65.9 | 54.6  | 60.0 | 74.2  | 97.5  |
| 342   | Printing and Graphic Industry | 25.9 | 80.5 | 100.0 | 82.6  | 60.7 | 91.3  | 102.0 | 106.9 | 108.7 |
| 323   | Leather and Leather Products | 55.4 | 125.5 | 100.0 | 112.6 | 101.3 | 108.7 | 87.0 | 93.9  | 100.0 |
| 355   | Rubber Products         | 22.0 | 84.4 | 100.0 | 101.8 | 76.1 | 189.9 | 200.9 | 206.4 | 233.9 |
| 351/352 | Chemicals              | 11.8 | 51.4 | 100.0 | 101.1 | 68.5 | 72.8  | 70.3 | 62.5  | 68.3  |
| 353   | Petroleum and Derivates | 12.0 | 49.0 | 100.0 | 85.2  | 37.2 | 62.4  | 58.7 | 55.3  | 62.5  |
| 36    | Non-Metallic Mineral Products | 8.5  | 80.9 | 100.0 | 102.6 | 50.4 | 71.1  | 69.0 | 76.8  | 85.3  |
| 381   | Metals Products         | 1.5  | 41.9 | 100.0 | 102.7 | 53.9 | 41.8  | 33.5 | 25.7  | 26.5  |
| 382/383 | Machinery (Electric and Non-Electric) | 2.8  | 47.7 | 100.0 | 103.7 | 61.7 | 66.4  | 74.8 | 54.2  | 52.3  |
| 384   | Transport Equipment     | 5.3  | 74.2 | 100.0 | 104.9 | 62.8 | 39.6  | 43.3 | 39.2  | 40.8  |

GROSS VALUE OF PRODUCTION
21.1  64.8  100.0  100.5  73.6  82.6  84.9  87.0  93.3

*Preliminary figures.
Source: Calculations by the author based on information provided by Departamento Industrial Minero, MIPLAN, Managua.
# TABLE 9
Ownership Structure of Nicaraguan Manufacturing Industry*—1981
(% Shares of value added)

| ISIC Branches       | State (100%) | Private (100%) | Mixed |
|---------------------|--------------|----------------|-------|
|                     | State Majority | Private Majority | Total** |
| 312 Food            | 20.8         | 30.3           | 17.4  | 31.3 | 100.0 |
| 313 Beverages       | 0.5          | 9.8            | 44.8  | 44.9 | 100.0 |
| 314 Tobacco         | 1.3          | 0.5            | ---   | ---  | 98.1 | 100.0 |
| 321 Textiles        | 60.1         | 23.0           | ---   | ---  | 16.9 | 100.0 |
| 322 Apparel         | 39.6         | 60.4           | ---   | ---  | 100.0 |
| 323 Leather         | 16.9         | 83.1           | ---   | ---  | 100.0 |
| 324 Footwear        | 10.4         | 89.6           | ---   | ---  | 100.0 |
| 331 Wood and Cork   | 22.4         | 23.2           | 54.4  | ---  | 100.0 |
| 332 Furniture       | 14.8         | 55.8           | ---   | ---  | 32.4 | 100.0 |
| 341 Paper           | 20.9         | 55.8           | ---   | ---  | 23.3 | 100.0 |
| 342 Printing        | 30.9         | 68.6           | ---   | 0.5  | 100.0 |
| 351 Industrial Chemicals | 4.2     | 46.3           | ---   | 49.6 | 100.0 |
| 352 Other Chemicals | 29.4         | 64.7           | 4.1   | 1.8  | 100.0 |
| 353 Petroleum Refining | ---    | ---            | ---   | 100.0 | 100.0 |
| 355 Rubber          | ---          | ---            | ---   | 100.0 | 100.0 |
| 356 Plastics        | 21.3         | 38.5           | 40.3  | ---  | 100.0 |
| 36 Non-Metallic Minerals | 22.6   | 8.6            | 65.9  | 3.0  | 100.0 |
| 37 Basic Metals     | 56.6         | 43.4           | ---   | ---  | 100.0 |
| 381 Metal Products  | 70.0         | 30.0           | ---   | ---  | 100.0 |
| 382 Machinery (exc. electr.) | 65.3  | 34.7           | ---   | ---  | 100.0 |
| 383 Electrical Machinery | 18.7   | 80.0           | ---   | 1.3  | 100.0 |
| 384 Transport Equipment | 12.3  | 87.7           | ---   | ---  | 100.0 |
| 385 Scientific Instruments | ---  | 33.3           | 66.7  | ---  | 100.0 |
| 39 Other Industry, n.e.c. | --- | 11.4          | 88.6  | ---  | 100.0 |
| **TOTAL**           | 19.0         | 41.7           | 14.7  | 25.2 | 100.0 |

*Based on a survey covering establishments with 5 or more employed.
**Total may not add up because of rounding.

Source: Calculations by the author based on information provided by Encuesta Anual —Industria Manufacturera—1981, INEC, Managua, 1983.
### TABLE 10
Ownership Structure of Nicaraguan Industry by Major Use of Output—1981

| Major Use                        | State (100%) | Private (100%) | Mixed       |
|----------------------------------|---------------|----------------|-------------|
|                                  | m. Córdobas (%) | m. Córdobas (%) | State Majority | Private Majority | Total m. Córdobas (%) |
| Non-Durable Consumer Goods       | 600.3         | 1051.6         | 492.5       | 1109.2           | 3253.6                |
| Intermediate Goods               | 177.3         | 845.1          | 175.8       | 107.6            | 1305.8                |
| Consumer Durables and Capital    | 137.8         | 117.7          | 14.8        | 0.7              | 271.0                 |
| Goods                            |               |                | 492.5       | 1109.2           | 3253.6                |
| TOTAL                            | 915.4         | 2014.4         | 683.1       | 1217.5           | 4830.4                |

Source: Same as Table 9).
TABLE 11
Intraregional Trade and Nicaragua’s Shares of Intraregional Trade, 1976-82

| Years | Central American Intraregional Trade* (m. US$) | Intraregional Trades as % of Total Latin American External Trade* | Nicaragua’s Share of Intraregional Exports(%) | Nicaragua’s Share of Intraregional Imports(%) |
|-------|-----------------------------------------------|-------------------------------------------------|---------------------------------|---------------------------------|
| 1976  | 1264.0                                        | 20.0                                           | 18.1                            | 23.0                            |
| 1977  | 1518.0                                        | 17.9                                           | 17.0                            | 22.5                            |
| 1978  | 1747.3                                        | 20.2                                           | 16.9                            | 15.7                            |
| 1979  | 1852.4                                        | 18.8                                           | 10.0                            | 11.7                            |
| 1980  | 2367.1                                        | 21.8                                           | 5.9                             | 28.2                            |
| 1981  | 1963.7                                        | 19.7                                           | 6.9                             | 24.0                            |
| 1982  | 1595.1                                        | 18.4                                           | 6.4                             | 22.2                            |

*Exports (f.o.b.) and Imports (c.i.f.)

Source: Direction of Trade Statistics-Yearbook 1983, IMF, Washington, D.C., 1983.
### TABLE 12

Direction of Nicaragua's Trade in Industrial Goods in 1980
(million US$)

| ISTC | Exports (f.o.b.) | Total | CACM | Guatemala | El Salvador | Honduras | Costa Rica |
|------|------------------|-------|------|-----------|-------------|----------|-----------|
| 5.   | Chemicals        | 32.6  | 29.2 | 6.9       | 4.8         | 2.9      | 14.7      |
| 6.   | Other Intermediate Goods | 19.9  | 16.0 | 3.5       | 1.7         | 3.0      | 7.8       |
| 7.   | Machinery and Transportation Equipment | 1.9   | 1.9  | 0.6       | 0.4         | 0.2      | 0.7       |
| 8.   | Other Manufact | 6.1   | 6.1  | 1.1       | 0.4         | 0.3      | 4.2       |
| 5-8  | Total industrial Exports | 60.5  | 53.5 | 12.1      | 7.3         | 6.4      | 27.4      |
|      | TOTAL EXPORTS    | 436.3 | 75.4 | 16.2      | 10.0        | 12.5     | 36.7      |

**Regional Shares:**

|                  | Industrial Exports | Total Exports |
|------------------|--------------------|---------------|
|                  | 100.0              | 100.0         |
|                  | 88.0               | 17.3          |
|                  | 20.0               | 2.8           |
|                  | 12.1               | 1.7           |
|                  | 10.6               | 1.5           |
|                  | 46.3               | 6.2           |

| ISTC | Imports (c.i.f.) | Total | CACM | Guatemala | El Salvador | Honduras | Costa Rica |
|------|------------------|-------|------|-----------|-------------|----------|-----------|
| 5.   | Chemicals        | 190.2 | 58.7 | 25.4      | 7.7         | 5.7      | 19.9      |
| 6.   | Other Intermediate Goods | 177.2 | 115.0 | 33.4      | 20.4        | 13.9     | 47.3      |
| 7.   | Machinery and Transportation Equipment | 122.9 | 14.6 | 5.3       | 2.2         | 1.1      | 6.0       |
| 8.   | Other Manufact | 70.8  | 55.5 | 13.1      | 14.8        | 3.2      | 23.4      |
| 5-8  | Total industrial Imports | 561.1 | 243.8 | 77.2      | 45.1        | 23.9     | 96.6      |
|      | TOTAL IMPORTS    | 887.2 | 300.6 | 102.9     | 50.5        | 30.4     | 116.7     |

**Regional Shares:**

|                  | Industrial Imports | Total Imports |
|------------------|--------------------|---------------|
|                  | 100.0              | 100.0         |
|                  | 43.5               | 33.9          |
|                  | 13.8               | 11.6          |
|                  | 8.0                | 5.7           |
|                  | 4.3                | 3.4           |
|                  | 17.3               | 13.2          |

**Source:** Calculations based on *Anuario Estadistico Centroamericano de Comercio Exterior 1980* (SIECA, Guatemala, 1983).
TABLE 13

Trade Balances of Individual Countries in Central American Intraregional Trade 1961-82
(million US dollars)

| Years | Costa Rica | El Salvador | Guatemala | Honduras | Nicaragua |
|-------|------------|-------------|-----------|----------|-----------|
| 1961  | -2.1       | -0.2        | 1.4       | 1.9      | -1.1      |
| 1962  | -1.4       | -3.6        | 2.2       | 4.9      | -2.1      |
| 1963  | 0.6        | 0.8         | 1.0       | 0.7      | -3.1      |
| 1964  | 7.5        | -4.1        | 3.6       | 0.3      | -7.4      |
| 1965  | 4.2        | 3.8         | 6.8       | -3.3     | -11.5     |
| 1966  | 2.7        | 5.4         | 21.2      | -12.6    | -16.8     |
| 1967  | -3.2       | 20.7        | 23.6      | -17.2    | 23.8      |
| 1968  | -11.2      | 19.7        | 28.1      | -17.4    | -19.2     |
| 1969  | -15.1      | 11.6        | 35.0      | -20.1    | -11.4     |
| 1970  | -18.3      | 14.0        | 40.8      | -36.2    | -0.3      |
| 1971  | -30.3      | 17.3        | 30.4      | -10.8    | -5.2      |
| 1972  | -29.1      | 11.6        | 39.2      | -15.7    | -3.1      |
| 1973  | -14.5      | 14.0        | 48.2      | -19.1    | 2.1       |
| 1974  | -14.3      | 24.6        | 50.7      | -15.7    | -45.4     |
| 1975  | -20.0      | -16.0       | 81.2      | -22.7    | -22.5     |
| 1976  | -20.4      | -35.8       | 112.0     | -21.9    | -33.9     |
| 1977  | -17.4      | -76.1       | 166.5     | -27.3    | -45.7     |
| 1978  | -41.9      | -33.4       | 106.0     | -39.8    | 9.1       |
| 1979  | -42.5      | -59.5       | 145.8     | -42.1    | -1.8      |
| 1980  | 47.8       | -101.5      | 296.2     | -17.5    | -225.0    |
| 1981* | 74.4       | -98.1       | 213.2     | -37.3    | -171.3    |
| 1982* | 62.4       | -85.9       | 161.1     | -28.2    | -128.5    |

*Preliminary figures.

Sources: E. Torres-Rivas, “La crisis Económica Centroamericana: ¿Cuál crisis?”, INIES, Managua, 1983; Direction of Trade Statistics, IMF, Washington, D.C., 1983.
### TABLE 14
Dependency on Imports of Industrial Goods from the United States 1978, 1980 and 1982
(% of total imports by ISTC groups)

| ISTC | Industrial Groups       | 1978  | 1980  | 1982  |
|------|-------------------------|-------|-------|-------|
| 5    | Chemicals               | 60.9% | 51.5% | 39.2% |
| 6    | Other Intermediate Goods| 44.4% | 44.2% | 26.1% |
| 7    | Machinery and Transport Equipment | 46.2% | 40.3% | 31.1% |
| 5-7  | Sub-Total               | 51.8% | 47.1% | 33.6% |
|      | TOTAL IMPORTS           | 31.3% | 27.5% | 19.0% |

Source: Table 15 and Appendix Table 5.
| Country/Region                  | 1977  | 1978  | 1979  | 1980  | 1981  | 1982  | 1977  | 1978  | 1979  | 1980  | 1981  | 1982  |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| **Total (Thousand US$)**       | 636805| 645969| 566555| 466442| 407708| 376192| 407708| 761927| 593930| 360196| 887211| 999440|
| **Developing Countries**       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **CACM**                       | 21.0  | 22.6  | 15.9  | 16.2  | 13.9  | 12.8  | 21.6  | 23.4  | 30.9  | 33.9  | 21.1  | 15.1  |
| **LAFTA**                      | 2.6   | 0.5   | 0.6   | 0.1   | 3.4   | 3.6   | 14.7  | 14.8  | 21.3  | 20.2  | 26.0  | 28.9  |
| **Others**                     | 7.6   | 12.4  | 14.8  | 4.3   | 13.3  | 9.0   | 3.4   | 4.0   | 3.7   | 3.8   | 3.5   | 2.9   |
| **(Caribbean*)**               | ND    | ND    | ND    | (2.9) | (3.7) | (2.0) | ND    | ND    | ND    | (2.9) | (2.5) | 1.7   |
| **OECD**                       | 64.0  | 61.3  | 65.8  | 73.5  | 63.5  | 67.0  | 58.5  | 55.9  | 43.9  | 41.9  | 46.1  | 41.3  |
| **USA**                        | 22.7  | 23.2  | 31.7  | 33.3  | 23.0  | 23.7  | 28.8  | 31.3  | 25.2  | 27.5  | 26.3  | 19.0  |
| **EEC**                        | 28.4  | 27.9  | 26.3  | 27.8  | 20.7  | 22.9  | 12.6  | 11.5  | 9.7   | 7.8   | 11.5  | 14.1  |
| **Others OECD**                | 12.9  | 10.2  | 7.8   | 12.5  | 19.8  | 20.4  | 17.1  | 13.1  | 8.6   | 6.6   | 8.3   | 8.2   |
| **CMEA**                       | 1.0   | 0.2   | —     | 6.0   | 5.9   | 7.7   | 0.3   | 0.7   | 0.1   | 0.2   | 3.3   | 11.5  |
| **Eastern Europe**             | 1.0   | 0.2   | —     | 5.3   | 5.9   | 7.4   | 0.3   | 0.7   | 0.1   | 0.18  | 2.5   | 7.5   |
| **Cuba**                       | —     | —     | —     | 0.7   | 0.1   | 0.3   | —     | —     | —     | 0.02  | 0.8   | 3.9   |
| **Other Countries**            | 3.8   | 3.0   | 2.9   | —     | —     | —     | 1.5   | 1.2   | 0.5   | 0.02  | 0.03  | 0.3   |

*Does not include Cuba.

Source: Data elaborated by the author on the basis of information provided by MICE, The Nicaraguan Ministry of Foreign Trade.
### TABLE 16
Donations, Loans and Credits to Nicaragua
July 19, 1979-February 28, 1983
(million US$)

| Country/Organization        | Donations |   | Loans |   | Credits |   | TOTAL |   |
|-----------------------------|-----------|---|-------|---|---------|---|-------|---|
|                             | m.US$     | % | m.US$ | % | m.US$   | % | m.US$ | % |
| Multilateral Organizations  | 566.5     | 26.7 | 0     | 0 | 566.5 | 26.7 | 0     | 0 |
| United Nations              | 17.3      | 0.8 | 17.3  | 0.8 | 2.3  | 0.1 | 20.3  | 0.9 |
| Catholic Relief             | 1.2       | 0.6 | 1.2   | 0.6 | 0.6  | 0.3 | 2.4   | 0.9 |
| World Council of Churches   | 2.3       | 0.6 | 2.3   | 0.6 | 2.3  | 0.6 | 7.2   | 2.8 |
| CARE                        | 2.9       | 0.1 | 2.9   | 0.1 | 2.9  | 0.1 | 7.7   | 2.8 |
| Latin America               | 293.7     | 23.0 | 188.2 | 35.8 | 545.7 | 25.7 | 0     | 0 |
| Mexico                      | 43.3      | 14.9 | 65.4  | 12.4 | 315.1 | 14.9 | 0     | 0 |
| Venezuela                   | 5.9       | 2.4 | 3.0   | 0.6 | 96.2  | 4.5 | 0     | 0 |
| Others                      | 119.8     | 35.8 | 22.8  | 134.4 | 3.6  | 0.6 | 0     | 0 |
| USA                         | 2.3       | 0.6 | 94.1  | 4.4 | 0     | 0   | 0     | 0 |
| Canada                      | 2.4       | 0.6 | 6.8   | 0.3 | 0     | 0   | 0     | 0 |
| Western Europe              | 102.2     | 35.1 | 7.6   | 56.8 | 10.8  | 528.6 | 12.2 | 0 |
| Netherlands                 | 46.4      | 3.5 | 60.8  | 2.9 | 0     | 0   | 0     | 0 |
| Sweden                      | 6.3       | 0.8 | 17.4  | 0.8 | 0     | 0   | 0     | 0 |
| F.R. Germany                | 3.2       | 0.6 | 34.6  | 1.6 | 0     | 0   | 0     | 0 |
| France                      | 24.6      | 1.8 | 37.5  | 1.8 | 0     | 0   | 0     | 0 |
| Spain                       | 4.4       | 2.4 | 50.3  | 2.4 | 0     | 0   | 0     | 0 |
| Italy                       | 5.4       | 1.5 | 31.3  | 1.5 | 0     | 0   | 0     | 0 |
| Socialist Countries         | 183.6     | 13.9 | 52.8  | 24.6 | 0     | 0   | 0     | 0 |
| Cuba                        | 49.9      | 3.8 | 0.9   | 96.9 | 4.6 | 0     | 0 |
| USSR                        | 73.2      | 5.6 | 28.5  | 213.1 | 10.9 | 0     | 0 |
| GDR                         | 108.0     | 20.6 | 118.3 | 5.6 | 0     | 0   | 0     | 0 |
| Rest of the World           | 400.0     | 100.0 | 0.6   | 106.7 | 5.0 | 0     | 0 |
| Lybia                       | 100.0     | 100.0 | 100.0 | 2121.8 | 100.0 | 0     | 0 |
| TOTAL                       | 1318.6    | 100.0 | 525.5 | 100.0 | 2121.8 | 100.0 | 0     | 0 |

Source: Data elaborated on the basis of information provided by FIR (The International Fund for Reconstruction). Managua.
### TABLE 17
Manufacturing Production in the Caribbean Region 1960, 1970, 1978 and 1982
(million 1980 US$)

| Country         | 1960 m.US$ | 1960 % | 1970 m.US$ | 1970 % | 1978 m.US$ | 1978 % | 1982 m.US$ | 1982 % | Population 1982 millions % |
|-----------------|------------|--------|------------|--------|------------|--------|------------|--------|---------------------------|
| Costa Rica      | 157.1      | 4.2    | 366.3      | 6.0    | 742.0      | 7.3    | 674.4      | 6.3    | 2.3 4.8                   |
| El Salvador     | 204.4      | 5.5    | 446.7      | 7.3    | 704.8      | 7.1    | 450.8      | 4.2    | 5.1 10.7                  |
| Guatemala       | 388.7      | 9.9    | 769.9      | 12.6   | 1261.9     | 12.7   | 1304.6     | 12.2   | 12.4 15.5                 |
| Honduras        | 111.8      | 3.0    | 220.3      | 3.6    | 349.4      | 3.5    | 406.1      | 3.8    | 3.9 8.2                   |
| Nicaragua       | 145.8      | 3.9    | 416.2      | 6.8    | 636.5      | 6.4    | 572.9      | 5.3    | 2.5 5.2                   |
| CACM            | 987.2      | 26.5   | 2194.4     | 36.4   | 3676.6     | 37.0   | 3408.8     | 31.8   | 21.2 44.4                 |
| Panama          | 142.7      | 3.8    | 402.1      | 6.6    | 425.1      | 4.3    | 347.4      | 3.2    | 2.0 4.2                   |
| Central America | 1129.9     | 30.4   | 2621.5     | 42.9   | 4101.7     | 41.2   | 3756.2     | 35.1   | 23.2 48.5                 |
| Cuba            | 1584.4     | 42.6   | 2066.8     | 33.9   | 3869.2     | 38.8   | 4884.8     | 45.4   | 9.8 20.5                  |
| Dominican Republic | 265.4   | 7.1    | 541.9      | 8.9    | 945.1      | 9.5    | 1130.3     | 10.6   | 6.3 13.2                  |
| Haiti           | 110.3      | 3.0    | 117.7      | 1.9    | 212.4      | 2.1    | 223.4      | 2.1    | 5.2 10.9                  |
| Jamaica         | 334.2      | 9.0    | 592.4      | 9.7    | 566.5      | 5.7    | 471.9      | 4.4    | 2.2 4.6                   |
| Trinidad and Tobago | 294.7 | 7.9    | 163.9      | 2.7    | 261.2      | 2.6    | 262.2      | 2.4    | 1.1 2.3                   |
| Caribbean       | 2589.0     | 69.6   | 3482.8     | 57.1   | 5844.4     | 58.8   | 6952.6     | 64.9   | 24.6 51.5                 |
| Central America and Caribbean | 3718.9 | 100.0 | 6104.3 | 100.0 | 9946.1 | 100.0 | 10708.8 | 100.0 | 47.8 100.0 |

Sources: C. Brundenius, *Algunos aspectos sobre el desarrollo económico de Centro América y del Caribe, 1960-82*, (INIES, Managua, 1983) and *Informe del Banco Interamericano de Desarrollo*, Washington, D.C., 1983.
|                      | Central América | Cuba | Cuba/CA (CA = 100) |
|----------------------|----------------|------|-------------------|
| **Non-Durable**       |                |      |                   |
| **Consumer Goods**    |                |      |                   |
| 1970                 | 1961           | 1217 | 62                |
| 1978                 | 2994           | 1945 | 65                |
| 1982                 | 2901           | 2372 | 82                |
| **Annual Growth Rate**|                |      |                   |
| 1970-78              | 5.3%           | 5.9% |                   |
| 1978-82              | -0.8%          | 5.0% |                   |
| **Intermediate Goods**|                |      |                   |
| 1970                 | 413            | 676  | 163               |
| 1978                 | 701            | 1160 | 166               |
| 1982                 | 598            | 1476 | 247               |
| **Annual Growth Rate**|                |      |                   |
| 1970-78              | 6.7%           | 6.8% |                   |
| 1978-82              | -4.0%          | 6.0% |                   |
| **Capital Goods**    |                |      |                   |
| 1970                 | 247            | 174  | 70                |
| 1978                 | 388            | 754  | 194               |
| 1982                 | 313            | 1127 | 360               |
| **Annual Growth Rate**|                |      |                   |
| 1970-78              | 5.6%           | 18.4%|                   |
| 1978-82              | -5.4%          | 10.0%|                   |

Source: Claes Brundenius, Algunos Apuntes Sobre el Desarrollo Industrial de la Cuenca del Caribe, 1960-82 (INIES, Managua, 1983).
TABLE 19

Apparent Demand of Selected Commodities in Central America and in Cuba in 1980

(million 1980 US dollars)

| Production | Exports | Imports | Apparent Demand | Apparent Demand/Capita (dollars) |
|------------|---------|---------|-----------------|----------------------------------|
| **Textiles** |         |         |                 |                                  |
| Costa Rica | 97.4    | 33.2    | 61.3            | 125.5                           | 57 |
| El Salvador| 72.8    | 63.4    | 63.4            | 72.8                            | 15 |
| Guatemala  | 280.6   | 63.6    | 44.4            | 261.4                           | 37 |
| Honduras   | 61.1    | 13.5    | 35.7            | 83.3                            | 22 |
| Nicaragua  | 43.4    | 5.8     | 52.8            | 90.4                            | 37 |
| Central America | 555.3 | 179.5   | 257.6           | 633.4                           | 31 |
| Cuba       | 202.0   |         | 200.4           | 402.4                           | 42 |
| **Chemicals** |         |         |                 |                                  |
| Costa Rica | 229.9   | 70.4    | 273.7           | 433.2                           | 195 |
| El Salvador| 72.7    | 43.3    | 189.6           | 219.0                           | 46 |
| Guatemala  | 104.1   | 129.2   | 299.4           | 274.3                           | 39 |
| Honduras   | 55.0    | 35.5    | 154.3           | 173.8                           | 47 |
| Nicaragua  | 152.0   | 32.6    | 190.2           | 309.6                           | 128 |
| Central America | 613.7 | 924.7   | 1107.2          | 796.2                           | 40 |
| Cuba       | 920.0   | *       | 241.2           | 1161.2                          | 121 |
| **Metals Products** |         |         |                 |                                  |
| Costa Rica | 71.6    | 17.7    | 103.5           | 157.4                           | 71 |
| El Salvador| 22.5    | 15.1    | 43.6            | 51.0                            | 11 |
| Guatemala  | 229.7   | 79.7    | 95.5            | 245.5                           | 35 |
| Honduras   | 51.8    | 1.9     | 49.4            | 99.3                            | 27 |
| Nicaragua  | 35.7    | 2.7     | 37.7            | 70.7                            | 29 |
| Central America | 411.3 | 117.1   | 329.7           | 623.9                           | 31 |
| Cuba       | 196.5   | *       | 662.7           | 859.2                           | 90 |

* Negligible
TABLE 19

Apparent Demand of Selected Commodities in Central America and in Cuba in 1980
(million 1980 US dollars) (Cont.)

| Table | cont. | Production | Exports | Imports | Apparent Demand | Apparent Demand/Capita |
|-------|-------|------------|---------|---------|-----------------|------------------------|
| **Construction Materials** |       |            |         |         |                 |                        |
| Costa Rica | 6.67 | 9.0 | 24.6 | 82.3 | 37              |                         |
| El Salvador | 2.49 | 6.8 | 15.5 | 33.6 | 7               |                         |
| Guatemala | 13.30 | 22.2 | 28.4 | 139.2 | 20              |                         |
| Honduras | 45.2 | 0.8 | 18.9 | 63.3 | 17              |                         |
| Nicaragua | 34.6 | 1.8 | 14.4 | 47.2 | 19              |                         |
| Central America | 304.4 | 40.6 | 101.8 | 365.6 | 18              |                         |
| Cuba | 455.6 | * | 11.0 | 466.6 | 49              |                         |
| **Machinery** |       |            |         |         |                 |                        |
| Costa Rica | 29.3 | 3.3 | 155.9 | 181.9 | 82              |                         |
| El Salvador | 12.5 | 5.3 | 54.0 | 61.2 | 13              |                         |
| Guatemala | 28.3 | 2.0 | 154.8 | 181.1 | 26              |                         |
| Honduras | 3.1 | 0.0 | 140.4 | 143.5 | 39              |                         |
| Nicaragua | 6.1 | 1.0 | 58.7 | 63.8 | 26              |                         |
| Central America | 79.3 | 11.6 | 563.8 | 631.5 | 31              |                         |
| Cuba\(^1\) | 744.6 | * | 1603.4 | 2348.0 | 245             |                         |
| **Electric Machinery** |       |            |         |         |                 |                        |
| Costa Rica | 69.5 | 30.0 | 113.9 | 153.4 | 69              |                         |
| El Salvador | 48.4 | 11.8 | 48.2 | 84.8 | 18              |                         |
| Guatemala | 36.6 | 17.4 | 73.9 | 93.1 | 13              |                         |
| Honduras | 10.5 | 7.1 | 81.5 | 14     | 22              |                         |
| Nicaragua | 6.0 | 0.9 | 27.8 | 32.9 | 14              |                         |
| Central America | 171.0 | 60.1 | 334.8 | 445.7 | 22              |                         |
| Cuba | 201.0 | * | 49.6 | 250.6 | 26              |                         |

* Negligible

\(^1\)Including transport equipment.
**TABLE 19**

Apparent Demand of Selected Commodities in Central America and in Cuba in 1980  
(million 1980 US dollars) (Cont.)

| Table                  | cont. | Production | Exports | Imports | Apparent Demand | Apparent Demand/Capita |
|------------------------|-------|------------|---------|---------|-----------------|------------------------|
| **Transport Equipment**|       |            |         |         |                 | (dollars)              |
| Costa Rica             |       | 68.0       | 4.0     | 111.2   | 175.2           | 79                     |
| El Salvador            |       | 15.6       | 1.3     | 27.0    | 41.3            | 9                      |
| Guatemala              |       | 25.7       | 2.2     | 115.3   | 138.8           | 20                     |
| Honduras               |       | 2.6        | 0.1     | 89.1    | 91.6            | 25                     |
| Nicaragua              |       | 2.2        | *       |         | 38.7            | 16                     |
| Central America        |       | 114.1      | 7.6     | 379.1   | 485.6           | 24                     |
| Cuba                   |       | n.d.       | n.d.    | n.d.    | n.d.            | n.d.                   |
| **Total Capital Goods**|       |            |         |         |                 |                        |
| Costa Rica             |       | 166.8      | 37.3    | 380.9   | 510.4           | 230                    |
| El Salvador            |       | 76.5       | 18.3    | 129.3   | 187.5           | 39                     |
| Guatemala              |       | 90.6       | 21.6    | 343.9   | 412.9           | 59                     |
| Honduras               |       | 16.2       | 0.1     | 300.4   | 316.5           | 85                     |
| Nicaragua              |       | 14.3       | 1.9     | 122.9   | 135.3           | 56                     |
| Central America        |       | 364.4      | 79.2    | 1277.4  | 1562.6          | 78                     |
| Cuba                   |       | 945.6      | *       | 1662.0  | 2597.6          | 271                    |

* Negligible
## APPENDIX TABLE 1

### Manufacturing Industry: Gross Value of Production in Constant Prices

| BRANCH                        | 1960  | 1961  | 1962  | 1963  | 1964  | 1965  | 1966  | 1967  | 1968  | 1969  | 1970  |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Food                          | 427.3 | 488.4 | 563.6 | 653.2 | 694.2 | 748.3 | 802.4 | 943.3 | 1,003.0 | 1,061.5 | 1,128.7 |
| Beverages                     | 49.5  | 57.8  | 64.6  | 76.9  | 88.1  | 105.0 | 115.9 | 121.3 | 136.9  | 128.7  | 134.7  |
| Tobacco                       | 38.7  | 38.0  | 39.0  | 42.1  | 45.4  | 46.9  | 51.2  | 51.8  | 52.3  | 57.9  | 62.7  |
| Textiles                      | 43.0  | 49.9  | 62.2  | 88.2  | 106.3 | 124.2 | 106.7 | 110.2 | 105.3  | 102.3  | 119.4  |
| Footwear and Apparel          | 57.7  | 64.1  | 73.3  | 83.3  | 87.5  | 89.1  | 98.3  | 102.1 | 98.9  | 108.1  | 109.9  |
| Wood and Cork                 | 36.8  | 31.4  | 33.6  | 34.6  | 37.2  | 35.6  | 44.5  | 48.5  | 52.2  | 59.7  | 68.2  |
| Furniture and Accessories     | 6.0   | 7.7   | 9.4   | 13.3  | 14.7  | 12.4  | 14.6  | 16.2  | 22.1  | 21.9  | 20.9  |
| Paper and Paper Products      | 3.0   | 3.8   | 4.6   | 8.7   | 29.4  | 19.7  | 18.8  | 30.4  | 38.4  | 36.2  | 33.0  |
| Printing and Graphic Industry | 15.8  | 18.5  | 25.0  | 23.6  | 16.0  | 32.7  | 43.0  | 39.3  | 49.2  | 48.1  | 49.1  |
| Leather and Leather Products  | 12.8  | 14.9  | 16.0  | 18.5  | 19.0  | 17.8  | 18.7  | 19.9  | 23.0  | 25.7  | 29.0  |
| Rubber Products               | 2.4   | 2.2   | 3.9   | 3.5   | 3.9   | 4.7   | 9.2   | 11.4  | 10.5  | 9.2   |       |
| Chemicals                     | 65.0  | 76.5  | 100.1 | 127.4 | 148.8 | 171.3 | 176.1 | 194.4 | 207.4 | 244.2 | 282.0 |
| Petroleum and Derivates       |       |       |       | 32.2  | 50.0  | 46.9  | 51.0  | 61.5  | 68.5  | 83.2  | 84.6  |
| Non-Metalic Mineral Products  | 20.9  | 23.7  | 26.3  | 30.5  | 36.0  | 43.6  | 52.8  | 57.9  | 63.6  | 78.7  | 85.2  |
| Metal Products                | 14.2  | 19.3  | 25.0  | 48.2  | 63.1  | 82.0  | 80.4  | 74.5  | 101.9 | 111.9 | 134.9 |
| Machinery, Electric and Non-Elect. | 1.1   | 1.2   | 1.3   | 1.4   | 1.6   | 2.9   | 5.1   | 11.8  | 25.3  | 29.1  | 30.8  |
| Transport Equipment           | 0.3   | 0.4   | 0.7   | 0.9   | 1.1   | 1.5   | 2.7   | 3.0   | 5.2   | 3.9   | 5.1   |
| Other Industries              | 4.8   | 6.4   | 8.3   | 13.7  | 20.4  | 29.6  | 37.8  | 43.1  | 51.4  | 59.7  | 67.7  |
| **TOTAL**                     | 799.3 | 904.2 | 1,056.9 | 1,297.5 | 1,462.7 | 1,612.4 | 1,724.7 | 1,938.4 | 2,116.0 | 2,271.3 | 2,455.1 |

Estimated figures.

Sources: MIPLAN (Industrial and Mining Departament).
## Manufacturing Industry: Gross Value of Production in Constant Prices  
(continued)

|        | 1971   | 1972   | 1973   | 1974   | 1975   | 1976   | 1977   | 1978   | 1979   | 1980   | 1981   | 1982   | 1983*  |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| DE 1958| -------| -------| -------| -------| -------| -------| -------| -------| -------| -------| -------| -------| -------|
|        | 1,226.5| 1,245.7| 1,173.4| 1,198.8| 1,421.7| 1,465.1| 1,571.3| 1,655.2| 1,390.6| 1,386.4| 1,433.0| 1,625.0| 1,719.2|
|        | 138.7  | 143.9  | 169.5  | 206.4  | 196.2  | 222.3  | 286.7  | 291.4  | 233.1  | 343.9  | 333.9  | 308.9  | 312.3  |
|        | 63.0   | 62.2   | 74.5   | 80.2   | 81.2   | 99.6   | 106.8  | 103.6  | 80.8   | 119.7  | 115.5  | 99.7   | 100.7  |
|        | 131.4  | 152.9  | 151.1  | 170.2  | 177.7  | 187.4  | 177.5  | 171.9  | 107.7  | 102.4  | 140.9  | 145.8  | 191.6  |
|        | 109.5  | 114.0  | 110.8  | 112.7  | 87.3   | 100.2  | 98.3   | 85.4   | 48.4   | 112.3  | 123.5  | 113.4  | 121.0  |
|        | 73.5   | 78.6   | 80.4   | 88.9   | 122.0  | 116.3  | 124.1  | 99.2   | 58.5   | 60.8   | 63.7   | 54.7   | 52.9   |
|        | 18.6   | 18.1   | 15.1   | 19.9   | 19.3   | 20.6   | 27.3   | 26.7   | 18.3   | 16.6   | 17.5   | 15.2   | 12.8   |
|        | 26.4   | 31.7   | 54.1   | 65.5   | 66.3   | 74.6   | 85.3   | 94.2   | 56.2   | 46.6   | 51.2   | 63.3   | 83.2   |
|        | 46.3   | 55.1   | 49.3   | 59.5   | 51.1   | 53.9   | 61.0   | 50.4   | 37.0   | 56.7   | 62.2   | 65.2   | 66.3   |
|        | 30.8   | 30.3   | 23.0   | 19.8   | 23.8   | 22.1   | 23.1   | 26.0   | 23.4   | 25.1   | 20.1   | 21.7   | 23.1   |
|        | 7.7    | 9.5    | 8.0    | 8.5    | 9.3    | 9.9    | 10.9   | 11.1   | 8.3    | 20.7   | 21.9   | 22.5   | 25.5   |
|        | 274.5  | 378.6  | 444.2  | 515.1  | 479.9  | 507.0  | 548.7  | 554.8  | 375.6  | 399.5  | 385.5  | 342.7  | 374.6  |
|        | 90.2   | 93.2   | 113.9  | 116.1  | 131.6  | 142.4  | 153.0  | 136.9  | 96.6   | 140.2  | 157.3  | 134.5  | 140.0  |
|        | 91.0   | 106.7  | 153.1  | 200.7  | 145.1  | 162.5  | 174.0  | 148.2  | 64.8   | 108.6  | 102.1  | 96.3   | 106.7  |
|        | 165.9  | 167.6  | 180.9  | 244.9  | 185.2  | 146.8  | 166.7  | 171.0  | 84.1   | 118.5  | 115.1  | 128.1  | 142.2  |
|        | 33.8   | 37.5   | 38.3   | 46.4   | 53.5   | 51.0   | 73.5   | 75.5   | 39.6   | 30.7   | 24.6   | 18.9   | 19.5   |
|        | 5.9    | 3.8    | 5.5    | 9.7    | 9.6    | 11.5   | 10.7   | 11.1   | 6.6    | 7.1    | 8.0    | 5.8    | 5.6    |
|        | 67.1   | 42.6   | 46.6   | 60.7   | 60.6   | 61.5   | 91.3   | 95.8   | 57.4   | 36.2   | 39.5   | 35.8   | 37.3   |
|        | 2.600.8| 2.772.0| 2.891.7| 3.222.0| 3.320.4| 3.453.7| 3.789.2| 3.808.4| 2.787.0| 3.131.0| 3.215.5| 3.297.5| 3.536.5|
APPENDIX TABLE 2

Nicaragua: Anual Growth Rates of the Manufacturing Sector by Quinquenium 1945-75, 1975-78, 1979, 1980, 1981, 1982, 1983

| CIU         | B R A N C H             | 1945-50 | 1950-55 | 1955-60 | 1960-65 | 1965-70 | 1970-75 | 1975-78 | 1979 | 1980 | 1981 | 1982* | 1983* |
|-------------|-------------------------|---------|---------|---------|---------|---------|---------|---------|------|------|------|------|------|
| 311/312     | Food                    | 9.7     | 6.8     | 6.2     | 11.2    | 8.2     | 4.6     | 5.1     | -16.0| -0.3| 3.4  | 13.4 | 5.8  |
| 313         | Beverages               | -0.1    | 14.9    | -0.1    | 15.0    | 5.0     | 7.4     | 13.4    | -20.0| 47.5| -2.9 | -7.5 | 1.1  |
| 314         | Tobacco                 | 5.1     | 7.4     | 0.7     | 3.8     | 5.8     | 5.2     | 8.1     | -22.0| 48.1| -3.5 | -13.7| 1.0  |
| 321         | Textiles                | 8.0     | 39.0    | -3.3    | 21.2    | -0.8    | 8.0     | -1.1    | -37.3| -4.9| 37.6 | 3.5  | 31.4 |
| 322/324     | Footwear and Apparel    | 5.6     | 5.9     | 3.2     | 8.7     | 4.2     | -4.6    | -0.7    | -43.3| 132.0| 10.0 | -8.2 | 6.7  |
| 331         | Wood and Cork           | 8.3     | 17.1    | -3.6    | -0.7    | 13.0    | 11.6    | -6.9    | -41.0| 3.9  | 4.8  | -14.1| -3.3 |
| 332         | Furniture and Accessories| 5.2    | 7.8     | 4.9     | 14.5    | 10.4    | -1.6    | 10.8    | -31.5| -9.3 | 5.4  | -13.1| -15.8|
| 341         | Paper and Paper Products| -      | -       | -       | -       | 37.6    | 10.3    | 14.0    | -40.3| -17.1| 9.9  | 23.6 | 31.4 |
| 342         | Printing and Graphic Industry| -4.2 | 7.4     | -0.8    | 14.5    | 8.1     | 0.8     | -0.5    | -26.6| 50.5 | 11.7 | 4.8  | 1.7  |
| 323         | Leather and Leather Products| 8.0 | 5.2     | 4.4     | 6.8     | 9.8     | -4.0    | 2.9     | -10.0| 7.3  | -19.9| 8.0  | 6.5  |
| 355         | Rubber Products         | 2.8     | 35.0    | 4.6     | 9.7     | 17.2    | 0.2     | 5.9     | -25.2| 149.4| 5.8  | 2.7  | 13.3 |
| 351/352     | Chemicals               | 2.3     | 9.9     | 5.0     | 19.4    | 10.0    | 10.6    | 4.8     | -32.3| 9.4  | -3.5 | -11.1| 9.3  |
| 353         | Petroleum and derivatives| -      | -       | -       | 17.7    | 12.2    | 8.8     | 1.3     | -29.4| 45.1 | 12.2 | -14.4| 4.1  |
| 36          | Non-Metallic Mineral Prod.| 11.3  | 15.1    | -0.3    | 14.7    | 13.4    | 10.6    | 0.7     | 156.3| 67.6 | -6.0 | -5.7 | 12.9 |
| 381         | Metal Products          | -5.1    | 9.2     | 17.7    | 19.4    | 47.3    | 11.0    | 11.5    | -47.2| -22.5| -19.9| -23.2| 3.2  |
| 382/383     | Transport Equipment     | 14.9    | 23.0    | 11.5    | 32.2    | 24.5    | 12.7    | 4.8     | -40.5| 7.6  | 12.7 | -27.5| -3.4 |
| 39          | Other Industries        | 6.1     | 10.9    | 3.1     | 36.4    | 16.5    | -2.2    | 15.3    | -40.1| -36.9| 9.1  | -9.4 | 4.2  |

GROSS VALUE OF PRODUCTION

|               | 1945-65 | 1960-65 | 1965-70 | 1970-75 | 1975-78 | 1979 | 1980 | 1981 | 1982* | 1983* |
|---------------|---------|---------|---------|---------|---------|------|------|------|------|------|
| 6.2           | 10.6    | 2.8    | 14.0    | 8.4    | 6.0    | 4.6  | -26.8| 12.3 | 2.7  | 2.6  |

*1963-65 (there was no production before)
Source: 1945-60: Análisis y Proyecciones del Desarrollo Económico: El Desarrollo Económico de Nicaragua, (Naciones Unidas, Nueva York, 1969). Table 135.
1960-62: See Table 1
## APPENDIX TABLE 3

### Destination of Nicaraguan Industrial Production by 4-Digit ISIC-Groups

| CIU   | RAMA                | 1976  | 1979  | 1980  | 1981  |
|-------|---------------------|-------|-------|-------|-------|
|       |                     | I*    | II    | III   | IV    | I*    | II    | III   | IV    |
| 31    | Alimentos, bebidas y tabaco | 1978  | 57.2  | 7.6   | 41.0  | 1979  | 57.2  | 7.6   | 41.0  |
| 32    | Textiles, prendas de vestir, cuero y calzado | 239   | 76.2  | 15.9  | 7.9   | 238   | 76.2  | 15.9  | 7.9   |
| 33    | Madera y productos | 159   | 39.0  | 14.5  | 46.6  | 159   | 39.0  | 14.5  | 46.6  |
| 34    | Papel y productos | 124   | 97.6  | 2.4   | 97.6  | 133   | 97.6  | 2.4   | 97.6  |
| 35    | Sustancias químicas y prod. quím. | 1173  | 78.1  | 20.1  | 0.8   | 1173  | 78.1  | 20.1  | 0.8   |
| 3511  | Sustancias químicas básicas | 139   | 39.8  | 55.0  | 4.6   | 143   | 42.1  | 50.9  | 7.0   |
| 3512  | Abonos y plaguicidas | 264   | 65.5  | 33.3  | 1.2   | 261   | 65.5  | 33.3  | 1.2   |
| 3513  | Resinas sintéticas, fibras artif. | No**  | No**  | No**  | No**  | 13    | 87.5  | 12.5  | 13    |
| 3521  | Pintura, barnices y lacas | No**  | No**  | No**  | No**  | 13    | 87.5  | 12.5  | 13    |
| 3522  | Prod. farmacéuticos y medicamentos | 41    | 92.3  | 7.5   | 0.2   | 41    | 92.3  | 7.5   | 0.2   |
| 3523  | Jabones y preparados de limpieza | 45    | 93.5  | 6.5   | 93.5  | 45    | 93.5  | 6.5   | 93.5  |
| 3529  | Productos químicos nep | 35    | 51.0  | 48.0  | 0.2   | 35    | 51.0  | 48.0  | 0.2   |
| 3530  | Refinerías de petróleo | 564   | 95.9  | 4.1   | 95.9  | 564   | 95.9  | 4.1   | 95.9  |
| 3551  | Llanzas | 10    | 100.0 | 0.0   | 100.0 | 10    | 100.0 | 0.0   | 100.0 |
| 3560  | Productos químicos nep | 38    | 56.0  | 44.0  | 0.2   | 38    | 56.0  | 44.0  | 0.2   |
| 36    | Productos minerales no metálicos | 196   | 85.6  | 14.4  | 14.4  | 196   | 85.6  | 14.4  | 14.4  |
| 36    | Metálicas básicas | 24    | 76.2  | 23.8  | 23.8  | 24    | 76.2  | 23.8  | 23.8  |
| 38    | Prod. metálicos, maq. y equipo | 263   | 70.0  | 30.0  | 30.0  | 263   | 70.0  | 30.0  | 30.0  |
| 381   | Productos metálicos | 185   | 66.5  | 33.5  | 33.5  | 185   | 66.5  | 33.5  | 33.5  |
| 3812  | Muebles y accesorios metálicos | 12    | 100.0 | 0.0   | 100.0 | 12    | 100.0 | 0.0   | 100.0 |
| 3813  | Productos metálicos estructurales | 82    | 84.1  | 15.9  | 15.9  | 82    | 84.1  | 15.9  | 15.9  |
| 3819  | Productos metálicos nep | 90    | 46.3  | 53.7  | 43.7  | 90    | 46.3  | 53.7  | 43.7  |
| 382   | Maquinaria no eléctrica | No    | No    | No    | No    | 11    | 31.3  | 63.4  | 5.3   |
| 3822  | Maquinaria para la agricultura | No    | No    | No    | No    | 11    | 31.3  | 63.4  | 5.3   |
| 3829  | Maquinaria no eléctrica nep | No    | No    | No    | No    | 11    | 31.3  | 63.4  | 5.3   |
| 383   | Maquinaria eléctrica | 66    | 80.3  | 19.7  | 19.7  | 66    | 80.3  | 19.7  | 19.7  |
| 3831  | Maquinarias industriales | 122   | 71.0  | 29.0  | 29.0  | 122   | 71.0  | 29.0  | 29.0  |
| 3832  | Aparatos de radio y televisión | 51    | 184.3 | 15.7  | 15.7  | 51    | 184.3 | 15.7  | 15.7  |
| 3839  | Maquinaria y aparatos eléct. nep | 15    | 70.1  | 29.9  | 29.9  | 15    | 70.1  | 29.9  | 29.9  |
| 384   | Material de transporte | 51    | 184.3 | 15.7  | 15.7  | 51    | 184.3 | 15.7  | 15.7  |
| 3841  | Construcción y rep. de barcos | 51    | 184.3 | 15.7  | 15.7  | 51    | 184.3 | 15.7  | 15.7  |
| 3843  | Fabricación de vehículos | 51    | 184.3 | 15.7  | 15.7  | 51    | 184.3 | 15.7  | 15.7  |
| 3844  | Fabricación de motoicicletas | 51    | 184.3 | 15.7  | 15.7  | 51    | 184.3 | 15.7  | 15.7  |
| 385   | Equipo profesional y científico | 12    | 63.4  | 36.6  | 36.6  | 12    | 63.4  | 36.6  | 36.6  |

| TOTAL INDUSTRIA | 4139 | 64.5 | 13.6 | 22.0 | 5025 | 61.8 | 12.9 | 25.3 | 7234 | 77.7 | 7.9 | 14.3 | 9537 | 88.2 | 5.5 | 6.3 |

I = Total ventas
II = % en el país
III = % MCCA
IV = % Resto del mundo
* Millones de Córdobas
** Incluido en 3530
# APPENDIX TABLE 4

NICARAGUA: Imports of Industrial Goods in Relation to Gross Value of Production by 4-Digit ISIC-Groups

NICARAGUA: Insumos importados en relación del VBP por rama industrial 1976, 1979-81

| CIIU | RAMA | 1976 | 1979 | 1980 | 1981 |
|------|------|------|------|------|------|
| 31   | Alimentos, bebidas y tabaco | .09 | .07 | .16 | .11 |
| 32   | Textiles, prendas de vestir, cuero y calzado | .12 | .20 | .16 | .16 |
| 33   | Madera y productos | .08 | .05 | .05 | .05 |
| 34   | Papel y productos | .52 | .32 | .51 | .30 |
| 35   | Sust. químicas y productos químicos | .55 | .66 | .58 | .58 |
| 3511 | Sustancias químicas básicas | .17 | .30 | .24 | .19 |
| 3512 | Abonos y paquicidas | .30 | .39 | .23 | .33 |
| 3513 | Resinas sintéticas, fibras artif. | .30 | .39 | .42 | .40 |
| 3521 | Prod. Farmacéuticos y medicamentos | NO* | .23 | .38 | .31 |
| 3522 | Jabones y preparados de limpieza | .16 | .24 | .28 | .24 |
| 3523 | Productos químicos nep | .28 | .38 | .44 | .39 |
| 3529 | Productos químicos nep | .41 | .37 | .32 | .29 |
| 3530 | Refinerías de petróleo | .83 | .90 | .71 | .77 |
| 3551 | Llantas | .39 | .34 | .30 | .23 |
| 3560 | Productos plásticos nep | .28 | .44 | .43 | .35 |
| 36   | Productos minerales no metálicos | .09 | .09 | .07 | .05 |
| 37   | Metálicas básicas | .43 | .23 | .28 | .30 |
| 38   | Prod. metálicos, maquinaria y equipo | .35 | .43 | .51 | .36 |
| 381  | Productos metálicos | .28 | .50 | .56 | .39 |
| 3812 | Muebles y accesorios metálicos | .18 | .23 | .27 | .26 |
| 3813 | Productos metálicos estructurales | .33 | .38 | .41 | .37 |
| 3819 | Productos metálicos nep | .25 | .66 | .71 | .41 |
| 382  | Maquinaria no eléctrica | No** | .33 | .50 | .32 |
| 3822 | Maquinaria para la agricultura | — | — | — | — |
| 3829 | Maquinaria no eléctrica nep | No** | .33 | .50 | .46 |
| 383  | Maquinaria eléctrica | No** | .20 | .38 | .30 |
| 3831 | Máquinas industriales | No** | .04 | — | — |
| 3832 | Aparatos de radio y televisión | .40 | — | .07 | .59 |
| 3839 | Maquinaria y aparatos eléctricos nep | .52 | .24 | .40 | .30 |
| 384  | Material de transporte | — | — | .03 | .32 |
| 3841 | Construcción y reparación de barcos | — | — | .03 | .50 |
| 3843 | Fabricación de vehículos | — | — | — | — |
| 3844 | Fabricación de motocicletas | — | — | — | — |
| 385  | Equipo profesional y científico | No** | .37 | .32 | .27 |

TOTAL INDUSTRIA | .25 | .26 | .33 | .29

* Incluido en 3530

* Datos no disponibles por separado pero están incluidos en 38

Fuentes: Encuesta Anual de la Industria Manufacturera 1976 (Banco Central de Nicaragua); Encuesta Anual Industria Manufacturera 1979, 1980 y 1981 (INEC).
APPENDIX TABLE 5
Dependency on Industrial Imports from the United States, 1978, 1980, 1982
Dependencia de Insumos Importados de los Estados Unidos 1978, 1980 y 1982 (Miles de US$)

| NAUCA          | PRODUCTOS QUIMICOS                  | 1978 | 1980 | 1982 |
|----------------|-------------------------------------|------|------|------|
|                | De los EE.UU                        | %    | De los EE.UU | %    | De los EE.UU | %    |
|                | Miles de $                         |       | Miles de $   |       | Miles de $   |       |
| 511092900      | Compuestos inorgánicos             | 2843 | 75.1 | 15   | 31.3 | —     | —     |
| 512090209      | Compuestos orgánicos P/Prep. Insect.| 1796 | 88.1 | 1315 | 84.7 | —     | —     |
| 512090303      | DPT                                 | 1341 | 66.7 | 502  | 28.4 | —     | —     |
| 512090309      | Otros Prod. Químicos P/Prep. Insect.| 6206 | 99.1 | 10207| 99.0 | 3537  | 61.0  |
| 512091009      | Compuestos Nitrogenados             | 1099 | 95.2 | 648  | 91.9 | 66    | 48.5  |
| 512091201      | Amino-Fenoles P/Prep. Inst.         | 6931 | 36.3 | 4234 | 45.1 | 4096  | 40.4  |
| 501020000      | Abonos Fosfatados                   | 2151 | 73.2 | 7604 | 99.8 | 1428  | 100.0 |
| 512092029      | Compuestos orgánicos (Demás)        | 614  | 79.8 | 1286 | 87.7 | 790   | 99.0  |
| 541090409      | Antibióticos                        | 766  | 6.9  | 1171 | 6.4  | 445   | 3.8   |
| 561030000      | Abonos Nitrogenados                 | 62   | 0.6  | 5910 | 36.6 | 1659  | 24.0  |
| 561030000      | Abonos Potasioxos                   | 257  | 33.8 | 1296 | 60.1 | 370   | 100.0 |
| 561090000      | Abonos Mezclados                    | 675  | 31.7 | 9145 | 96.0 | 846   | 60.0  |
| 599010409      | Mat. Plásticos y Sintéticos         | 7282 | 75.4 | 9337 | 78.8 | 4476  | 43.3  |
| 599020000      | Insecticidas Nep.                   | 1808 | 38.1 | 4433 | 17.5 | 4890  | 48.8  |
| 599091509      | Otros Prod. Químicos                | 996  | 53.6 | 6782 | 83.6 | 1488  | 63.0  |
| TOTAL MUESTRA  |                                     | 34827| 60.9 | 63885| 51.5 | 24091 | 39.2  |

* Del total de Importaciones del rubro.

Fuentes: Nicaragua: Comercio Exterior 1978; Nicaragua: Comercio Exterior 1980 (MIPLAN) y cifras no publicadas para 1982 (MICE)
### Dependency on Industrial Imports from the United States, 1978, 1980, 1982 (continued)

Dependencia de Insumos Importados de los Estados Unidos 1978, 1980 y 1982 (Cont.)

| NAUCA | PRODUCTOS MANUFACTURADOS | 1978 | 1980 | 1982 |
|-------|--------------------------|------|------|------|
|       |                          | De los EEUU | %* | De los EEUU | %* | De los EEUU | %* |
|       |                          | Miles de $ |    | Miles de $ |    | Miles de $ |    |
| 629010201 | Llantas y Neumáticos | 1458 | 41.0 | 3351 | 62.4 | 3573 | 46.8 |
| 629010209 | Llantas Nep | 402 | 11.5 | 1167 | 19.4 | 212 | 3.9 |
| 641190900 | Cartulina | 2218 | 84.6 | 83 | 11.3 | 177 | 34.6 |
| 652020501 | Tejidos de algodón (Blanq) | 31 | 6.6 | 1413 | 26.3 | 140 | 12.9 |
| 681030000 | Hierro y acero de lingotes | 32 | 1.9 | 2673 | 83.0 | 400 | 12.1 |
| 699120200 | Herramientas de mano | 1188 | 62.5 | 1702 | 64.5 | 1304 | 35.9 |
| 699210600 | Envases desarmados |       |     |       |     |       |     |
|         | TOTAL MUESTRA | 6985 | 44.4 | 10595 | 44.2 | 5868 | 26.1 |

* Del total de Importaciones del rubro.

**Fuentes:** Nicaragua: Comercio Exterior 1978; Nicaragua: Comercio Exterior 1980 (MIPLAN) y cifras no publicadas para
### Dependency on Industrial Imports from the United States, 1978, 1980, 1982 (continued)

### Dependencia de Insumos Importados de los Estados Unidos 1978, 1980 y 1982 (Cont.)

| NAUCA       | MAQUINARIA Y MATERIAL DE TRANSPORTE                                                                 | 1978     | 1980     | 1982     |
|-------------|---------------------------------------------------------------------------------------------------|----------|----------|----------|
|             |                                                                                                   | De los EEUU | %*       | De los EEUU | %*       | De los EEUU | %*       |
|             |                                                                                                   | Miles de $ |          | Miles de $ |          | Miles de $ |          |
| 711050101   | Motores diesel para vehículos                                                                       | 1824      | 56.0     | 2434      | 66.1     | 3604       | 51.9     |
| 712020100   | Máquinas para recolección                                                                           | 310       | 52.9     | 3088      | 51.7     | 3162       | 75.7     |
| 712020200   | Trilladoras y desgranadoras                                                                          | 1968      | 86.1     | 1512      | 67.7     | 782        | 71.3     |
| 713010000   | Tractores (Exc. de vapor)                                                                            | 2054      | 37.7     | 5513      | 68.2     | 989        | 8.3      |
| 716010200   | Bombas para agua                                                                                    | 2004      | 71.9     | 1230      | 68.1     | 2135       | 73.2     |
| 716030300   | Gatos, micas, garruchas                                                                             | 1082      | 86.2     | 605       | 70.3     | 1143       | 49.1     |
| 716030400   | Maquinaria para excavar                                                                              | 4245      | 63.9     | 1442      | 25.5     | 1755       | 14.1     |
| 716130409   | Bombas de aire                                                                                      | 1310      | 90.2     | 1364      | 96.4     | 1048       | 63.9     |
| 716130800   | Máquinas para limpiar                                                                               | 1086      | 85.5     | 523       | 76.6     | 512        | 61.5     |
| 716132400   | Maq. y Utens. Mec. no El.                                                                            | 2242      | 83.7     | 825       | 92.6     | 382        | 41.0     |
| 716140000   | Cojinetes de bolas                                                                                  | 906       | 56.2     | 1302      | 56.4     | 1394       | 44.2     |
| 721010400   | Transformadores eléctricos                                                                            | 1678      | 72.5     | 715       | 37.5     | 1345       | 51.1     |
| 721040109   | Radio receptores (demás)                                                                             | 1925      | 64.4     | 829       | 33.1     | 703        | 29.8     |
| 721040400   | Condensadores                                                                                       | 1205      | 51.9     | 404       | 92.7     | 585        | 70.4     |
| 721050000   | Aparatos para Telegr. y Teléf.                                                                       | 1359      | 27.8     | 275       | 19.1     | 545        | 9.4      |
| 721130000   | Cables y alambres aislados                                                                            | 303       | 13.3     | 1352      | 31.4     | 710        | 22.8     |
| 732010206   | Stationwagons con tracción                                                                           | 1316      | 68.0     | 402       | 70.4     | 235        | 25.2     |
| 732030203   | Camionetas ("Pickups")                                                                              | 1366      | 19.5     | 907       | 8.2      |            |          |
| 732030209   | Camionetas grandes                                                                                  | 3691      | 35.0     | 1879      | 37.8     | 241        | 8.3      |
| 732060004   | Chasis sin motor                                                                                    |            |          |           |          |            |          |
| TOTAL MUESTRA|                                                                                                   | 33369     | 46.2     | 27621     | 40.3     | 22412      | 31.1     |
| TOTAL MUESTRAS (5+6+7) |                                                                                          | 75181     | 51.8     | 102101    | 47.1     | 52371      | 33.6     |
| TOTAL MUESTRAS SOBRE TOTAL DE IMPORTACIONES |                                                                                                      | 40.0 | 24.4 | 41.9 | 24.4 | 35.5 | 20.1 |

* Del total de importaciones del rubro

**Fuentes:** Nicaragua: Comercio Exterior 1978; Nicaragua: Comercio Exterior 1980 (MIPLAN) y cifras no publicadas para 1982 (MICE)
APPENDIX TABLE 6
Imports of Most Important Goods from Cuba in 1982

NICARAGUA: Importaciones de los productos más importantes de Cuba en 1982

| NAUCA               | PRODUCTOS                                      | Miles de $  | %   |
|---------------------|------------------------------------------------|-------------|-----|
| 771020000           | Cemento                                       | 10681.9     | 34.9|
| 681040009           | Viquetas, etc. P/ reforzar concreto            | 1647.7      | 5.4 |
| 811010100           | Edificios prefabr. (de madera)                | 1647.5      | 5.4 |
| 661090009           | Asbestocemento                                 | 1554.5      | 5.1 |
| 723030209           | Equip. electr. P/ Transformación              | 808.9       | 2.6 |
| 681130009           | Tubos y cañerías de hierro o acero            | 656.0       | 2.1 |
| 713010009           | Tractores (Exc. a vapor)                      | 424.1       | 1.4 |
| 541090409           | Medicamentos P/ uso interno                   | 314.9       | 1.0 |
| 716003000           | Gatos, Micas y garruchas                      | 254.6       | 0.8 |
| 716030400           | Maquinaria P/ excavar etc.                    | 247.3       | 0.8 |
| 723010101           | Alambre de cobre desnudo                      | 208.0       | 0.7 |
| 042020099           | Arroz (Semillas)                              | 199.5       | 0.7 |
| 723030202           | Cable de Cobre aislado                        | 142.6       | 0.5 |
| 541080403           | Antibióticos                                  | 119.5       | 0.4 |
| 716131600           | Maq. para separar o mezclar tierra           | 93.2        | 0.3 |
| 733090300           | Carretas para carga                           | 58.6        | 0.2 |
| 699120200           | Herramientas de mano                          | 50.1        | 0.2 |
| **SUB TOTAL**       |                                                | **17461.4** | **57.1**|
| **TOTAL**           |                                                | **30581.0** | **100.0**|

Fuente: MICE (Ministerio de Comercio Exterior), Managua