Colombia
Manufacturing Sector Developments and Changes in Foreign Trade and Financial Policies
(In Two Volumes) Volume I: Summary Report
January 21, 1983
Projects Department
Latin America and the Caribbean Regional Office
FOR OFFICIAL USE ONLY

Document of the World Bank
This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.
CURRENCY EQUIVALENTS 1/

Currency Unit = Colombian Peso (Col$)

US$1.0  =  Col$70.11
Col$1.0  =  US$.0143
Col$1.0 million  =  US$14,164

GLOSSARY OF ABBREVIATIONS

ANDI  Asociacion Nacional de Industriales
(National Association of Manufacturers)

ASOBANCARIA  Asociacion Bancaria
(Banking Association of Colombia)

BR  Banco de La Republica
(The Central Bank)

CAF  Corporacion Andina de Fomento
(Industrial Financing Agency of Andean Common Market)

CAT  Certificado de Abono Tributario
(Tax Rebate Certificate for Non-traditional Reports)

DANE  Departamento Administrativo Nacional de Estadistica
(National Statistical Office)

DNP  Departamento Nacional de Planeamiento
(National Planning Office)

CDTs  Certificados de Deposito al Termino
(Certificates of Deposit)

CEPAL  Comision Economica para America Latina
(United Nations, Economic Commission for Latin America)

CFs  Corporaciones Financieras
(Investment Banks)

ECOPETROL  Empresa Colombiana de Petroleo
(National Petroleum Company)

FEDERESARROLLO  Fundacion para la Educacion Superior y del Desarrollo
(Economic Research Institute in Bogota)

FFI  Fondo Financiero Industrial
(Industrial Financing Fund)

FIP  Fondo de Inversiones Privadas
/Private Investment Fund /

IFI  Instituto de Fomento Industrial
(Official Industrial Development Bank)

IFS  International Financial Statistics, Published by the International Monetary Fund (IMF)

INCOMEX  Instituto Colombiano de Comercio Exterior
(Colombian Foreign Trade Institute)

PROEXPO  Fondo de Promocion de Exportaciones
(Export Promotion Fund)

PV  Plan Vallejo
(Import Drawback Device for Exporters of Non-traditional Products)

UFACs  Unidades de Poder Adquisitivo Constante
(Indexed Investments Issued by Savings and Loan Associations)

1/ December 31, 1982
# TABLE OF CONTENTS

## VOLUME I

### SUMMARY REPORT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Summary and Recommendations</td>
<td>1</td>
</tr>
<tr>
<td>II. FOREIGN TRADE INCENTIVES AND MAJOR SECTOR VARIABLES</td>
<td></td>
</tr>
<tr>
<td>A. Patterns of Trade and Industrial Growth</td>
<td>3</td>
</tr>
<tr>
<td>B. The Foreign Trade Incentive Framework</td>
<td>5</td>
</tr>
<tr>
<td>C. Export Development: Structure and Response to Incentives</td>
<td>11</td>
</tr>
<tr>
<td>D. Foreign Trade Incentives, Industrial Development and Policy Options</td>
<td>15</td>
</tr>
<tr>
<td>III. FINANCIAL POLICIES AND INDUSTRIAL DEVELOPMENT</td>
<td></td>
</tr>
<tr>
<td>E. Financial Policies, Interest Rates and Resource Mobilization</td>
<td>21</td>
</tr>
<tr>
<td>F. Industrial Finance: Problems and Prospects</td>
<td>24</td>
</tr>
<tr>
<td>IV. INDUSTRIAL SECTOR DEVELOPMENTS AND SPECIFIC ISSUES</td>
<td></td>
</tr>
<tr>
<td>G. Investment, Productivity, Wages and International Competitiveness</td>
<td>29</td>
</tr>
<tr>
<td>H. Textiles and the Problem of Import Liberalization</td>
<td>32</td>
</tr>
<tr>
<td>I. The Metal Mechanical Industries</td>
<td>36</td>
</tr>
</tbody>
</table>

This report is based on the findings of a mission which visited Colombia in September 1981. This mission comprised Messrs. J.P. Wogart (LCPI2); J. Hanson (IND); A. Sandig (IND); D. Von Stauffenberg, (CL1); D. Morawetz, J. Escandon, and C. Velez (Consultants).

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.
I. SUMMARY AND RECOMMENDATIONS

1. During the last decade, Colombian industrial development has been quite successful in terms of growth of output, employment, and exports of manufactured products. Since 1980 however, various external and internal factors have been slowing down development. Thus, it appears an opportune moment to assess industrial strategy for the decade of the 1980s. The Industrial Sector Mission that visited Colombia in August/September 1981 focussed principally on:

   (a) reviewing the manufacturing sector's problems and prospects, with particular emphasis on the current state of international competitiveness of some major subsectors;

   (b) analyzing foreign trade policies and the impact they have on the performance of the manufacturing sector;

   (c) examining financial policies and their relation to the financial structure and needs of manufacturing enterprises;

   (d) identifying technical and financial measures to improve the manufacturing sector's performance in the years to come.

The mission's review was concerned particularly with the relationship between changes in the external sector incentive framework and their impact on manufacturing sector development. In addition, an attempt was made to analyze the financial structure of firms in manufacturing and to evaluate the impact of recent financial sector reforms on industrial financing and on investment. Subsector analysis concentrated on two branches which were among those most affected by the changes in the export incentive system and the move toward import liberalization, viz. textiles and garments, and the metal-mechanical industries.

2. The report explores the links between foreign trade incentives and major variables in the manufacturing sector: output, prices, exports and employment. It finds that changes in these variables have been significantly influenced by Colombia's foreign trade strategy, and it suggests that improvements in trade policies should lead to improvements in manufacturing sector performance. The manufacturing sector has generally been able to maintain its international competitiveness in operational terms during the late 1970s, suggesting that further import liberalization can be undertaken with some confidence provided that an appropriate exchange rate regime prevails. Analysis of two principal subsectors which have already faced strong competition from imports supports this view.

3. The recent slowdown in growth and the accompanying difficulties encountered by the sector have led to renewed protection measures and
increased credit at below market rates. While a more inward-looking policy with increased interventions might help to stimulate production in the short run, it is suggested that a more forceful orientation towards an open economy is desirable from the medium and long-run perspective. In order to achieve higher growth, enlarge employment opportunities, and stabilize export earnings, the general recommendation of the mission is to remove progressively the most important distortions in trade and financial systems as part of a carefully phased medium-term program. More specifically, the report suggests:

(i) to give greater incentives to exporting via maintenance of a real effective exchange rate, which makes manufactured exports more profitable than currently. This policy is even more necessary than in the early 1970s, given the changing conditions in international markets and the prevailing recessionary conditions. The changing composition of manufactured exports regarding subsectors and countries of destination as well as the difficulty of predicting future exports suggest that concentrating on specific export incentives would be less effective than maintaining on a favorable exchange rate (paras. 22-24, 31-34).

(ii) to expand imports along with exports, in order to limit inflation and to take full advantage of specialization. This would require rationalizing import protection by gradually lowering tariffs on most consumer goods, while raising the effective protection on capital goods by reducing the numerous special exemptions from tariffs. More importantly, it would require a renewed attempt to liberalize the prior licensing process. This rationalization process would be facilitated by a more favorable real exchange rate. Evidence from the recent import liberalization attempts points towards a positive impact, in terms of increased output and lower inflation, on those sectors where imports entered more freely (paras. 28-30, 35-36).

(iii) to follow through with a more outward directed policy within the Andean Common Market; this would be in line with Colombia's recent attempts to set the integration movement on a new course. Colombia has greatly increased trade with its Andean Group neighbors, but the expansion of its manufactured exports appears to be largely unrelated to the specific trade preferences of the Andean Common Market. Since regulations for foreign investment and integrated industries seem to have had a dampening effect on industrial investment and output, the report suggests that current regulations be revised and that greater private sector participation be stressed in new directives for regional development (paras. 25-26).

(iv) to relax limitations on external capital inflows and to reduce forced investments and reserve requirements of the financial system in order to lower interest rates. To dampen potential inflationary consequences of these measures, import restrictions must be eased and the fiscal deficit controlled (paras. 51-52).
to consider the gradual phaseout of the subsidy elements of the special lines of credit, since their impact on industrial concentration seems to be significant. It would also be beneficial to adjust the corporate accounting and tax systems to recognize more fully the role of inflation and reduce distortions (paras. 48, 53).

The proposed measures are likely to: (a) stimulate relatively more labor intensive industries and with it increase employment in manufacturing and related sectors; (b) reduce inflation through enforcing increased competition in highly protected sectors; (c) diversify the export base of the country and with it stabilize export receipts and expand its import capacity; and (d) help to increase the GNP growth rate above what it otherwise would be. While a detailed projection of the recommended policies' results will require more information than that examined in this report, there is a strong presumption that reverting to protectionism will have a negative impact on the major macroeconomic and sectoral variables.

4. Implementation of the various recommendations made in this report will require careful planning and phasing in view of their macroeconomic significance and interrelationships. While the recommendations in organization and procedural areas, such as the streamlining of the import drawback mechanism and adjustment in accounting procedures, could be implemented quickly, the major recommendations will need to be implemented progressively over two to three years, following extensive consultations among the different branches of Government and the private sector. The phasing of the external tariff simplification and unification program is of special importance. Removal of the anti-export bias of Colombian manufacturing requires a careful coordination of exchange rate, export promotion and import liberalization measures. Similarly, the removal of distortions in financial markets as they affect industrial activities have to be introduced in sequence and in coordination with the trade policies.

II. FOREIGN TRADE INCENTIVES AND MAJOR SECTOR VARIABLES

A. Patterns of Trade and Industrial Growth

5. In the last 20 years, Colombia has been transformed from a predominantly rural and agricultural economy to a more urbanized and industrialized economy, with a labor force which is increasingly employed in services and manufacturing activities. Interdependence has grown between Colombia and the fully industrialized centers of the world economy, and it is increasing with the neighboring countries of the Andean region. While economic growth has fluctuated over the last 30 years, it has generally been strong, averaging about 5% p.a. in real terms. Manufacturing has been one of the leading sectors, with its rate of growth consistently outpacing GDP growth by approximately 1% per year since 1950.

6. Since import substitution and export promotion policies have had a major impact on promoting the manufacturing sectors in developing countries, researchers have attempted to measure the contribution of each strategy to economic growth and employment. Table 1 links the growth in the Colombian manufacturing sector for the 1953-79 period to the various sources of demand
changes. 1/ Up to 1967 Colombia pursued an import substituting growth strategy (ISI), with the ratio of industrial imports to gross output falling continuously. As is usually the case, most of the measured growth occurred in the early years, when increased local production in such traditional ISI type investments as steel and chemicals came on stream at protection inflated prices. Over the latter portion of the period (1963-67), import substitution slowed substantially in the manufacturing sector, although the foreign exchange crises of 1965 and 1967 and their accompanying quantitative restrictions produced a further decline in the ratio of total imports to GDP. The easy stage of import substitution had passed, with capital and import intensive sectors dominating an industrial development suffering from foreign exchange scarcity. The fall in coffee exports also depressed the domestic demand, which, together with lack of inputs, generated excess capacity in industry. This latter stage of the import substitution strategy coincided with the lowest average rate of aggregate growth between 1953 and 1980.

Table 1: SOURCES OF INDUSTRIAL OUTPUT GROWTH

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Annual Growth in Manufacturing Value Added</td>
<td>6.2</td>
<td>7.6</td>
<td>6.4</td>
</tr>
<tr>
<td>Percent Growth due to Import Substitution</td>
<td>22</td>
<td>-4</td>
<td>2</td>
</tr>
<tr>
<td>Percent Growth due to Export Diversification</td>
<td>7</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Percent Growth due to Domestic Demand Expansion</td>
<td>60 ( )</td>
<td>10 ( )</td>
<td>4 ( )</td>
</tr>
<tr>
<td>Change in Input-Output Coefficients</td>
<td>11 ( )</td>
<td>94 ( )</td>
<td>94 ( )</td>
</tr>
</tbody>
</table>

SOURCE: H.B. Chenery, Interactions between Industrialization and Exports, American Economic Review (May 1980) and Table 8, Vol. II.

7. In contrast to the early 1960s imports grew faster than domestic output during 1967-74. Thus, import substitution's contribution to growth became negative for the economy as a whole as well as for the manufacturing sector. The most striking characteristic was however the rapid growth of exports. Stimulated by favorable world economic conditions and a number of monetary and fiscal incentives, as well as a more realistic exchange rate policy, export growth accounted for an increased fraction of growth in domestic output. Manufactured exports rose from US$25 million in 1967 to US$400 million in 1974, climbing rapidly from 3% of industrial production in 1970-71 to close to 10% in the mid-1970s. While less important than the strong expansion of internal demand, exports of manufactured goods were a driving force behind the high rate of industrial growth, which averaged 7.6% between 1967 and 1974. At the same time, manufacturing firms increased employment by over 20,000 per year, increases many of which were created in the export intensive branches of industry.

1/ For an explanation of the analysis and a more complete discussion, see Vol. II, Chapter III.
8. The export drive lost much of its impetus after 1974. Manufacturing exports expanded modestly, with both their share in world exports and GDP declining from the peak reached in 1974. At the same time imports of industrial goods were held down—at least until 1979—with their nominal and real share declining as a percentage of GDP. Manufacturing output nonetheless continued to grow at an average of 5.5% between 1975 and 1980. This was made possible by the rise in coffee prices, and to a lesser extent by the drug boom, which stimulated domestic demand in a captive market between 1976 and 1980. While gains in output growth, improvements in real wages, and relatively low unemployment were positive signs, the rate at which the manufacturing sector generated new jobs in 1975-79 was only about half of that during 1970-74.

9. In early 1980, the economy began to slow down. The fall in export growth and high interest rates lowered the growth in real aggregate demand and forced the manufacturing sector to contract. Sluggish aggregate demand led industrial enterprises to reduce capacity utilization by 10 percentage points, rendering new investment unprofitable. More recently, high interest rates and low profitability have also added to industry's reluctance to undertake investments. Foreign investment, which had contributed significantly to the import substitution phase of industrialization in the 1950s and 1960s, had already slowed down in the 1970s. Even the increased foreign investment applications during 1979/80 barely went beyond the needs for maintaining the real value of the capital stock.

10. Struck by the first serious recession in over 15 years, the manufacturing sector as a whole and a number of important branches in particular have requested and received higher protection and favorable credit conditions. During the first semester of 1982, the most important trade and financial measures included the complete prohibition of textile imports and the opening of new credit lines at below market interest rates for capital goods. Currently, an increased number of imports are shifted from free to previous license, and import tariffs are to be raised by 20%. While it is too early to measure the impact of these policies, it can be expected that they will be of some benefit to industrial producers in the short run. On the other hand, it is likely that they will also have an inflationary effect on the economy. In the medium run, even the positive effects can be expected to disappear, once the distortionary effects of increased protection and credit subsidization divert significant amounts of resources from the rest of the economy.

B. The Foreign Trade Incentive Framework

11. Colombian imports have been restricted by a combination of selective licensing, tariffs, prior deposits and exchange controls. The prior license has remained the most important form of protection. Until 1981 the percentage of tariff code classifications subject to licensing was steadily falling from over 95% in 1971 to 66% in 1975 and to about 31% in 1980. Prior licenses continued to be used for some agricultural products and to protect the textile and wood products industry. Although almost 90% of requests for permission to import were approved in 1980, the likelihood of being rejected
for such reasons as overly high prices (possible over invoicing), overly low prices (dumping), or excessive requests relative to historic levels of imports or to local supplies, inhibited many potential imports. Nominal Colombian tariffs averaged 26% (unweighted) following the revision of protection in mid-1979, according to the most recent estimates. This average level was close to the Andean Pact's common minimum tariff, which has not presented a barrier to cuts. The tariff schedule showed substantial dispersion around the average, the standard deviation was 17.7%, and the distribution was skewed toward higher levels, with some tariffs being as high as 150%. In addition to tariffs, imports were subject to prior deposits (consumer goods and inputs) and to a 5% fee to finance PROEXPO loans. The rise in this fee offset much of the cut in average tariffs between 1970 and 1980.

12. No current study is available of effective protection estimates based on comparisons of local and world prices of importables. Using only the legal import tariffs and the input-output tables, average (unweighted) effective protection was computed to be 44% in the second semester of 1979. The standard deviation was 40% and the distribution was sharply skewed, with maximum rates of 400% and minimum rates of -46%. The highest nominal and effective rates apply to consumer goods and transport equipment, with average effective rates of protection being more than double the nominal rates (see Table 2). Average effective rates are 30% to 50% higher than nominal rates in other industrial sectors. The consumer goods sector is also subject to prior deposits, which are not included in these estimates of effective protection. While the machinery sector shows the next highest effective rates, the estimate neglects the Global License Facility and public sector purchases, which allow imports of capital goods at only a 5%, or even a zero, nominal tariff rate. Mission estimates indicate that the machinery sector faces much more international competition than implied by Table 2; in some cases it experiences negative effective protection (see Vol. II, Chapter III). Finally, primary products are shown to have the lowest nominal and effective rates of protection, although direct price estimates for a few products indicate that their actual protection was quite high because of the effect of prior licenses.

Table 2: IMPORT PROTECTION OF MANUFACTURING 1975 AND 1979

<table>
<thead>
<tr>
<th>Items Under Prior License</th>
<th>Primary Products</th>
<th>Consumer Goods</th>
<th>Intermediate Products</th>
<th>Machinery</th>
<th>Transport Equipment</th>
<th>All Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975 %</td>
<td>19</td>
<td>47</td>
<td>24</td>
<td>28</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>1979 %</td>
<td>15</td>
<td>39</td>
<td>20</td>
<td>27</td>
<td>34</td>
<td>26</td>
</tr>
<tr>
<td>Effective Protection</td>
<td>1979 %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979 %</td>
<td>24</td>
<td>81</td>
<td>29</td>
<td>39</td>
<td>75</td>
<td>44</td>
</tr>
<tr>
<td>Items Under Prior License</td>
<td>1975 %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1975 %</td>
<td>53</td>
<td>48</td>
<td>43</td>
<td>66</td>
<td>89</td>
<td>66</td>
</tr>
<tr>
<td>1979 %</td>
<td>20</td>
<td>49</td>
<td>18</td>
<td>30</td>
<td>91</td>
<td>40</td>
</tr>
</tbody>
</table>

\( / \) Information of first three items under prior license are for 1978.

SOURCE: Statistical Appendix, Table 12.
13. In order to lower inflationary pressures, which began in the early 1970s and became stronger with the export and foreign exchange surplus after 1974, successive governments have started rather hesitantly to open up the economy to international competition. On average, nominal and effective protection declined after 1975, although these cuts were partially offset by the rise in PROEXPO fees and the re-imposition of prior deposits. The percentage of imports on the free list rose after 1974, the delays in responding to import requests were cut, and the proportions of approved requests for licensed imports were maintained at roughly 90% of applications. Prior deposits, which were cut in early 1982, already had a lower average cost in the second half of the seventies than in the first half. However, the average ratio of legal imports to GDP was actually lower in 1975-79 than in 1970-74, and rates of effective protection are still uneven, with a number of consumer goods enjoying rates of 60% or more, while many capital goods suffer from negative effective rates of protection.

14. In 1980, imports did rise sharply as a percentage of GDP, but 70% of the increase was composed of petroleum and petroleum products, capital goods, and transport equipment. Increased world prices and subsidized internal prices combined to raise petroleum imports; government imports under the Public Investment Plan (PIN) and the use of the Global License Facility, particularly by petroleum companies, increased demand for foreign machinery and equipment; a liberal interpretation of import prohibitions by INCOMEX temporarily allowed vehicles to enter the country. Some of the 1980 rise in imports may also have resulted from speculation that the liberal treatment of requests for imports and the favorable exchange rate would soon end because of the unfavorable current account. Thus, most of the recent increase in imports has been due to special factors and policies, which have already been reversed, and to specific types of liberalizations, usually in areas which do not compete with imports.

15. Colombia's shift from import substitution to export promotion in the late 1960s was stimulated by various policies and incentives, including tax rebates (CAT), import drawbacks (Plan Vallejo), low interest rate credit, and most importantly, a crawling peg system for the exchange rate. The CAT is a tax certificate valued at a given percentage of the value of exports that is issued to the exporter, who may sell it at a market-determined discount rate on the stock exchanges or use it to pay domestic taxes and duties at maturity. The cash value of the incentive is determined by the percentage of export value granted as CAT, the market discount rate, and the marginal tax rate of the owner. As the total volume of CATs cost the Treasury about US$90 million in 1974, the tax rebate was reduced from 15% of export value to 1% for most agricultural and mining products, 5% for a large portion of industrial products, and to 7% for other nontraditional products, leading to a weighted average CAT for all nontraditional exports of about 3.9% of export value during 1975 and 1976. In 1977 and 1978, the CATs were raised in an attempt to compensate for the lagging exchange rate devaluation, and four different rates were established, with some industrial products receiving 12%. Between 1977 and 1981, further changes of CAT percentages were implemented, which raised the weighted average CAT to 7% with some industrial products receiving 12% of export value. Finally in 1982, CATs for
agricultural products were raised significantly to compensate for low international prices. As a consequence, the average weighted export tax incentive was about 11% for all nontraditional export products in late 1982. 2/

16. A number of reasons for the implementation of the above changes in the level and structure of CATs have been given by the authorities. These reasons have changed over time and have not always been consistent with each other or with the actual CAT system. The most important reason for the introduction of CATs was the objective of providing exports with an overall compensation for an overvalued exchange rate; consequently, an across-the-board CAT was established for all nontraditional exports. The drastic reduction in CAT rates in 1974, on the other hand, was based on the objective of reducing the budget deficit. After 1974, the strong differentiation of CAT percentages and their frequent changes reflect the desire to use the CATs as a more finely tuned instrument of export promotion. The authorities attempted to stimulate exports with high domestic value added, labor intensive exports, and products coming from less developed regions of the country; on the other hand, exports with insufficient or variable domestic supply or with good potential in foreign markets were granted a low CAT.

17. When the CAT incentives were curtailed in 1974, the supply of subsidized export credit from PROEXPO was expanded, and new credit lines were added. Between 1974 and 1978 credits to industrial exports rose from US$101 million (26% coverage) to US$416 million (78% coverage). The expansion of PROEXPO credit was made possible by increasing the import surcharge from 1.5% to 5%, representing about 20% of total tariff revenues. Export credits are granted through three major lines, including short and medium-term pre-shipment credit in national currency established in 1972 and 1974, and a short-term post-shipment credit line in US dollars that was established in 1975. The increasing coverage of PROEXPO credit has provided liberal provision of export credit financing. While the authorities' monetary policy has aimed at restricting the expansion of domestic credit since inflation accelerated in 1967-77, the increasing availability of credit from PROEXPO contributed to relieve the tight credit situation faced by the industrial sector. As the authorities consciously attempted to compensate for the lagging exchange rate movement with more favorable lending terms, the differential between PROEXPO interest rates and the interest rates charged by commercial banks have become wider. In 1980, the level of the PROEXPO credit subsidy reached 7.5 cents for every dollar of exports. Since the subsectoral distribution of PROEXPO credit was quite similar to the actual percentage composition of exports by product categories, the interest rate subsidy operated as an across-the-board incentive.

18. The import duty drawback system known as Plan Vallejo constitutes the oldest instrument of export promotion for manufactured exports. Under this scheme, export manufacturers establish contracts with the Government for

2/ For a detailed analysis of these and other export incentives see Vol. II, Chapter I.
the import of inputs and machinery free of import duties and other import charges. Nearly half of all nontraditional exports in 1977-78 benefited from duty-free imports under Plan Vallejo, compared to a little over one-third in 1974-75. By providing access to inputs at international prices, Plan Vallejo reduces the costs of exporting enterprises that might otherwise be forced to use domestically produced inputs at higher prices. It is estimated that the cost reduction achieved by Plan Vallejo users during the period 1972-76 averaged about 6.5 cents per dollar of exports. Given the recent differences in external and domestic price trends, it is likely that the cost reduction in later years was somewhat higher. Plan Vallejo has thus provided a benefit to nontraditional exports by reducing the disincentives inherent in the import protection system. Moreover, the benefits provided under Plan Vallejo have been quite stable over time. However, the complicated administrative procedures involved have tended to favor large enterprises, and the delays inherent in the scheme have reduced its value to exporters.

19. Nominal exchange rates are usually changed when domestic and international inflation rates differ significantly. This has been the case in Colombia for many years. When examining movements in the real exchange rate, which measures the extent to which the rate of devaluation of the peso has offset the difference between the rate of increase of prices in Colombia and abroad, two different sets of data are usually calculated in Colombia: peso-US dollar, and peso-weighted average-basket-of-currencies ("peso-weighted average"). The real peso-dollar exchange rate rose consistently from 1967 through 1971, fluctuated around the 1971 level in 1972-75, and then fell by 20-25% in 1976-81, with the largest single decline (15-16%) occurring in 1977. The relationship between the Colombian peso and a basket of foreign currencies showed a similar trend, although the increasing exchange rate fluctuations among major currencies caused annual differences to widen. During 1967-72, the real peso-weighted average exchange rate rose continuously and reached a peak in 1975-76, but then declined until June 1981, when it was 13% below what it had been in 1971, and 20% below what it had been in 1975.

20. The computation of the effective value of fiscal and credit export incentives (CAT + PROEXPO credit) is presented in Graph 1, which indicates their increasing importance since the mid-1970s (from 12% to 20% of export revenues between 1975 and 1980). At the same time Colombia's real exchange rate fell by about 20%, after it had climbed steadily during the late sixties and early seventies. Fiscal and credit incentives as well as the real exchange rate increments are combined in the index of the real effective exchange rate. That index fluctuated less because of the counterbalancing movements of exchange rate and fiscal-credit policies. Nevertheless, its 1980 level was more than 5% below the 1975-76 level, and by mid-1981 it had fallen to 10% below the earlier peak. Moreover, the increased use of the fiscal and credit incentives had the potential to accelerate inflation and to invite countervailing measures from abroad.
C. Export Development: Structure and Response to Incentives

21. Colombia's exports of manufactured goods in dollar terms increased almost sevenfold during 1970-75, but less than doubled during 1975-79. While export growth of manufactures from other developing countries also slowed down during the second part of the seventies, some of them realized substantially higher rates of expansion of sales in external markets. Manufactured exports of some East Asian countries (Korea, Taiwan, Hong Kong and Singapore) experienced average annual growth rates of 35% between 1970-75 and 15% in the 1975-80 period in real terms. In contrast, Colombia's annual exports of manufactures increased by 17% in real terms during 1970-75, but rose by only 4% a year between 1975 and 1980. The growth and subsequent stagnation of Colombia's manufactured exports are reflected in a number of ratios. Manufactured exports rose from around 3% of industrial output in 1970-71 to about 10% in 1974-75, but then gradually declined to about 7% in 1980. As a percentage of GDP, they rose from about 1.4% during 1970-71 to about 5% in 1974-75, but then declined gradually to about 3.6% in 1980. Similarly, Colombia's share of total LDC manufactured exports rose from 0.69% in 1971 to 0.88% in 1973, but then fell back slightly to 0.85% in 1975-77 and 0.75% in 1978-79.

22. Statistical analysis indicates that there was a strong positive correlation between the improvements of Colombia's real effective exchange rate and manufacturing export growth between 1967 and 1974. When the real effective exchange rate declined in the mid-1970s the value of real manufactures exported also fell. The relationship between export performance and exchange rate policy is more difficult to trace after 1978. Paradoxically, manufacturing exports reached their highest level in 1979, at the same time as the index of the real effective exchange rate fell. When export incentives improved in 1980, real export revenues declined. In part, this contradictory behavior can be explained by fictitious exports, which industrialists undertook to import or repatriate capital in 1979. If registered rather than customs reported exports are considered, the relationship between exports and the real effective exchange rate shows a continuation of the positive correlation trend, with the export-output ratio for 1979-80 being approximately three percentage points below the same ratio in 1974-75 at the same time as the real effective exchange rate index fell by approximately 8%, as illustrated in Graph 2.

23. The impact of changing trade incentives on the pattern and destination of Colombian exports is less visible. Venezuela has become the most important market for Colombia's manufactured products. That country, with a comparatively limited size but relatively high per capita income now takes about 40-50% of Colombia's total industrial exports. Total official industrial exports to Venezuela increased from US$4 million in 1970 to US$281 million in 1980. Four sectors—textiles and clothing, metal manufactures, transport equipment and cement—have consistently made up about half of these exports, with the other half spread quite widely across the industrial spectrum. The main reasons behind the growth of manufactured exports to Venezuela were the rapid rise of Venezuelan incomes (between the oil price increases of 1973-74 and the price stabilization attempt in 1980-81), and the emergence of the Margarita Islands since 1975 as an important Venezuelan free port. After Venezuela, the second most important market for Colombia's
manufactured exports is the United States, which took 21% of official manufactured exports in 1977. Colombia's manufactured exports to the U.S. are highly concentrated: few items, such as non-metallic mineral products followed by clothing, yarns and fabrics as well as leather goods, suitcases and bags, accounted for 60-65% of total manufactured exports in 1970 and 1974, and for three-quarters of such exports during 1978-79. Exports to each, the Andean Group (except Venezuela), Central America, the Caribbean, and the E.E.C. are of equal importance as markets for Colombia's manufactured exports after Venezuela and the U.S. This diverse group of countries tend to take 10-15% each of such exports, with the rest of Latin America taking most of the remaining 5%.

24. While exports to neighboring markets tend to be more capital and skill intensive, Colombia has exported relatively labor intensive goods to
the U.S. and the E.E.C. during the 1970s. Exports to the other Latin American nations are concentrated in chemicals, metal products, and non-metallic minerals, whereas the U.S. and E.E.C. markets are of major importance for leather goods and shoes, as well as textiles and clothing. The trend is also visible on an intra-industry basis. Clothing exports to the U.S. and the E.E.C. tend to be made to buyers' specifications and sometimes require only low cost labor, whereas exports of clothing to neighboring markets are mostly to Colombian manufacturers' designs and specifications and include all phases of the operation. More recently, Colombia also has been exporting some more capital intensive items to the advanced countries, including yarn, fabrics and some paper and paper products; thus, the export diversification is moving beyond the stage of specialization in natural resource and labor intensive products. In view of the weakening of the Venezuelan market, which has been consuming almost half of Colombia's manufactured exports, further efforts in export market diversification appear to be desirable.

25. An important issue regarding Colombia's diversification of manufactured exports relates to the effects of the Arldean Common Market (ACM). A recent study undertaken by Colombia's Planning Department showed that Colombia appears to have been the principal beneficiary of liberalization policies, with its exports to ACM countries rising from US$51.9 million to US$652.7 million between 1970 and 1979, with imports from those countries increasing even faster from US$17.8 million to US$174.5 million. But while the increase in Colombian imports from other ACM countries is largely attributable to the preference given to them, Colombian exports to ACM countries received very little preference (Graph 3). Thus, Colombian exports to ACM countries can be attributed mainly to their proximity, general export promotion policies, and the rapid rise in per capita incomes and increasing overvaluation of the exchange rates in Venezuela and—until recently—in Ecuador.

26. The Andean Pact countries have been and are expected to remain an important market for Colombian manufactured products. This explains in great part why Colombia actively participates in a multi-country market agreement, which has been firmly committed to an import substitution strategy. There is now a growing awareness of the costs to each country of buying high priced goods from its ACM partners, rather than importing cheaper products from third countries. In the November 1981 meeting of ACM Ministers of Industry, Colombia asked the other members to face up to these problems and set the Andean Group on a new course, which would consist of the following changes: (a) increased emphasis on export promotion; (b) adjustments in existing Industrial Programs; (c) additional trade liberalization and decreased emphasis on industrial programming; (d) renewed efforts to achieve a common external tariff; and (e) less discrimination against agriculture and mining.

3/ The Andean Group was formed by Bolivia, Chile, Colombia, Ecuador, and Peru in 1968. Venezuela joined in 1971, and Chile withdrew in 1974. A more detailed analysis of the Andean Market is currently undertaken by a separate mission of the World Bank.
Non-oil exports from Colombia to the countries of the Andean Common Market increased from US$35 million to US$300 million between 1970 and 1979. However, most products had no special trade preference within the Andean Common Market.
D. Foreign Trade Incentives, Industrial Development and Policy Options

27. While it is not too difficult to trace the impact of the import substitution strategy and the move toward export promotion on industrial imports and exports, industrial output and employment depend on many more variables than foreign trade strategies. This is particularly true for a country in which exports and imports are less than 25% of GDP and where the exports of the manufacturing sector, while reaching over 30% of total exports, averaged only 10% of total industrial production during their best years. Nevertheless, it seems that Colombian manufacturing development in general and that sector's employment growth in particular went through different development stages, which correspond rather closely with changes in trade strategies. These were discussed in paragraphs 5 to 8. Graph 4 provides a summary review of these relationships, demonstrating the substantial differences in manufacturing exports and employment growth during the three different time periods. During the last seven years of the import substitution period (1960-67), manufacturing exports hardly grew. Only 4,300 jobs per year were created in manufacturing during that time. Those developments contrasted with the growth pattern in 1967-74, a period which was characterized by strong export incentives. Not only did manufacturing exports shoot up, manufacturing value added did better than during any other period, and employment gains were five times the earlier job increases. However, once the boom of traditional and illegal exports led to lower incentives for nontraditional export products, manufacturing export reacted negatively, output growth slowed down and the number of new jobs created fell from 21,000 to less than 8,000. In sum, there seemed to be a positive response of the Colombian economy to export-oriented policies, creating a momentum for production and employment by manufacturing, which has not been sustained in more recent years.

28. During the second half of the 1970s and increasingly so since 1979, Colombian policy makers have lowered import barriers. As a consequence, import penetration has increased in several industries. In general, it seems, that the higher imports did not prevent growth from occurring, while they did contribute to dampen price increases during the last five years. Regression analysis suggests that monetary expansion and rises in the local price of imports were the two principal factors contributing to inflation in 1960-80, with weights of .7 and .3 respectively. This analysis also shows that the local prices of imports have been inversely related to output growth over the same period. Lowered protection, while perhaps hurting some sectors, on balance seems to have lowered costs and inflation, without reducing aggregate growth of the Colombian economy.

29. At the industry level, a comparison of seven major manufacturing sectors shows that those branches which depended more heavily on import substitution for their expansion experienced lower than average growth and

4/ For a detailed analysis of this and the following paragraphs, see Vol. II, Chapter III.
GRAPH 4
OUTWARD ORIENTED POLICIES BETWEEN 1967 AND 1974 LED TO:

1. Rapid Increase in Manufactured Exports

2. Substantial Gains in Industrial Value Added

3. And a Surge in Industrial Employment
higher than average inflation during 1974-79, while those sectors experiencing some increases in import competition did well in terms of both, output and relative price stability (Graph 5). For the most part, increased imports did not compete with domestic production, although the statistics do show output declines in some of those branches which have been affected by illegal imports. With annual contraband imports of textiles, estimated to have reached 15% to 20% of textile consumption, and large volumes of electrical appliances, radios and TVs entering Colombia illegally, production of textiles and electrical appliances fell in 1980. However, the decline in economic activity during 1980-81 was much more the result of a generalized slowdown in aggregate demand—part of which came from the decrease in all types of exports, and part from attempts to restrain money supply and credit—than the result of increased imports. Moreover, some firms reacted to the increased competition of de facto liberalization by modernizing plant and equipment—returning to a position where they can take advantage of improvements in the domestic economy and sell in the world economy when appropriate incentives are offered.

30. The detailed analysis presented in Vol. II, Chapter III of this report suggests that the appropriate policy for sustaining a desirable rate of industrial growth in the medium run involves a reduction and equalization of protection, combined with a somewhat faster rate of devaluation. This policy would reduce distortions and provide generalized incentives for the expansion of exports of labor intensive manufactures and for the production of competitive import substitutes. The regression analysis indicates that such a policy raised the growth rate significantly in 1967-74. In contrast, a policy of increasing protection and rapidly expanding credit is unlikely to be a successful approach in the medium run. Restraining imports will raise their local prices and is likely to raise costs and prices in general, with negative effects on growth. Increasing credit more rapidly than import prices will produce balance of payments pressure and a rise in inflation. The analysis indicates that resulting inflation would equal the rate of increase in prices of imports plus 70% of the amount by which the growth in money supply exceeds that increase. In contrast the output effect of such a policy is likely to be small—less than 5% of the difference between the growth of money supply and the increase in prices of imports, an effect which disappears in two to three years.

31. The prospects for Colombia's exports of manufactured goods depend mainly on two factors: (a) the state of world demand, and (b) the present and prospective competitiveness of Colombia's exports, including business men's perceptions of the Government's determination to conduct policies favorable to exports. At the current real effective exchange rate, much of exporting is a marginal activity in Colombia. This is demonstrated by the fact that there are only a small number of firms that are either specializing in

5/ The treatment of exporting as a marginal activity also affects foreign purchasers who, sensing this type of behavior, are less inclined to repeat purchases (especially in the U.S.).
GRAPH 5
IMPORT SUBSTITUTION, INFLATION AND GROWTH IN MAJOR SUBSECTORS, 1974-1979

PERCENT OF GROWTH DUE TO IMPORT SUBSTITUTION

SECTORAL RATES OF INFLATION

AVERAGE COMPOUNDED REAL GROWTH OF VALUE ADDED

TRANSP. EQUIP. GARMENTS METALS FOOD TEXTILES NON ELEC. MACH. ELEC. MACH.
production for export or are planning investments to ensure future exports. In order to stimulate renewed efforts in exporting nontraditional products, it will be necessary to provide these incentives continuously over a period of years. The experience of the 1967-74 period suggests that only a stable program will induce firms to make the investments in export-oriented plant and equipment and in market penetration that will create a successful export drive. The present depressed state of the world economy makes such a program even more necessary, in order to prepare manufacturing firms for capturing new parts of the international market during the recovery.

32. Before discussing the issues which have to be resolved if the policy framework for nontraditional exports is to be improved, one is tempted to ask which exports could be expected to do exceptionally well, and how fast they would grow if exporting were to be made profitable again. This is a most difficult task, as the National Planning Department found out, when it projected specific manufactured exports ten years ago. At that time it seemed logical to expect increases in exports of products based on natural resources, particularly such agro-industrial products as solvent coffee and fruit juices, as well as wood and leather products. As it turned out, a number of those products did well, but exports advanced much more rapidly in fields which proved to be labor and/or skill intensive, rather than natural resource intensive, including areas where there had been no previous export experience at all.

33. Exports did surprisingly well in textiles, cut flowers, dairy products, children's books, refrigerators and stoves, working gloves, and frozen shrimp. These developments had been completely unforeseen ten years earlier. They occurred because of general incentives and increases in incomes of Colombia's trading partners. The important point that emerges from this experience is that exports will do well if a good incentive framework is provided. Generalized incentives are more reliable than attempts to stimulate particular lines by specific measures. One should not prejudge what is or what is not exportable.

34. Since 1979, the Colombian authorities have broadly followed a policy of adjusting the exchange rate periodically to compensate for the difference between domestic and international inflation. However, the real appreciation of the exchange rate, which occurred in 1975-77, was not sufficiently compensated by fiscal and monetary incentives, and as a consequence many export activities were unprofitable during the second half of the 1970s. With the return to dependence on coffee, the developments in international coffee markets once more became the major preoccupation of policy makers. Dependence on coffee (and possibly coal exports after the mid-1980s) will only decline with the resumption of a push for nontraditional exports through a more favorable incentive framework and with the establishment of more flexible regulations for domestic and foreign investment in new branches with the capacity to compete successfully in international markets. It is crucial that this policy entails a commitment to maintain a real effective exchange rate which makes exporting profitable, otherwise investments will not be made with a view to the export market. To achieve that favorable real exchange rate it is not sufficient to merely adjust the nominal exchange rate periodically. Inflation must also be slowed until the desired real rate is obtained.
35. In the short run, a policy of real devaluation could be used to
revitalize the manufacturing sector, increasing employment and taking
advantage of existing excess capacity. However, once excess capacity is
utilized, the benefits to export promotion will be limited without some
further attempts at import liberalization. If there is no relative rise in
imports as well as exports, then factors of production will have to remain in
home goods and import-competing production in order to satisfy consumer
demands. As a result, conflicting pulls on resources will develop, raising
factor costs and cutting off export expansion and the employment and output
benefits of specialization. On the other hand, a policy of increased import
liberalization combined with greater stimulus to exports would allow Colombia
to reap the fruits of greater specialization. Factors of production could
then shift more forcefully into lines of comparative advantage. After a one
or two-year transition period, lower capital-output ratios in exports will
allow faster growth with the same level of saving.

36. In the import liberalization process, greater equalization of
effective protection should be the first priority. In order to rationalize
protection, it is necessary to examine the effective protection of individual
activities based on price comparisons. While such a study is undertaken,
excess protection on a number of activities could be removed immediately.
Lowering effective protection also requires relaxing the import licensing
process. It is exactly here, where special interest groups have increased
their pressure recently, not only to maintain the current system, but to
shift large numbers of items back from the free to the prior license list and
from the prior license to the prohibited list. While it would seem advisable
to proceed cautiously with import liberalization in a recessionary world
economy, the positive action of INCOMEX has been slowed down and partly
reversed in the recent past. To shift products to the free list only if
domestic production is insignificant hardly contributes to effective trade
liberalization. While the final aim must be to phase out the licensing
system altogether, one step in the near future should involve identification
of domestic monopolies which could be disciplined by increased foreign
competition.

37. The purpose of this section has been to examine the impact of
foreign trade policies in general and exchange rate policies in particular on
manufacturing performance. The review suggests that the stimulation of
manufacturing production and its exports cannot be expected to succeed
without maintaining a real effective exchange rate such as prevailed in the
early to mid-1970s. Regardless of the value of the real exchange rate, there
is a need to rationalize the currently inefficient structure of protection.
In addition, the case for generalized rather than specialized incentives will
remain strong. If the real exchange rate is permitted to become overvalued
in the future because of a surge in mining exports, a possible improvement in
coffee prices, and increased domestic oil production, Colombia may in the
medium run face a similar dilemma that some oil rich countries have faced in
the recent past, i.e., overvaluation for the exchange rate leading to
disinvestment in nontraditional agricultural and industrial activities. The
negative effects of such developments in terms of employment and income
distribution and vulnerability to falls in commodity prices is already
apparent among some of Colombia's neighbors.
38. The return to export orientation, accompanied by cautious but con-
tinuous import liberalization, should be combined with increased efforts to
promote technological innovation, both in the production and marketing pro-
cesses. At this time, the public institutions for this purpose have
concentrated their efforts on developing new agricultural exports. In addi-
tion, joint ventures with foreign partners should allow domestic industries
the access to technology and marketing know-how they need to penetrate
foreign markets. Subcontracting of parts to domestic firms is a promising
approach to combine the cost advantage of local producers with foreign tech-
nical and marketing know-how. Here, a revision of the Andean Group foreign
investment law is in order to facilitate creation of such export-oriented
joint ventures. Improvement of export-related infrastructure remains also a
priority items. Ports and customs are still caused of frequent delays and
high costs. Finally, the reallocation process on the goods side should be
accompanied by the rationalization and streamlining of financial markets, as
discussed in the next chapter.

III. FINANCIAL POLICIES AND INDUSTRIAL DEVELOPMENT

E. Financial Policies, Interest Rates and Resource Mobilization

39. Similar to the developments in Colombia's goods sectors, financial
and capital markets were subjected to many restrictions, which hampered their
ability to mobilize resources and to allocate them to the most productive
activities during the 1950s and 1960s. Starting in 1967-68, a gradual
liberalization process was set in motion, strengthening the role of the
market in determining interest rates and credit allocations. This process
included the start-up of the indexed housing finance system (UFAC) and
culminated in the financial reforms of 1974-75, which contained six major
elements, ranging from reductions in reserve requirements and a diminished
role of the Banco de la Republica as a development bank to the freeing of
interest rates on loans and the raising of ceilings on deposit interest
rates. The benefits of this liberalization were seen as an improvement in
aggregate productivity and as an increase in the saving rate. Yet, soon
afterwards inflationary pressures forced the Colombian Government to reverse
itself on the issue of financial liberalization. In fact, this has been the
pattern of the last 15 years, with efforts to liberalize being followed by
financial repression, usually because of the short-run pressures to fight
inflation.

40. The combined effects of the 1974 tax and financial reforms on
nominal interest rates of deposits were noticeable. The average interest
rate on easily available assets (saving accounts and UPAC deposits) rose from
9% in 1972 to 21% in 1975. While average after-tax real rates were still
negative on these assets, they were up some 3 percentage points from the
1970-72 average (Graph 6). However, the liberalizing trend was cut short by
rising inflation as the rates hit the newly established ceilings. Further
attempts at capital market liberalization were hampered by the Government's
attempts to stem the effects of rising liquidity, produced by the combination
of the rising coffee prices and illegal exports, the inflow of private
capital stimulated by the slowdown in devaluation, and the restrictions on
imports. In order to curb inflation, the 1977, stabilization package imposed
GRAPH 6
NOMINAL AND REAL INTEREST RATES ON ASSETS
1968-1980

- INTEREST ON SAVING ACCOUNTS
- - - REAL RATE
- - - - REAL RATE AFTER TAX

100% marginal reserve requirements on checking accounts (maintained until 1980) and foreign currency deposits (dropped in 1978 but replaced by much higher average rates), and quantitative restrictions on direct foreign borrowings. In a further move to lower liquidity, foreign exchange obtained from coffee and some other primary exports could only be sold for exchange certificates with a six-months maturity. Finally, quantitative controls on credit and limitations on interest rates were reimposed.

41. The negative effect of these policies on the financial sector soon became apparent. As a result of restrictions on foreign borrowings, registered foreign capital inflows declined sharply as a source of credits, and the ratio of credit from organized markets and external sources to GDP fell by nearly 10% as compared to the first half of the seventies. Average lending rates rose from 4% to 8% in real terms, while real rates to savers fell. A variety of new financial instruments and intermediaries sprang up and grew at the expense of the traditional financial sector. Within the officially regulated financial sector disintermediation occurred in favor of those institutions and assets temporarily favored by legislation. Special development funds at below market rates became an increasing fraction of the total amount of credit available to manufacturing. Firms with access to such credit or to nonregistered inflows of foreign exchange were able to acquire less favored firms, increasing economic concentration.

42. Since 1979, some tentative steps have been taken to liberalize organized financial markets once again, while reducing the extra-bank market. First, the effect of inflation on capital gains was fully recognized for purposes of taxation. Then, in January 1980, the 100% marginal reserve requirement on checking accounts was lowered and the banks and corporaciones financieras were allowed to issue C.D's with only a 10% reserve requirement and bearing a free interest rate, while ventas de cartera were subjected to reserve requirements. In September 1980, the ceiling interest rates were loosened on savings deposits, and the UPAC system liabilities were lowered in 1981. Further decreases in the reserve requirements occurred in February and May 1982, although this was done by switching the reserve requirement to forced investments in the Banco de la Republica's development funds. The aim of all these measures was to improve the ability of the organized financial system to compete with the unorganized markets for funds and to raise deposit interest rates to positive levels.

43. Despite the sharp rise in inflation during the 1970s, aggregate savings (domestic and foreign) did not change significantly. In fact, the average ratio of foreign plus domestic savings to GDP, measured in current pesos, increased slightly from 20.3% in 1967-73 to 21.4% in 1974-79. The major source of finance for investment has continued to be business savings, which accounted for about 52% of total savings in each of the two periods. However, when compared with business saving during the 1960s, there was a decline of approximately 10 percentage points. The relative decrease of retained earnings and business firms' depreciation is also reflected in the balance sheets of the industrial corporations, as discussed below in paragraphs 46 and 47.

44. A dramatic shift in the sources of investment finance occurred between household savings and capital inflows. Between 1967 and 1973, capital inflows financed an average of 13.5% of investment while household
savings financed only 8.1% (equivalent to less than 2% of GDP). After 1973, household saving reached an average of almost 25% of investment (equivalent to nearly 5% of GDP). Between 1975 and 1979, households not only financed all housing construction but also contributed approximately 2% of GDP toward the financing of machinery and nonresidential construction. However, between the two periods public sector savings declined slightly, and Colombia switched from a net capital importer to a net capital exporter, as a result of the efforts to reduce inflation by curtailing public borrowing and limiting private capital inflows. The apparent rise in the average real interest rate paid to savers on easily available assets has been advanced as a possible explanation for the substantial increase in personal savings. However, the rate of personal saving nearly doubled while the real return to savings rose by only 3.4%. Moreover, the after-tax real rate actually declined slightly because of the rise in taxes on interest income and monetary correction after 1974. Thus, the changes in the real interest rate could probably explain a constant personal saving rate in the face of inflation, but not much of an increase, leaving the rise in saving rate to other factors, such as the rise in unreported income from illegal exports and the rise in the inflation tax (see Volume II, Chapter IV for further discussion).

45. One way to improve the incentives to save would be to recognize the fact that a large fraction of the interest paid to savers simply reflects the maintenance of the real value of their capital and should not be taxed. An additional way to increase the rate of saving would be to raise ceilings on saving deposit interest rates and UPAC monetary correction, while reducing the requirements for reserves and forced investments. Competition for the deposits with increased profitability would then push up the deposit interest rates and increase personal saving.

F. Industrial Finance: Problems and Prospects

46. Since World War II industrial financing has shifted dramatically from equity to debt sources, as shown in Graph 7, which is based on data from the Superintendencia de Sociedades Anonimas. The switch from capital to loans as a source of investment funds was particularly strong in the sixties; it continued at a reduced rate in the seventies. At the same time, there was a sharp drop in the issuance of new stock as a source of finance. Internal sources of funds (retained earnings and depreciation) also declined as a source of corporate funds for investment from about 50% in 1964–68 to 25% in the seventies. This pattern is evident for corporations in all the major industrial subsectors—food processing, beverages, textiles and garments, basic metals, and metal mechanical industries.

47. The apparent shift toward greater use of debt financing is a tendency that began in the sixties and has little to do with the financial reforms of the seventies. Rather the shift reflects (i) the general growth in financial intermediation in Colombia; (ii) the character of the firms reporting to the Superintendencia de Sociedades Anonimas, i.e., firms with better than average access to lines of credit with below-market rates; (iii) the effect of growing inflation, which tends to decrease the relative cost of debt finance because of the tax system; i.e., the inflation premium can be
expensed against taxable income, while the corporation obtains the full
benefit of paying off the loan in depreciated money; (iv) the double taxation
of corporate profit plus the increased taxation of capital gains in the stock
market in the 1974-77 period following the 1974 Tax Reform; and (v) the
underindexing of fixed assets for depreciation purposes, which leads to an
overstatement of corporate profits and an increased rate of taxation for
equity investors, a problem which has been reduced by the recent acceleration
in depreciation allowances at the cost of introducing other distortions into
the system.

48. Some progress has been made in reducing the incentives to use
debt finance by the above-mentioned measures regarding capital gains and
depreciation. Further steps could be taken by (i) raising the interest rates
on development funds, thereby reducing this incentive to debt finance; (ii)
revamping the accounting and tax system to more fully recognize the role of
inflation, for example by allowing firms to expense the present value of
their depreciation allowances while returning these allowances to something
approximating the economic life of the assets and by requiring firms to treat
a part of their interest costs as capital rather than current expenses. One
simple reform in this direction would be to allow expensing of capital goods
purchases while eliminating all interest deductions; (iii) encouraging the
corporaciones financieras to experiment with issuing liabilities and credits
bearing a variable interest rate. This rate could be tied to the interest
rates in the secondary CAT market. The variation in the rate should be
limited to prevent liquidity squeezes, but the principal should be adjusted
by the difference between the actual rise in the interest rate and the
limit. Such an instrument, which has also been suggested in other Latin
American countries, would spread risks more equally between borrower and
lender than any currently available asset-liability combination and might
permit more long term financing of industrial project. At the same time, it
would move toward the principle of expensing only a portion of interest
costs.

49. The increasing reliance on debt financing by manufacturing firms
has been accompanied by a reduction in the average maturity of credit.
Colombian financial intermediaries, including the corporaciones financieras
which are a principal source of finance for manufacturing, reduced the
average maturity of their credits between 1974 and 1980. Growing reliance on
short-term debt finance leaves business firms vulnerable to rises in interest
rates. An increase in nominal interest rates, for whatever reason, will
increase the debt service proportionately to the rise in interest rates.
This will create a liquidity squeeze and increase bankruptcies in the short
run, since neither the price level nor profits will rise proportionately as

6/ The problem was alleviated in 1979, as taxable capital gains on stocks
were fully indexed to eliminate the effects of inflation, leading to a

7/ For a detailed analysis of the current problems faced by the
corporaciones financieras see the Bank’s forthcoming report on “The
Colombian Investment Banking System and Related Financial Sector Issues”.
fast as interest rates and debt service. The problem becomes particularly acute when interest rates rise without an accompanying rise in prices or credit, for example because of a rise in foreign interest rates or the initiation of a stabilization program.

50. Nominal interest rates on credit to manufacturing have risen steadily during the seventies, at a rate which exceeded the increase in inflation (see Graph 8). Thus, realized real interest rates for manufacturing credit averaged about 1% from 1970 to 1975, increasing to about 5% from 1976 to 1981. In 1977, 1980, and 1981, average real rates reached more than 8%. These sharp increases produced liquidity squeezes of the type described above. The trend of nominal interest rates can be largely explained by the increased rate of inflation. The rise in real rates reflects a series of additional factors, both external and internal. The most important are: (i) the rise in real interest rates in world capital markets in 1980-81; (ii) the fall in the relative price of manufactures between 1974 and 1980, world-wide and in Colombia, which raises the effective real interest rate to borrowers in the manufacturing sector (the real interest rate is computed as the nominal rate deflated by the inflation in the industrial wholesale price index); (iii) the 1977 stabilization package, which increased spreads in local financial markets by imposing much larger reserve requirements and delinked Colombian and world capital markets by limiting direct foreign borrowing and imposing large reserve requirements on foreign currency deposits in Colombia. These measures reduced the size of the credit pool in Colombia and raised the interest costs sharply in 1977. Moreover, they shifted an increased fraction of manufacturing credit to the extra-bank market (up from 23% in 1970-74 to 32% in 1977-79), where rates tend to be higher because of higher costs of intermediation; (iv) the shift of the Colombian Government from a moderate surplus to a large fiscal deficit in 1981; and (v) possible expectations of increase in the rate of devaluation which increased the cost of credit from time to time, especially in 1981.

51. This analysis suggests that one of the ways to bring down real rates in Colombia would be to further ease the restrictions on foreign borrowing. This policy would have to be combined with some liberalization of imports and capital outflows in order to avoid an increase in domestic inflation. In the domestic market the Colombian Government could continue its program of reducing reserve requirements and financial investments while freeing up the ceiling on deposit rates. This program should increase the saving rate somewhat and thereby lower interest rates on credit by increasing the pool of loanable funds. Again, liberalization would be necessary to minimize the impact on prices. Finally, reducing the rate of inflation would lower nominal interest rates and the risk of a sharp devaluation. Since the Government deficit is currently a major factor in the expansion of the money base, bringing it under control would have a two pronged effect, i.e., decreasing inflation and easing credit conditions.

52. The rate of manufacturing investment seems to have been affected by higher real interest rates, and the decline in real credit. According to DANE figures, total manufacturing investment fell relative to growth in value added by 10% during the seventies, including 1979 (see Volume II Chapter III). The drop in manufacturing investment in 1980-81 should probably be attributed more to the declines in aggregate demand than a decline in investment directly caused by high real interest rates. The firms reporting to the Superintendencia de Sociedades Anónimas also reduced their real
GRAPH 8
INTEREST RATES ON CREDITS
1970-1980

- FIP
- PROEXPO
- EXTERNAL INTEREST RATES
- EXTRA MARKET INTEREST RATES
- REAL INTEREST RATE ALL CREDIT

investments, while they increased their financial investments at the same time (see Graph 7). The reporting firms, larger and better organized, probably had easier access to below-market credit sources—FFI, FIP, PROEXPO—and to external loans, (direct and through the corporaciones). These firms then assumed the role of financial intermediaries and relented such funds, either indirectly, through other intermediaries and the extra bank market, or directly to less favored firms.

53. This analysis points to a major issue in Colombian industrial finance—the impact of the growth of the two-tiered credit market. Focussing on average real interest rates alone hides the impact of the rapid growth of development credits, which accounted for 38% of manufacturing credits on the organized market in 1978-80 versus 34% in 1974-76. These credits are obtained at 24 to 30 percentage points below market rates and often less than the rate of inflation. Firms without access to those funds suffered because of higher credit costs; they were subject to takeover threats from those using credit at preferential rates, thus increasing industrial concentration. Attempts have been made to limit the use of development credit in takeover bids, but like most attempts at allocating credit, these are likely to fail because credit is too easily shifted from one use to another. A strategy which is likely to be more successful would be to reduce the role of development fund credits by reducing the forced investment requirements, by raising ceilings on deposit rates, and by raising the interest rates on development credit—possibly by linking them to the CD or UPAC rate. The net effect of this strategy would be to decrease sharply the interest rate spread between the free market and the development credits by lowering the former and raising the latter.

IV. INDUSTRIAL SECTOR DEVELOPMENTS AND SPECIFIC ISSUES

54. Improving external trade incentives and liberalizing the financial system should contribute to improve efficiency in manufacturing, but it may not be sufficient to ensure future expansion and competitiveness. Better use of the factors of production remains crucial to achieve the major aims of industrial policy: growth in output, employment and exports. As a consequence, the mission has paid special attention to recent developments in capital formation of the manufacturing sector, the role it played in the expansion and modernization of various activities and the impact it had on improving labor productivity. At the same time, some attempts were made to examine the relationship between changes in labor productivity and wages in order to evaluate the state of Colombian industry's international competitiveness. To obtain a better understanding of the significance of the interaction between foreign trade and financial policies on the one hand and industrial development on the other, two subsectors were examined in detail, textiles and metal-mechanical industries. Firms in both sectors have been actively exporting for years, but they have also experienced increasing import competition. In addition, both sectors have encountered difficulties in financing working capital and investment.

G. Investment, Productivity, Wages and International Competitiveness

55. With the exception of a slight decline in the late 1950s, capital formation in construction, machinery and equipment has remained fairly
constant in terms of gross domestic output, making up roughly a fifth of GDP. On the other hand, incremental capital-output ratios fell from over 4 in the 1950s to less than 3 in the early 1970s, and increased to 3.5 by the end of the last decade. With the declines in the ratio of gross investment to value added from 15% to 13% of GDP and a growth rate of value added averaging 6% p.a., the realized marginal capital output ratio in manufacturing fell from 2.3 to 2.0 between the sixties and seventies. Similar to a slight deterioration in the economy as a whole, average efficiency of investment in manufacturing seems to have fallen in the late 1970s, with a definite turn for the worse in the early 1980s.

56. Growth of employment and average labor productivity in manufacturing have fluctuated substantially. During the rather capital intensive period of the 1960s, labor productivity (value added per worker) advanced by nearly 5% p.a. It fell in the early 1970s, as large employment gains accompanied a rather constant rate of capital formation. Average labor productivity recovered slowly after 1975, and surpassed the 1971-72 level in 1979-80. Individual branches experienced quite different developments. Gains were strong in the capital goods sector but rather small in the consumer goods industries. The development of intermediate industrial goods actually suffered from a decline in labor productivity, after advances had been made earlier in the decade.

57. The pattern and sectoral distribution of labor productivity changes during the last few years indicate two factors which have exerted a major influence: increased imports of capital goods and some technical innovations in national industry. During the first part of the last decade, capital goods imports, which embody a large part of new technology, were stagnant and reached a low in 1975. Since 1976, however, an increasing amount of capital goods has entered the country, with growth rates averaging 20% per year. Many of these imports have been purchased in connection with global licenses, and it can be asserted that the installation of these capital goods led to new production processes which entailed substantial labor productivity increases. Those innovations and some restructuring of national industry would seem to be behind the increased difference between the actual and potential growth of value added in manufacturing, attributable only to increases of capital and labor inputs. The unexplained "residual" increased from about 16% of growth in the late 1960s and early 1970s to 28% after 1975, indicating accelerating technological progress in the manufacturing sector during the past 10 years. The policy implications from these findings would be to have confidence in the increasing ability of Colombia's industrial sector to compete internationally, provided labor legislation is simplified, financial repression is overcome, and adequate export incentives are maintained.

58. While average real wages followed the trend in labor productivity in the manufacturing sector, Graph 9 shows that cuts in industrial wages during 1970-74 were deeper and gains between 1975 and 1980 were lagging behind productivity increases, indicating that entrepreneurs were able to capture a significant part of productivity increases in the late 1970s. However, some fringe benefits not included in the data may have increased faster than wages during the last few years. The principal factor in this rise has been the change in the treatment of the cesantia. According to current Colombian labor law, on termination of his contract a worker is entitled to one month's salary at his current wage rate for each year of his service. Any employed worker may draw against this claim for certain
GRAPH 9
LABOR PRODUCTIVITY AND WAGES

- LABOR PRODUCTIVITY
- REAL WAGES

ANNUAL PERCENTAGE CHANGES

INDEX

Changes in Labor Productivity
Changes in Real Wages

1970 71/2 73/4 75/6 77/8 79/80
"investment" expenses, e.g., purchase or repair of housing, with the balance earning interest at 12%. Thus, while the firms were previously able to use their reserves for cesantias for working capital purposes, currently they have to annually index their contribution and stand ready to make interest free loans out of these funds. This change has raised the effective costs of labor and may have contributed to the substitution of capital for labor, which occurred during most of the second half of the 1970s in medium and large enterprises. At this point in time, no estimates have been made about the impact of the new treatment of the cesantia on labor costs, on the possible substitution between capital and labor, on capital formation in manufacturing, and on the growth of new firms. Such a study should have priority for future policy making in the industrial sector.

59. Did the increases in real unit labor costs jeopardize Colombia's international competitiveness in the production of more labor and skill intensive goods? Available information from two different sets of exporting industries—clothing and footwear on the one side and machinery and transport equipment on the other—indicate a radically different development of labor productivity and real wages within the manufacturing sector. Labor productivity in machinery and transport equipment production advanced rapidly during each year of the 1970s, while real wages moved close to the industrial average, falling between 1972 and 1977 and rising steeply thereafter. In contrast, the clothing and footwear industries suffered from declines in labor productivity between 1972 and 1976 and recovered only in the late 1970s. Real wages fell simultaneously but less than labor productivity up to 1977, and increased by over 10% per year between 1978 and 1980. In comparison to other countries competing with Colombian apparel in world markets, two observations can be made. Until 1977, labor productivity increased faster in East Asian garment factories than in Colombian firms, but so did wages. By 1980 Colombia's wages had caught up with them. On the other hand, increasing imports of relatively low priced fabrics decreased the costs and raised the quality of the industry's most important input. It would seem then that a more favorable export incentive framework should have enabled Colombia's clothing firms to expand sales abroad rather than to retrench. In sum, during the last decade the skill intensive sectors seemed to have increased their competitiveness substantially. The traditional labor intensive branches did less well, but their international competitiveness was maintained by open and some inadvertent import liberalization.

H. Textiles and the Problem of Import Liberalization

60. The textile industry, which is still the largest manufacturing subsector, experienced its most rapid growth during the 1930s and 1940s. In the 1950s, Colombia had the most advanced textile industries in Latin America, and by 1967, it seized the opportunities offered by an active export incentive program. Textile exports rose from US$17 million in 1968 to close to US$100 million in 1974. Since 1975 however, exports have stagnated. For some time, textile producers continued to do quite well by concentrating on the highly protected domestic market, but it appears that, with the slackening of the export drive, the industry felt less compelled to invest and innovate. By the end of the decade the Colombian textile industry, which had been internationally competitive for over two decades, was faced with a growing wave of illegal imports, which are estimated to have captured slightly over 20% of domestic consumption. The ready market for the contraband is explained by the fact that the international prices of textiles
are well below the domestic level, the quality, design and styling of imported goods is usually superior, and goods are offered at convenient credit terms, which the domestic producers cannot afford to extend because of credit restrictions and relatively high cost of working capital.

61. How is it possible for the Colombian textile industry to export 10% of production and not be able to compete effectively with foreign producers in the domestic market? Several facts explain that seemingly contradictory behavior. While Colombia is selling mainly yarn and grey goods abroad, at home firms sell a great variety of textile goods, which are produced in short runs. High tariff and nontariff protection has made it possible for Colombia's textile industry to use discriminatory pricing policy for those products selling in the two markets. In 1981, imports of textile products were subject to duties averaging 26% for synthetic fibers to 40% for spun yarn and 70% for textile fabrics. More importantly, the Government attempted to regulate the flow of imports by limiting the number of import licenses, based on historic trends in the sector and local prices. As a consequence, official imports have remained insignificant, accounting for less than 5% of domestic consumption during most recent years. That type of protection has allowed companies not only to charge between 40% and 100% more in domestic than in international markets, but also leading to price increases which were 50% above Colombia's general rate of inflation (Graph 10).

**GRAPH 10**

**TEXTILE PRICES ROSE 50% MORE RAPIDLY THAN CONSUMER PRICES IN 1970-74...**

...AND WHILE THEY HAVE FALLEN SLIGHTLY BEHIND THOSE GENERAL PRICE INCREASE SINCE 1975, THEY ROSE MORE RAPIDLY THAN WORLD PRICES (+ DEVALUATION)...
Over the last 20 years, one of the crucial problems of the textile firm has been the relatively slow growth of labor productivity at the same time as labor costs have gone up vis-a-vis international competitors. Studies undertaken by the Economic Commission for Latin America have shown that, in 1960-62, the cost of producing 100 yards of cotton cloth in Colombia was only 6% above producing the same cloth in the U.S. and between 25% and 30% above Japanese costs. During that time labor productivity in the Colombian textile industry, although reaching only 60% of the US counterpart, was the highest of all textile industries in Latin America and most other developing countries. In 1979, overall productivity of the Colombian textile industry had fallen to about one-third of that in the U.S., with labor costs per unit of output being marginally higher in Colombia than in the U.S., despite the large wage differential. At the same time, Colombia's labor costs were considerably higher than in several leading textile exporting countries such as Taiwan, Hong Kong and South Korea. During the late 1970s, Colombia had only lower labor costs per unit of output than the EEC countries, since the hourly cost of labor in the EEC was about 20% higher than in the U.S., while productivity was marginally lower.

Behind this relative decline in labor productivity and increase in production costs are two aspects: lagging investment and fixed labor costs. The combination of generous export incentives and a rapidly expanding domestic market led to a rather complacent investment policy in a world environment that went through dramatic technological changes in the production of textile fabrics during the 1960s and 1970s. The Colombian firms are now engaged in large outlays for new investment. Labor and other costs have, however, remained high, not so much as a consequence of high wage payments, but more because of the inability to rapidly adjust the size of the labor force to the new technological requirements of the production process. Most of the interviewed managers claim that they can operate successfully with about 20% less labor, but as normal attrition is about 2% per annum, it would take at least ten years to adjust the labor force in relation to the machinery already in place.

In 1981, an important part of the Colombian textile industry seemed to be fully engaged in modernizing its production process. It is estimated that currently about 25% of all equipment in the textile industry is less than five years old, and 50% is less than ten years old. As the volume of production increased only moderately (11%) since 1973, it appears that most of the machinery and parts have been imported for replacement and modernization of the existing equipment. While historically imports of textile machinery have been running at about 2.5% in relation to the value of production, the rate has increased recently, especially after 1978 when imports of used machinery were banned by the Government, and new machinery was allowed a faster (six years) depreciation. For example, investment of the largest firm increased from 6.3% of sales in 1978 to 11.2% in 1979 and 18.6% in 1980, for a total of Col$3.7 billion. The same firm is planning to invest about Col$9.1 billion in the 1978-82 period, or more than twice the current (1980) equity. Investments in machinery and equipment of the second

---

most important firm amounted to Col$700 million in 1979-80 and further expenditures of Col$450 million for raising equity. The rate of capital investment for some of the smaller companies is of the same order. In terms of textile machinery purchases in relation to the volume of fiber consumed at the mill level, Colombia now compares favorably with the U.S.

With sales revenues declining or at best being stagnant and outlays for both capital and labor increasing, it is no surprise to see a sharp decline in the profitability of the larger firms in the textile industry over the last few years. Smaller companies seem to have fared better, although their "official" financial performance does not seem to have been significantly superior to the large competitors. In general, smaller companies benefitted from lower labor costs (nonunionized labor), lower overheads, lower inventories and a greater flexibility to counteract illegal imports. The smaller companies also seemed to be in a better position to cope with the recent credit restrictions as owners' capital was supplemented with directors' loans.

While there is a measure of agreement regarding the large volume of illegal textile imports entering Colombia, explanations of how these goods are brought into the country and sold in the domestic market differ widely. Conventional wisdom holds that profits from illegal drug exports to the U.S. are repatriated in the form of consumer goods, textiles being the favorite item, because the origin of textile fabrics is nearly impossible to identify. On the other hand, many people in the textile industry believe that most of the illegal fabrics come in on reused licenses granted by INCOMEX. As a consequence, the industry has been pressing the Government to put most textile items on the "prohibited" list, which was achieved in early 1982. While a good part of the illegal imports may be residuals of large runs produced by the American textile industry, with some of them being possibly sold at "dumping" prices, import prohibition is unlikely to stop smuggling; but it will probably raise prices. Moreover, it is increasing the market power of domestic companies in those lines which are most in need of foreign competition. Since the Colombian textile industry is well established and has proven recently that it is able to modernize and streamline its operations, the usefulness of the recent protectionist moves is questionable.

If the authorities officially lowered tariffs and lifted import quota restrictions, a large part of contraband would probably shift to legal trade, actually raising tariff revenues as well as income taxes. The following additional measures could be implemented to help the restructuring process of that industry. First, antidumping measures can be undertaken, if a large amount of legally imported textiles are sold below world prices. Second, the modernization and restructuring process requires not only new investment capital but also increased working capital. If firms are able to borrow part of that capital from abroad, it should not be curtailed merely because it potentially inflates the domestic money supply; this could be avoided by a policy of favoring import liberalization in general. Third, labor legislation regarding fringe benefits should be reviewed carefully. Besides the fact that the level and inflexibility of real wages may have put Colombia's textile industry in an uncompetitive position, the changes in the
cesantia have led to a financial burden at a time where working capital is both relatively scarce and expensive.

68. Faced with a de-facto liberalization of trade, the industry has been forced to take steps to raise its productivity. Analysis of production methods, costs and prices in the textile sector leads to the conclusions that the modernization process is well underway. In the past, Colombia's large textile firms produced relatively small amounts of a vast array of different products, which involved frequent changeovers from one pattern to another. To be able to use its new equipment to maximum effect, however, industry will need to concentrate on a limited number of items which are produced in large quantity for exports as well as for the domestic market. At the same time, textile producers should be working more closely together with clothing manufactures to take advantage of export incentives for a final product which still enjoys considerable success in foreign markets.

I. The Metal-Mechanical Industries

69. Metal-mechanical industries are a good example of a sector where Colombia has a considerable comparative advantage, which, if correctly stimulated, could lead to vigorous growth. Many metal-mechanical industries require high inputs of skilled labor, a resource which is both relatively inexpensive and plentiful in that sector. There have been periods when Colombia seemed to fulfill the expectations placed in its metal-mechanical industries. Between 1967 and 1975, during a period of rapid economic growth, these industries were able to increase their share of manufacturing value added from 13.3% to 18.4%. Since then, however, the industry has fallen short of its potential. By 1979, the share of metal-mechanical industries fell back to 17.6% of manufacturing value added, and it is estimated that the share has contracted further to 16.4% in 1980. This compares with a 29% share in other medium-sized countries at approximately the same level of development as Colombia.

70. Colombian import substitution first took place in consumer and then in intermediate goods industries. Several governments tended to regard imports of capital goods as the most beneficial kind of imports. When, in the wake of the coffee boom, imports were liberalized to combat inflation, the tariff on several capital goods was lowered to 5%. Duties on capital goods imports by the mining and petroleum industries were abolished altogether. Even where nominal tariffs remain high, the effective tariff on capital goods is often lowered through the system of global licenses, under which a general, usually low tariff is applied to all components of an investment project. While effective protection for most capital goods averages 40% according to the tariff schedules, in practice the exemptions and special licenses have often resulted in negative protection for capital goods industries. Producers have to import components on which duties were levied, whereas they have to compete with imported final products on which little or no duties were paid. Agricultural machinery for instance, which is an important product of the metal-mechanical industry, was found to have an effective protection of -20% in 1980-81. The effective protection for equipment imports by the mining industry (which includes cement) is -21% and for the petroleum industry -23%. Many types of metal-working machinery as well as industrial links have negative effective protection. Similarly, purchases
by the Government and public agencies are exempt from import duties which results in negative effective protection for a substantial part of the market for capital goods. For electrical equipment, such as controls and transformers bought by Government agencies, the effective protection is -26% and -32% respectively. For telephone equipment, another area where the Government constitutes the bulk of the market, effective protection for domestic producers turned out to be between -12% (for telephones) and -26% (for switchboards). It is important to adjust the tariffs and to remove the numerous special incentives for imports of capital goods, in order to put effective protection at about equal level with other industrial products.

71. Purchases by the Government and its agencies are estimated to equal about 15% of the value of Colombian industrial production. For some products, such as electrical and telecommunications equipment, as well as road maintenance and railroad equipment, the Government holds a virtual monopsony. For others, such as office equipment or steel structures, it constitutes a significant part of the market. The Government, through its purchases, could therefore become an important factor in stimulating the development of a capital goods industry. This potential is not being used. On the contrary, there is a bias against local suppliers on the part of the Government. This bias manifests itself in various ways. For one, Colombian firms are usually not large enough to handle major projects by themselves, even though they could do so, if a large project were broken down into components. For reasons of administrative simplicity, however, government agencies prefer to deal with one supplier or contractor which removes Colombian firms from competition for such large contracts. Some cost-benefit analysis will be required in the future to explore alternative ways of buying equipment for major public projects.

72. For capital goods the financing which can be offered by a supplier is often a decisive factor in the buying decision. Foreign products sold in Colombia are particularly favored in this regard, since they are frequently supported by special export credits. Colombian manufacturers, by contrast, far from being able to offer generous financing terms to their clients, were suffering from a credit squeeze. As a result, sales were lost to imports, even in cases where the domestic product would have been cheaper. Colombian firms who successfully sell their products in foreign markets—where they are supported by PROEXPO credits—had difficulties in competing in the domestic market because they were unable to finance their sales. In one case, a major producer of capital goods had set up a subsidiary in Venezuela from which he supplies the Colombian market with the help of Venezuelan export credits. The firm's Colombian production facilities concentrate on exports. The survey of a sample of metal-mechanical industries established clearly that lack of sales financing was regarded as the single most important obstacle to more rapid development.

73. There have been attempts in the past to provide sales financing to Colombian producers of capital goods; however, the amounts were insignificant compared to producers' needs, and the procedures involved were inordinately complicated. On September 30, 1981, the Central Bank issued a resolution which sets a fixed interest rate of 26% on credit granted for the purchase of domestically produced capital goods. These credits have three year terms; up to 80% can be rediscounted. Compared to the current cost of funds in
Colombian lending markets, 26% p.a. constitutes a subsidy which could put the sales of capital goods in the domestic market on equal footing with exports. On the other hand, these measures introduce still another distortion into the credit markets. Further study is needed to assess benefits and costs of this measure.

74. In general, metal-mechanical enterprises in Colombia employ technologies which do not offer significant economies of scale. Most firms prefer labor intensive production methods, which allow them to expand or contract with the market. The industry was therefore not pushed into exports, because of the need to achieve more efficient scales of production. In most firms, exports were made when opportunities opened up, and were abandoned either because the Peso revaluation since 1975 made them uncompetitive or because recessions in Venezuela and Peru cut off the market. The firms in question appeared to weather these fluctuations in exports without undue problems. However, the future expansion of the subsector will increasingly depend on provision of a stable incentive framework for both exports and imports, facilitating investment and production decisions for the firms involved.