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The Brookings Institution

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August 14, 1980

Mr. Constantine Michalopoulos
Director, Office of Economic Affairs
Policy and Program Coordination
Room 3847
U.S. Agency for International Development
Washington, D. C. 20523

Dear Mr. Michalopoulos:

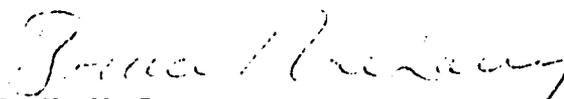
I am writing to request financial support from the Agency for International Development for the extension of our research project on North-South Complementary Intra-Industry Trade. I understand that Joseph Grunwald, who is in charge of the study, has been in touch with you and your staff regarding this request and that you have seen the work outline. I am enclosing a copy of the proposal for the additional research.

The budget attached to the proposal indicates an estimated cost of \$83,400 for the research extension. We are requesting a contribution of \$50,000 from the Agency for International Development. The remainder will be financed from other sources.

Research will be carried out at the Brookings Institution under the direct responsibility of Joseph Grunwald. His principal collaborator is Kenneth Flamm. Their resumes are enclosed. The study is scheduled for completion in April 1981.

Please let me know if you need any further information. We greatly appreciate your interest.

Sincerely yours,


B. K. MacLaury
President

enclosures

North-South Complementary Intra-Industry Trade

A Project Description and Proposal for Supplementary Research

BEST AVAILABLE DOCUMENT

Background

The problem of how to reconcile promotion of rapid industrialization of Third World countries with the increasing pressures to protect domestic economic activities in the industrial countries, has become a major postwar dilemma. Until recently the OECD countries have focused their LDC policies on the concessional transfer of resources. The magnitude of the economic development task, the growing lack of political support for aid programs in the face of the 1973-75 world recession and the continued slow economic activity, as well as the rising per capita income levels in some developing countries, have limited concessional aid to the poorest of the developing countries. Therefore the LDCs must increasingly rely for their development on internal reforms and external trade. Although foreign trade cannot be the only engine for growth, it provides important means for development, including the technological change without which economic progress is not possible.

For many decades the international pattern of comparative advantage between the industrial and developing countries remained virtually unchanged. This gave rise to policy recommendations that the optimum allocation of the world's resources would be best served if the LDCs continued to export raw materials and agricultural products and to import manufactures. However, import substituting industrialization in many developing countries during the post-war period produced remarkable shifts in international comparative advantage.

The LDCs were pushed by economists and advisors from the OECD countries (often as part of aid programs) to lower the costs of import substituting production, which tended to be inefficient during the early stages. Many developing countries have since become highly competitive in industrial country products.

Manufactured exports from the LCDs have grown much more rapidly than had been foreseen; the average annual rate of increase rose from 12 percent during 1960-66 to 25 percent during 1966-73; this compares to a 17 percent annual growth rate for the manufactured exports of the developed nations during the latter period. Such exports from Latin America, one of the most advanced developing regions, increased 23 fold during the two decades 1955-1974, as contrasted to an 11 fold rise for the world as a whole. Projections for the future indicate that the trend in the rising LDC share in the world industrial output will continue, if not accelerate.

Other indicators also signal that there will be significant changes, both quantitatively as well as qualitatively in international production and trade patterns in the foreseeable future. These changes will require substantial, and often painful, adjustments in the OECD countries. Until now the necessary adjustments have been handled with relative ease. The institution of "orderly marketing agreements" by the United States, or "organized free trade" by European countries, and occasionally, domestic adjustment assistance, have helped to avoid major dislocations. These measures might not only become insufficient in the future to cope with the industrial expansion of Third World countries, but would be contrary to free trade principles. Marketing arrangements and other quota systems are clearly protectionist and hurt consumer welfare; adjustment assistance for firms (but not aid for retraining and unemployment), might maintain inefficient

industries and thus might also go against the changing international pattern of comparative advantage.

The alternatives for the developed countries are (a) to import labor from developing countries, or (b) give up or relocate entire industries, or (c) share production with developing countries by shifting to them those tasks in which any comparative advantage has been lost. The first alternative was used massively in Western Europe during the 1960s and early '70s, but has become increasingly difficult since then. For various reasons, among which the "oil shock" of 1973/74 has been an important one, economic growth in the industrial countries has slowed, and a significant level of unemployment has become chronic. Therefore, though the indigenous unemployed may not be prepared to accept those unskilled jobs for which immigrant labor could be used, organized labor representing primarily the lower skilled groups has become particularly opposed to immigration of foreign workers. Even with immigration, it is institutionally difficult, if not impossible, to maintain foreign workers' wages sufficiently low within the industrial countries in order to compete with manufactures from low wage areas in the long run. For similar reasons the second alternative would also encounter powerful political and economic resistance.

North-South co-production seems to be the politically most viable alternative for the North. From the industrial country firm point of view it permits shifting uneconomic production activities abroad without losing the entire plant. If these activities become uneconomic because of high wage costs, transferring them to subsidiaries or subcontracting with independent enterprises in low wage areas will restore the profitability of the production process to the industrial country firm.

In the late 1960s, industrial firms began to undertake complementary intra-industry production with developing countries. While many factors--including country-specific risks, transport cost, scale economies, advances in communications, the growth of the multinational firm, and national economic policies--affect the location of production, recent shifts in the international sourcing of manufacturing production appear to primarily reflect persistent intercountry input price differentials.

Economic, social, and institutional barriers to migration have effectively preserved international wage differentials. Even the major new flows of capital that poured into the developing countries after the Second World War did not eliminate national disparities in real wages. In part this may be a consequence of the sheer magnitude of the labor force available in underdeveloped economies. But this may also reflect the dual structure of labor markets in developing countries which have effectively rationed high-wage job opportunities, insulating the great bulk of the population from the productivity increases resulting from capital accumulation.

Persistent differentials in the cost of capital used in the developed and less-developed regions may also have played a role in the recent evolution of world trade patterns. The existence of tariffs, country-specific risks, and national tax systems which subsidize overseas investment probably explain this phenomenon. To some extent, differentials in the price and availability of key national resource products may play an important role in the world-wide sourcing of products which depend heavily on such inputs.

The shifts that have been occurring in international trade in manufac-

tures seem to indicate that existing tariff barriers in developed countries are losing importance relative to cost differentials as determinants of the location of manufacturing production. The voluminous literature on the changing pattern of LDC exports points to labor cost differentials as the key ingredient in a rather complex list.

Factors other than input prices, however, may also play an important role in the location of international production. Transport costs and the location of markets encourage geographically-based specialization. Scale economies, if present, favor the centralization of production. The existence of country-specific risks may favor diversification. Labor market conditions and skill availability might constrain industrial production. National economic policies--in such diverse forms as tax policy, integration requirements, constraints on input use, health and safety requirements, and national quotas on imports--all may be expected to influence the national location of world production.

One would think that developing country competition in labor intensive goods would affect the industrial countries primarily in such traditional products as textiles, particularly wearing apparel, footwear, toys, etc. These are the product lines in which low cost imports from developing nations forced factories to close in developed countries. But these account for less than 20 percent of complementary intra-industry trade of the United States with developing countries.

What appears as much more important than those traditional goods are relatively new sectors, particularly electronics. While these sectors are technologically advanced, there are production stages which require intensive use of labor. For instance, electronics shares with the apparel industry the characteristic of constant and rapidly changing styles which limits the degree of automation. In addition, electronics is subject to continuous advances

in technology which also restrains investment in automation which would eliminate much unskilled labor.

Nature and Trends of Co-production

A new kind of international division of labor may be signaled by the growth of international trade in component parts and processes of a final product. * It permits industries, which otherwise would be inefficient, to survive and prosper in industrial countries, while industrialization continues to accelerate in developing countries. This production system can provide the mutuality of benefits which is essential for a viable new international economic order. In the face of growing protectionist sentiment in industrial countries, industrial complementary imports may encounter less resistance than imports of items entirely produced abroad

Complementary industrial production and trade between the United States and other countries are already present in a wide variety of activities. They range from operations where most of the fabrication is done in the United States and only assembly or testing is done abroad, to those where U.S. components form only a small part of the total product. This range is exemplified, at one extreme, by the sending of cut garments abroad where they are sewn and returned to the United States or by the testing abroad of magnetic tapes, and at the other, by the production of foreign automobiles,

*Provisions for intra-industry production and trade have been made in several regional economic integration schemes in order to promote an equitable distribution of benefits among member countries (for example, the "complementarity agreements" in the Latin American Free Trade Association and the industrial "sector programs" in the Andean Common Market).

where only such things as sealed beam head lamps, window glass, and seat belts to meet U.S. safety requirements are supplied (but sometimes the complementarity is more complex, as in the U.S.-Canadian, automotive arrangement). In between, there is a huge variety of complementary activities. In the production of semi-conductors, the United States supplies unscrubbed silicon wafers and uncut wire, the foreign country supplies other components and assembles them by hand under magnification; the semi-conductors themselves are then used in the internationally complementary production of electronic equipment. In the production of clock radios, the United States exports timer mechanisms, printed circuit boards and other components (some of which were produced abroad); the foreign country produces the radio (sometimes with U.S. components), assembles and tests the finished product, and then exports it to the United States. In the production of electronic memories, the United States supplies ferrites, stackboards, magnet wire; the foreign country supplies other components and does the assembly for export to the United States where the article is used in computers and other data processing equipment, some parts of which were produced abroad. In the production of foreign airplanes, the United States often supplies flight control and communication systems, pressurization systems and jet engines which were produced with foreign parts. In copper and aluminum mill products frequently the United States produces seamless copper or brass tubing aluminum strips, etc., and the foreign country does the rolling, drawing, extrusion, casting, piercing, etc. Heavy equipment such as turbines, tractor shovels and other earthmoving and mining equipment have also been produced by countries in a complementary fashion.

Many forms of trade can be involved. Among them are: (a) exporting of components from the industrial country to the LDC where it is fabricated or

assembled for return to the industrial country; the returned product may be complete, ready for sale in the industrial country market or for export abroad, or the returned product requires further processing in the industrial country before sale as a finished good; (b) the industrial country firm may contract component parts abroad which are fabricated into the final products in the industrial country; (c) LDC or third country firms may contract processes and component parts in the LDC and the industrial country, for sale in the industrial country or abroad.

Subcontracting has been the basis for such a production system, but there are many variations and additional modes of intra-industry arrangements: (1) industrial country multinational enterprises contract with the LDC subsidiary they own or control resulting in "sequential export-import operations"; (2) subcontracting of components or finished products abroad by the foreign subsidiary of a transnational enterprise; the retail aspect-- e.g. Sears Roebuck -- is a special case; (3) industrial country producer contract with independent LDC firms; (4) non-producing industrial country firms (such as jobbers) purchase components domestically or abroad and contract abroad; (5) LDC producers purchase industrial country components for fabrication and reexport; (6) non-producing LDC firms purchase components and contract production domestically or abroad.

Information compiled by the U.S. International Trade Commission (formerly the U.S. Tariff Commission) provides insights into the magnitude and nature of complementary intra-industry trade for the United States. Of particular interest are data on imports under item 807.00 and 806.30 of the U.S. Tariff Schedules.

These items permit the duty-free re-entry of U.S. produced components which have been processed or assembled abroad. *

An examination of ITC data reveals two significant trends: first, imports under the two tariff items have increased sharply since 1966 (the first year of record), rising from less than one billion dollars in 1966 to almost \$12 billion in 1979; this is nearly twice the growth rate of total U.S. imports of manufactures; and second, the proportion of 807.00/806.30 imports coming from developing countries have shown a drastic increase since 1966 when they constituted about 6 percent of the total (94 percent being imported from industrial countries); in 1979 such imports from the LDCs were almost one-half of the total. **

The importance of these U.S. tariff items also has increased in the foreign trade of the developing countries. Exports to the United States under these tariff items by the non-petroleum exporting LDCs were less than one percent of their total exports to the United States in 1969. This share increased to almost 11 percent in 1976. Between one-fifth and one-quarter of the U.S.

* Item 807.00, which accounts now for over 95 percent of imports under the two tariff provisions, provides for duty-free re-entry only of U.S. components which do not lose their physical identity in the assembled article. Under item 806.30 the exemption related only to a U.S. base metal article, but permits the exported metal article to be subjected to unlimited processing abroad so long as the resulting product is imported by (of for the account of) the U.S. exporter of the metal article for further processing in the United States.

** In terms of value added abroad (including foreign components), the LDC share was 31 percent in 1979 compared to less than 4 percent in 1969.

imports of manufactures from the LDCs now fall under the provisions. At first, Hong Kong was by far the most important LDC source under 807.00/806.30, now Mexico provides more of these imports than Hong Kong, Taiwan, South Korea and Singapore combined. The importance of Malaysia, Philippines, the Caribbean and Central America has also increased substantially.

General Objectives

The principal aim of the study is to examine the potential implications of complementary intra-industry trade between industrial and developing countries. The major policy questions are not necessarily the same for both sides of the co-production relationship, the individual countries on the one side and developing nations on the other. For the industrial countries the major concerns focus on the employment and balance of payments effects: What is the net employment impact of shifting inefficient production processes abroad, particularly if these tend to be labor intensive? What are the balance of payments effects of complementary intra-industry trade compared to traditional trade?

For the developing countries the policy concerns are broader. They include not only the employment and balance of payments effects but also question about stability, linkages, "dependency" relationships, technology transfer, social factors and upgrading of the labor force: Is there any evidence that offshore processing and assembly operations in developing countries are less stable than traditional manufacturing operations? Do such operations tend to be production enclaves within developing countries, with no use of local inputs aside from labor and no domestic use of the output? Compared to direct foreign investments and other transfers, is co-production an adequate vehicle for the transfer of technology? Compared to other man-

ufacturing, do such operations tend to keep labor unskilled and wages low? Do co-production arrangements inject a greater dependency on industrial countries than ordinary international economic relations? Is the composition of the labor force different in respect to sex, age and marital status? Does the preponderance of young female employees signify greater male unemployment, the breakup of the traditional family and other social distortions?

The project addresses itself to these and other questions and attempts to shed sufficient light to suggest some answers.

Project Status

Until now resource limitations have restricted the scope of the project mainly to (a) an analysis of the trade patterns under U.S. tariff provisions 806.30 and 807.00 with special reference to Latin America, and (b) case studies which examine some effects of co-production on three countries in Latin America, Mexico, Haiti and Colombia. For the preparation of the case studies, the collaboration of local institutions and economists has been secured. In Mexico the collaborating institution is El Colegio de Mexico (Victor Urquidi, President) and in Colombia, FEDESARROLLO (Rodrigo Botero, President, Miguel Urrutia, Director). Both institutions count among the best in Latin America. In the absence of a corresponding institution in Haiti, two first-rate Haitian economists, now at the University of Chicago, have been contracted (Leslie Delatour and Karl Voltaire, who have consulted for the U.S. AID mission in Haiti on several occasions).

The country case studies address themselves to (a) the magnitude and nature of the assembly and other co-production operations including the major product groups and the role of the multinational corporations; (b) employment and composition of the labor force in co-production; (c) stability of the

operations: (d) wages and working conditions; and (e) some linkage effects with the rest of the economy.

Research has been completed on the nature of intra-industry trade including institutional arrangements, and on major trends by principal countries and product groups. The data base is special tapes of 806.30/807.00 tabulations obtained from the U.S. International Trade Commission. The case studies are based on surveys of establishments and workers in Mexico, Haiti and Colombia undertaken by the local institutions and economists who collaborate with Brookings on this project. The surveys are essentially complete. The Haiti surveys have already been analyzed.

The second seminar of the current project will be held under UNCTAD auspices at El Colegio de Mexico in Mexico City, August 18-22, 1980. At the seminar the three country studies will be presented by the Latin American collaborators and an overall analysis of trade patterns emerging from North-South co-production activities will be presented. Economists from Latin America and elsewhere will review experience of international subcontracting in other countries and representatives of international agencies will report on related research in their organizations. (Attached is a summary of the first seminar held at El Colegio de Mexico in July 1979).

The Need for Supplementary Work

In the course of the study it has become evident that in order to gain adequate insights into co-production activities and their role in North-South relations, additional work will be necessary. The major components of the supplementary work will be to expand the view of complementary intra-industry trade to cover U.S. trade with other developing countries beyond the three case studies, to include as much as is possible other industrial countries' trade with developing countries, and to undertake an in-depth analysis of

an industry on a global scale. In this manner, the study can provide an international perspective, although the specific focus is co-production relationships of the United States with developing countries. Policy implications will be derived for the United States and specific developing countries, such as those involved in the case studies, as well as for industrial and developing areas in general, with a view to improving the development impact of co-production arrangements.

Some ground work has been laid for this additional work: (a) a data bank has been built up which encompasses special tabulations from the U.S. Bureau of the Census, the U.S. International Trade Commission and the U.S. Customs Service; (b) preliminary explorations have been made regarding the availability of data for offshore assembly and processing operations of European countries and Japan; and (c) on the basis of a first review of important product groups which lend themselves to co-production arrangements, it appears that an analysis of the semiconductor industry would be most fruitful. Such a study would yield insights about various aspects of production sharing activities around the globe, because it affords the opportunity to compare Southeast Asian countries with countries in Latin America and the Caribbean.

Proposed Supplementary Research

The research questions will be divided into two principal components; those that relate primarily to the United States or industrial countries in general and those that relate primarily to the developing countries.

In respect to the first, the work will focus on the following questions:

1. What factors determine offshore production and its location?

Specific effects of various economic factors on the sourcing of production across countries will be examined, including relative labor costs in the United States and developing

countries (including fringe benefits and other supplementary compensation), transportation costs, country specific risks, the existence of export processing zones and other infrastructure, institutional and political elements, and international business cycles.

2. What are some of the effects of co-production arrangements on the United States?

The net employment effect in a specific industry will be estimated in two parts: employment decrease due to transfer of jobs abroad and employment increase generated by larger sales and purchases of U.S. inputs due to reduced prices (this will be a partial equilibrium analysis; the indirect effects on the rest of the economy, such as price-induced demand changes in other industries, etc., will not be measured. Yet it is expected to be a significant improvement on previous estimates).

3. What is the balance of payments impact?

The analysis will attempt to compare the outflow of wages (and profits if the co-production is not with a subsidiary but with an independent local firm) with the increased exports and/or decreased imports due to lower domestic prices (increased international competitiveness).

4. What are some of the linkage effects in the United States?

Will industry in the United States tend to become more technology intensive as the proportion of production workers declines due to co-production? Will the greater usage of the product have multiplier effects in other industries? These effects and structural changes in terms of employment, productivity and value added will be evaluated. This will include an appraisal of some social issues in the United States, such as the costs of labor displacement.

In respect to the developing countries, research will focus on linkage effects. In addition to the absorption of local labor force, what has been the local input usage in co-production? What factors affect the development of linkages? For example, will the movement of wage rates cause significant substitution between labor and capital in a specific industry? Will tariff changes induce important substitution between domestic and U.S.-produced inputs?

Social and political issues will also be examined. The composition of the labor force in specific co-production activities will be evaluated. The role of the multinational corporation in these operations will be studied.

Methodology

The main vehicle for the proposed analysis will be a case study of the semiconductor industry.

Semiconductors are the most important single industry involved in co-production and growing increasingly important. (In 1979 they constituted over one third of \$07.00 imports from LDCs). The industry is also important in world trade as a whole; about 90 percent of all U.S. semiconductor imports are based on offshore production.

The research questions posed in the previous section will be investigated first for the semiconductor industry in great detail. The findings will then be tested for other industries, and their applicability will be examined for offshore processing and assembly operations in general.

The principal data base is detailed breakdowns of 806.30/807.00 United States imports and external trade data for Europe and Japan. Internationally

comparable labor compensation data will also be used to the extent of their availability (original wage data have been obtained for offshore assembly operations for the three case study countries - Mexico, Haiti and Colombia - on the basis of surveys).

The most important single information source is the statistics gathered under United States Tariff item 807.00. By far the largest portion of world co-production activities is covered by these data. Of course 807.00 does not include all co-production activities even for the United States, - first, because some products with U.S. components do not return to the United States, second, because some imports with U.S. components do not qualify; third, because in some cases it is not used because benefits are outweighed by costs of red tape; and fourth, because the General System of Preference (GSP) is used instead. Over the years, however, U.S. authorities have broadened interpretations of the admissability of imports under 807.00, so that now only a small part of co-production activities are not covered by it.

European co-production data are much scarcer than in the United States. When they do exist, their coverage tends to be broader than in the United States although definitions differ. In West German and Dutch statistics, for example, data are divided into "passive and" active improvement trade (Veredelungsverkehr). The "passive" category corresponds roughly to United States 806.30/807.00 trade, (i.e., German components go out for fabrication and/or assembly abroad for import back into Germany). "Active" improvement trade covers the processing of foreign components in Germany for export abroad.

No comparable data for Japan have been uncovered so far. The study will, however, examine the extent of Japanese offshore assembly in the semiconductor industry on the basis of the available trade statistics of the various countries involved.

Other data that will be used are Census Bureau tabulations on "Related Party Trade" and breakdowns of value added for subsidiaries of specific firms engaged in offshore operations obtained from the United States Customs Service. The former will give some evidence as to how much of intra-industry trade is intra-firm trade, and the latter will be used to shed light on the effects of relative price changes.

A modified version of the capital asset pricing model (CAPM) will be used to try to explain the sourcing decisions of firms for offshore operations (see question 1 in the previous section). This econometric model will combine a microeconomic description of semiconductor production technology with a modification of CAPM to incorporate risk diversification by producers and account for other country specific effects. This inquiry as well as the analyses noted below will use time series for a cross section of country data on intra-industry trade in the U.S. semiconductor industry.

For the questions regarding the impacts on the United States economy (see points 2, 3 and 4 in the previous section), the primary data sets will be United States Custom Service special firm data on costs and profit margins in offshore operations and the just released U.S. 1972 Input-Output table. Direct and indirect linkages will be examined for semiconductors. The employment and balance of payments effects will be estimated in a simple but disaggregated fashion. (In previous studies demand elasticities were estimated on an

aggregative basis, for example, with one elasticity for all manufacturing activities).

To address the linkage and employment effects of co-production in the developing countries as noted in the previous section, an econometric model will be estimated to determine how input prices affect factor demand. Again time series of cross section data for specific countries will be analyzed, using ITC trade data and the Customs Service value added information mentioned earlier.

The results of the analyses in the semiconductor case study, particularly those dealing with impacts on developing country economies, will be supplemented by the country case studies before general conclusions are drawn. The country studies also deal with employment, linkage and stability effects which can be compared with the industry study. Social and political elements are also treated in the country studies and will be combined with other available information.

Selected Bibliography

Three types of references are appended: general sources, references for the semiconductor industry and, as an example, a bibliography for the case study of Haiti.

Of the general sources, the U.S. Tariff Commission study of 1970 is the most useful. The material, however, is outdated and contains little economic analysis. The Finger articles constitute the basic studies of off-shore assembly operations under U.S. 806/807. The Brookings research will be both, more disaggregated in its quantitative analysis and broader in its coverage of co-production. The Baerresen book is the basic reference on Mexican assembly operations for the United States market and together with the OECD papers, provides some useful background material.

Most of the references for the semiconductor industry are technology-oriented studies, dealing with technological innovation, diffusion and transfer. In this respect, the Chang and Tilton studies are the pioneering works, with the former directly addressing some concerns of the proposed study. (The Finan work essentially is an update of the Tilton book.) The ITC, CIA and Department of Commerce studies consist principally of collections of data. In the first two documents the information is limited to general observations, and the more interesting data are excised due to their confidentiality. The focus is Japanese competition. There is little or no economic analysis in these publications, nor is there any in the Brann and MacDonald book, which is primarily historical.

More useful for the purpose of the proposed study is Moxon's piece which deals with some of the relevant issues. Its limitations are that it contains few data for analysis (primarily interview data about the motivations of firms) and its focus is the electronics industry as a whole rather than semiconductors. Much of observed trade patterns is explained by specific institutional constraints, which can be examined only at a highly disaggregated level of detail.

Research Staff, Schedule and Budget

Joseph Grunwald, Senior Fellow, and Kenneth Flamm, Research Associate, have primary responsibility for the project at the Brookings Institution. They have had part time research assistance. The collaborators in Mexico, Haiti and Colombia were already indicated in this proposal. Personal resumes of Grunwald and Flamm are appended.

Work on the supplementary research can proceed immediately. As mentioned before, the basic groundwork has already been laid. It will be advisable to await the results of the supplementary research before a full manuscript on the project will be completed. This means that the first (current) stage of the research will be represented essentially by the reports to be completed for the

August seminar. The final conclusions and policy implications of the study must incorporate the results of the supplementary research in order to provide adequate perspective on the subject of international co-production. Therefore one principal manuscript will cover both the first and supplementary stages of the project. (Special reports, such as one to UNCTAD, may be issued separately and each of the three country studies may be published separately by the collaborating institutions in their respective countries in addition to the final book). The manuscript is expected to be ready by the end of March 1981, assuming approval of the additional funds in early August 1980.

The main source of financing for the project was the Latin American Office of the United Nations Development Program (UNDP) which channeled the funds through UNCTAD in Geneva to the Brookings Institution. Smaller grants were received from the Tinker Foundation (for the Mexican part of the study), Inter-American Development Bank (primarily for the collaborating local institutions and local consultants), and External Research of the U.S. State Department. These funds have covered most of the current stage of the project.

The funding request for the supplementary research is \$83,400 as indicated in the following budget.

North-South Complementary Intra-Industry TradeBudget for Supplementary Research.
(8 months)

Professional Salaries	\$43,000
Support Salaries	5,000
Travel and Subsistence	7,800
Materials, supplies, duplications and other office expenses	3,000
Communications	<u>1,600</u> 60,400
Administrative Cost 38%	23,000
Total	<u>83,400</u>

GENERAL
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