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Administrative and Progress Report, 1965-66

General

This report for the fiscal year July 1, 1965 - July 1, 1966, will combine the annual administrative and financial report with a report on substantive progress during that period. In the future an annual administrative and financial report will be submitted after the close of the fiscal year; and, in accordance with Amendment No. 2 of the contract, substantive progress reports will be made semi-annually at the end of June and December.

In January 1966 negotiations began concerning a proposal for an adjustment to Amendment No. 2. The principal purpose of the January proposal was to reinstate in the contract the overseas activities originally included in Amendment No. 2. When Amendment No. 2 was ratified (June 25, 1965) these activities were deleted because of the clearance provisions of the AID appropriation prevailing at that time. When subsequently such clearance requirements were dropped under the AID appropriation, the request was made that overseas work under the contract be restored. Reinstatement of overseas activities was not approved, however, and all overseas field work, travel, consultation, and allowances continue to be funded from non-Government sources. Negotiations continued, however, concerning the extension of the contract

to June 30, 1969. The purpose of such an extension is to provide sufficient time for the completion of the studies of the Group E country analysts, who could not begin work on the five new countries until July 1, 1966.

#### Status of Country Studies

During the period under review, the second book in the series of country studies was in press, and subsequently was published in August 1966 under the title Ceylon: An Export Economy in Transition, by Donald Snodgrass.

Final revisions were completed on two additional monographs, that of Donald Mead on Egypt and that of Gerald K. Helleiner on Nigeria. Both monographs are in press and will be published on February 1, 1967. Monographs for Argentina, Colombia, Mexico, and Tunisia are well advanced. Those for Pakistan, Peru, the Philippines and Israel are in progress. Field research on Chile and Turkey was completed in January 1966 and the analysts returned to Yale to begin work on their findings.

In February 1966 a meeting was held in Bangkok for a progress review of the on-going work of Samuel P. S. Ho, the single Group D analyst, who had been conducting his field research in Taiwan since July 1965. Mr. Ho presented an interim report on his studies and discussed his findings with Professors Reynolds and Kuznets. The discussions were also attended by Donald Snodgrass (who was then completing his revisions on the Ceylon monograph) and by Van Doorn Ooms (who is the country analyst for Malaysia, a non-AID financed country study).

Under the terms of Amendment No. 2, eight new countries are now covered by the contract. Work on three of these countries had been initiated by the Economic Growth Center with other resources and was in the field research stage at the time the amendment was ratified. These three countries and their respective analysts are as follows:

Chile - Markos J. Mamalakis  
Israel - Howard Pack  
Taiwan - Samuel P. S. Ho

Field research on the studies of Chile and Israel was completed in January 1966, and the analysts returned to begin work on their monographs. Mr. Ho was in the field during the entire period.

Due to the delay in the execution of Amendment No. 2, it was not possible to recruit additional country analysts in time to initiate work in 1965-66 on the five remaining countries to be covered. The necessary staff were recruited during the year, but did not begin work until July 1, 1966. As a result, an additional year beyond the period of the present contract will be required for the completion of these studies. The five new analysts and their countries are as follows:

Iran - Vahid F. Nowshirvani  
Ivory Coast - J. Dirck Stryker  
Korea - Paul W. Kuznets  
Thailand - Ammar Siamwalla  
Venezuela - James A. Hanson

The country analysts who have completed their field research and are now preparing their monographs find that completion is requiring more time than had been anticipated at the outset of the project. The primary reason for the greater length of time required is that the country studies have generated interest in related and specialized areas of research within the larger framework of the country studies. The analysts in almost every instance have judged it worthwhile to pursue these related studies simultaneously with their work on their respective monographs, on the ground that the quality of the monograph will be greatly improved by their more thorough study of the problems involved in the economy of the particular country. A report on recent and current research activities of eight country analysts is attached, listing articles and books published or proposed to be published in the near future.

#### Development of Data System and Data Mechanization

A key part of the Country Analysis Program involves collecting national accounts and other economic data for each country and casting these data into a common format. The resulting data systems, which are to be published as appendices to the country studies, are intended to be of use not only to the analyst working on a particular country but also to future researchers who may be interested in further analysis of a given economy or in comparative analysis among several economies. In 1965-66 a group of researchers continued to assemble and prepare for processing the statistics gathered through the Country Analysis Program and, for comparative purposes, similar statistics (cast in the CAP data system) for some twenty industrial countries. Support for further development of the data mechanization project will be made available through a National Science Foundation grant for the period July 1966 - June 1969. The abstract of the description of the project is as follows:

An important segment of the research effort presently undertaken by the economics profession involves the quantitative study of economic growth and the evolution of economic structure in various countries. The data required for such research comes in many forms (e.g., national accounts, price series, balance of payments, monetary and foreign trade series) and is produced by many agencies (e.g., national statistical offices, central banks, United Nations, International Monetary Fund). Unfortunately for the researcher, these data as they are currently available have several weaknesses. First, being the product of different agencies, their comparability is reduced by their being compiled on different definitions and subdivided according to different structures. Second, different estimates, often produced by different agencies, are available for the same series, and the researcher often does not know which to use. Third, the researcher's task of deriving inferences from the meaningful comparison of different batches of data is often an enormous clerical and computational task.

This project seeks to overcome these difficulties through the development of a computerized economic information retrieval system and data files. The system would contain five components. The first component would be data files of economic statistics, such as the series listed above, for a large number of countries, all keypunched from their original

sources and placed on magnetic tape. The second component would provide input and output programs which could call on these data files and print out the data in the exact form in which they were originally published by the producing agency, including the replication of row and column labels and footnotes, no matter what particular peculiarities of classification may be involved. These programs are now being written. The third component would contain a set of editing and processing programs which would perform data adjustment operations for the researcher. Two important types of adjustments are suggested by the data deficiencies outlined above. First, similar series from different sources could be compared to let the researcher know if the differences are trivial or important, and various types of composite series could also be compiled. Second, the comparability of data from different sources could be improved by estimating subdivisions of a type other than what the published sources show. The fourth component of the system would supply analytic programs for performing computational operations on the data (e.g., computation of ratios, indices, growth rates, averages, correlation and regression coefficients). The final component is a set of manuals to provide for the operation of the system and show the researcher how to make the best use of it.

Developing this system requires the following:

(1) assembly of economic statistics to be included in the data files; (2) creation of the dictionary of table formats required to make the data files machine readable; (3) keypunching the data directly from the original sources to punchcards for entry into the data files; and (4) most importantly, designing and writing the necessary computer programs.

While such a project is of obvious value to the research interests of the Economic Growth Center, it should also be of great value to others in the economics profession. Therefore duplicate tapes and manuals would be made available, through a regular distribution system, to anyone who requested them.

#### Cross-Sectional and Analytical Work

Mr. Andrea Maneschi and Mr. Charles Frank worked throughout the year on developing new techniques of country analysis and in conducting general studies relating to comparative growth patterns and cross sectional investigations. Mr. Maneschi is embarking, with the participation of most of the Latin American country analysts, on a comparison of the import substitution process in Latin America.

Some preliminary results of cross-sectional and analytical studies were presented in the form of Center Discussion Papers. The Discussion Papers were begun in February 1966 primarily as a means of improving the quality of articles

proposed to be published. Each paper is distributed to all members of the Growth Center staff several days before a scheduled discussion meeting. Two members of the Center present independent critical analyses of the article to a general meeting of the professional staff; there then follows an extended period of informal discussion.

The attached lists of past publications (Center Reprint Series, Numbers 60-84 issued in the period under review), Discussion Papers, and recent and current research activities give a good idea of the theoretical and cross-sectional work being carried on as well as the research in depth being undertaken by country analysts on their own countries.

In the realm of theoretical work, Discussion Papers have been produced in three general categories - agriculture, international economics, and savings investment. Discussion Papers on agriculture include:

J. Fei and G. Ranis, Agrarianism, Dualism and Economic Development

A. Berry and R. Soligo, Rural-Urban Migration, Agricultural Output, and the Supply Price of Labor in a Labor Surplus Economy

R. Minami, Estimation of Daily Wages in Manufacturing Industries in Pre-War Japan: A Note

The four Discussion Papers on international economics are

S. Hymer, The Impact of the Multinational Firm.

A. Berry and R. Soligo, Some Welfare Aspects of International Migration

S. Hymer, The Decision to Own a Foreign Enterprise

A. Rahman, The Welfare Economics of External Borrowing.

Discussion Paper Number 10, Finite-Horizon Planning and Optimizing the Rate of Savings, by A. Rahman, deals with savings-investment theory.

Published articles distributed through the Center Reprint Series in 1965-1966 which concern economic theory are as follows:

Richard C. Porter, "The Optimal Price Problem in Buffer Fund Stabilization," Oxford Economic Papers, Vol. 16, No. 3, 1964.

Janusz G. Zirlinski, "Centralisation and Decentralisation in Decision-making," Economics of Planning, Vol. 3, No. 3, December 1963.

John C. H. Fei and Gustav Ranis, "Innovational Intensity and Factor Bias in the Theory of Growth," International Economic Review, Vol. 5, May 1965.

Gustav Ranis, "Planning for Resources and Planning for Strategy Change," Weltwirtschaftliches Archiv, Vol. 95, Book 1, 1965.

Hla Myint, "Economic Theory and the Underdeveloped Countries," Journal of Political Economy, October 1965.

Carlos F. Diaz Alejandro, "On The Import Intensity of Import Substitution," Kyklos, No. 3, 1965.

Andrea Maneschi, "Optimal Savings with Finite Planning Horizon," International Economic Review, January 1966.

Werner Baer and Michel E. A. Herve, "Employment and Industrialization in Developing Countries," Quarterly Journal of Economics, February 1966.

Markos Mamalakis, "Growth as a Cause of Inflation," Journal of Economic Studies, November 1965.

Frederic L. Pryor, "Economic Growth and the Terms of Trade," Oxford Economic Papers, March 1966.

Many of the articles to be published in the near future, listed in the attachment "Recent and Current Research Activities," are also of a theoretical nature.

Cross-sectional studies presented in Center Discussion Papers include that of Markos Mamalakis, The Export Sector, Stages of Economic Development, and the Saving-Investment Process in Latin America, and that of Andrea Maneschi and Clark W. Reynolds, The Effect of Import Substitution on Foreign Exchange Needs, Savings Rates and Growth in Latin America, on the role of the foreign sector in Latin America.

Cross-sectional studies reprinted in the Center Reprint Series during the year are the following:

Bela Balassa, "Trade Liberalisation and 'Revealed' Comparative Advantage," The Manchester School, May 1965.

Carlos F. Diaz Alejandro, "Industrialization and Labor Productivity Differentials," The Review of Economics and Statistics, May 1965.

Reginald H. Green, "Four African Development Plans: Ghana, Kenya, Nigeria, and Tanzania," Journal of Modern African Studies, July 1965.

Robert Triffin, "International Monetary Arrangements, Capital Markets and Economic Integration in Latin America."

Hugh T. Patrick, "Financial Development and Economic Growth in Underdeveloped Countries," Economic Development and Cultural Change, January 1966.

Bela Balassa, "Tariff Protection in Industrial Countries--An Evaluation," The Journal of Political Economy, December 1965.

John Michael Montias, "Economic Nationalism in Eastern Europe: Forty Years of Continuity and Change," Journal of International Affairs, Vol. XX, Number 1, 1966.

B. Van Arkadie and P. Ndegwa, "Future Trade, Balance of Payments and Aid Requirements in East Africa," East African Economic Review, Vol. I, June 1965.

A cross-sectional study in progress is that of Andrea Maneschi and Clark W. Reynolds, "Analysis of the Effects on Output of Factor Substitution Between Investment in Transportation Equipment, Construction and Machinery, in Selected Latin American Countries."

The first Center Discussion Paper, that of R. H. Green and Stephen Hymer, The Introduction of Cocoa in the Gold Coast: A Study in the Relations Between African Farmers and Colonial Agricultural Experts, concerns the detailed research of one aspect of one country's economy. Similar detailed, in-depth studies appeared in the Center Reprint Series as follows:

Hugh T. Patrick, "External Equilibrium and Internal Convertibility: Financial Policy in Meiji Japan," The Journal of Economic History, June 1965.

Werner Baer and Mario Henrique Simonsen, "Profit Illusion and Policy-Making in an Inflationary Economy," Oxford Economic Papers, July 1965.

Richard C. Porter, "Narrow Security Markets and Monetary Policy: Lessons from Pakistan," Economic Development and Cultural Change, October 1965.

Celso Furtado, "Political Obstacles to Economic Growth in Brazil," International Affairs, April 1965.

Bela Balassa, "Whither French Planning?" Quarterly Journal of Economics, November 1965.

Richard N. Cooper, "The Interest Equalization Tax: An Experiment in the Separation of Capital Markets," Finanz-Archiv, Vol. 24. No. 3.

Works in progress which involve research in depth on particular aspects of the economies of various countries include the following:

R. Albert Berry, An Analysis of Agriculture in Colombia.

R. Albert Berry, "Breve Estudio de Los Determinantes del Crecimiento de la Poblacion en Colombia," Centro de Estudios Sobre Desarrollo Economico, Universidad de Los Andes, Bogota, Colombia, 1964.

Markos Mamalakis, Saving and Investment Process in Chile: Selected Topics (to be published this year by the Graduate School of Economics [ESCOLATINA] and the Instituto de Economia of the University of Chile).

Markos Mamalakis, "Veinte y cinco años de Actividad de la Corporación de Fomento de la Producción" ("Twenty-five years of Activities of the Chilean Development Corporation") in La Planificación del Desarrollo Económico, Instituto de Economía, ed., Santiago, Chile.

Markos Mamalakis, "Host Government and Foreign-Owned Export Sectors. The Case of the Chilean Copper Industry" (to be published in a book edited by Raymond Mikesell).

Ronald Soligo, "Growth and Structural Change in Pakistan's Manufacturing Industry, 1954 to 1964," Pakistan Development Review, Spring 1965, with Stephen R. Lewis, Jr.

Ronald Soligo, "Tariff Protection, Import Substitution and Investment Efficiency," with Joseph J. Stern, Pakistan Development Review, Summer 1965.

Ronald Soligo, "Export Bonus, Export Promotion and Investment Criteria," with Joseph J. Stern, Pakistan Development Review, Spring 1966.

Ronald Soligo, "Tariff Protection, Import Substitution, and Investment Efficiency: Reply," with Joseph J. Stern, Pakistan Development Review, Spring 1966.

Ronald Soligo, "Monetary Problems of Pakistan," paper given at the Conference of University Professors (American Bankers Association), Princeton, September 1966 (to be published in a conference volume).

Ronald Soligo, "Real and Illusory Aspects of an Overvalued Exchange Rate" (to be published in the near future).

Carlos Diaz Alejandro, "The Argentine Tariff, 1906-1940" (to be published in Oxford Economic Papers sometime in 1967).

Shane Hunt, A projection of the Peruvian economy over the next decade, presented at the Cornell Conference on Latin American Economic Development (July 1966) (to be published in the volume based on that conference).

Staff

Professor Lloyd G. Reynolds continued his duties as Project Director. Professor Gustav Ranis, project adviser, was on leave of absence while serving as Assistant Administrator for Program with the Agency for International Development in Washington. Professor John Fei continued to serve as a project adviser. Professor Hugh Patrick returned from a leave of absence overseas and resumed his function as a project adviser.

The two remaining Group A analysts, Donald Mead (Egypt) and Gerald Helleiner (Nigeria), left the project at the end of the academic year, July 1, 1965.

Two Group B analysts left Yale during the year but are continuing work on their respective monographs. They are Michel E. A. Herve (Tunisia), and Carlos F. Diaz Alejandro (Argentina), both of whom left at the close of the academic and fiscal year. Ronald Soligo (Pakistan) returned from the field in September.

All four Group C analysts returned from their field investigations-- Howard Pack (Israel) and Stephen A. Resnick (Philippines) in September 1965, and Markos Mamalakis (Chile) and James W. Land (Turkey) in January 1966.

Work Plan for 1966-1967

Following the publication of Donald Snodgrass's monograph, Ceylon: An Export Economy in Transition (August 1966), the second and third volumes in the series (that of Donald Mead on Egypt and that of Gerald K. Helleiner on Nigeria) will be published in February 1967. It is anticipated that draft

manuscripts on Argentina, Colombia, Mexico, Peru and Tunisia will all be received in early 1967.

Work on the following countries will be in the writing phase in 1966-1967: Chile, Israel, Pakistan, Philippines and Turkey. Mr. Samuel Ho, the Group D analyst who returned from the field in September 1966, will also be in the process of writing his study of Taiwan.

The Group E analysts began their work in July 1966. Mr. Paul Kuznets will be in Korea for the entire fiscal 1966-1967. Mr. Siamwalla, after several months of preliminary work at Yale, in December began his field investigations in Thailand and will remain abroad for the remainder of the year. Messrs. Nowshirvani (Iran) and Stryker (Ivory Coast) are presently engaged in preliminary research at Yale and will begin their field work in July 1967. James Hanson (Venezuela) undertook preliminary research in the summer of 1966 and will begin working in Venezuela in February 1967.

The goals of the data mechanization project, described above, are clearly defined and concentrated effort will be made towards the development of a program and testing of its operations on given data.

It is anticipated that cross-sectional studies will increase in 1966-1967 as more complete information and project data become available through the Country Analysis Program. Mr. Maneschi plans a comparison of the import substitution process in Latin America and will be working closely with most of the Latin American country analysts. Mr. Charles Frank will continue his study

of comparative aspects of the growth of African economies, working with Mr. Stephen Hymer (Ghana) and Mr. Brian Van Arkadie (East Africa), who are writing monographs on non-AID supported country studies.

Workshop and Seminar Series

The Country Analysis Workshop, organized as a means of facilitating preparation for field work and coordinating research activities, was not continued in 1965-1966 because there were no country analysts in New Haven who were then preparing to go abroad. It has been continued in 1966-1967 now that Group E analysts have begun their preliminary research and are preparing to undertake their field investigations.

Economic Growth Center Seminars with outside speakers were held periodically throughout the year. The Seminar series is not restricted to Center staff but is open to all faculty and students in economics and related fields. Seminar speakers in 1965-1966 included the following:

- October 18 - Dale W. Jorgenson, University of California at Berkeley, "Subsistence, Agriculture and Economic Growth."
- October 25 - Edmund Phelps, Yale University, "Investment in Humans, Technological Diffusion and Economic Growth."
- November 5 - Visiting Professor Jean Waelbroeck, M.I.T., "On the Structure of International Trade Interdependence."
- November 12 - Visiting Research Associate Hla Myint, Yale University, Notes on the "Widening Trade Gap" of the Underdeveloped Countries.
- November 15 - Professor Albert Fishlow, University of California at Berkeley, "Models of Educational Investment: An American Application."

- November 29 - Arnold Harberger, Economic Development Institute at the International Bank for Reconstruction and Development, Washington, D.C., "The Case of the Three Numeraires."
- December 6 - Professor John Chipman, University of Minnesota, "The Relation Between the Rate of Return on Investment Projects and the Rate of Growth of the National Product."
- December 13 - Professor Charles R. Frank, Jr., Yale University, "Aggregate Projection Model for the East African Economy."
- December 17 - Paul Clark, Williams College, "Strategy for Accelerating Development in an Early-Stage Underdeveloped Economy: Uganda."
- February 11 - Walther Lederer, Balance of Payments Division of the U.S. Department of Commerce.
- February 14 - M. Philippe de Seynes, Under-Secretary for Economic and Social Affairs at the United Nations, Discussion of the activities of his Department and their relation to the Center program.
- February 18 - Visiting Professor Michael Bruno, Hebrew University in Jerusalem, currently at Harvard University and M.I.T., "Experiments with a Multi-Sectoral Programming Model."
- February 25 - Franklin Fisher, M.I.T., "Embodied Technical Change and the Existence of Capital and Labor Aggregates."
- March 4 - E.A.J. Johnson, Johns Hopkins University, "The Organization of Space in a Developing Country, with Special Reference to India."
- March 7 - Tibor Scitovsky, University of California at Berkeley, "Functional Finance and International Liquidity."
- March 11 - Gustav Ranis, Department of State, Washington D.C., "Agrarianism, Dualism and Economic Development."
- March 14 - Ronald I. McKinnon, Stanford University, "Intermediate Products, Differential Tariffs, and a Generalization of Lerner's Symmetry Theorem."
- March 18 - Walter F. Falcon, Harvard University, "Agriculture in the Subcontinent of South Asia--Progress and Prospects."
- April 8 - Peter Kenen, Columbia University.
- April 15 - Harley Hindrichs, University of Maryland, "A General Theory of Tax Structure Change During Economic Development With Application to Tax Reform in Nigeria and Argentina."

April 29 - Donald B. Keesing, Columbia University, "Study of International Trade in Manufactures with Implications for Development."

Financial Report

A report on budgeted amounts and actual expenditures under the Repas-12 contract during the fiscal year 1965-1966 is attached. Total expenditures were \$272,623.37, as against a budget of \$286,409.00.

COUNTRY DATA SYSTEMS AND ANALYSIS PROGRAM

Expenditures, 1965-1966

	<u>1965-1966</u>	
	<u>Budgeted</u>	<u>Actual</u>
<u>SALARIES</u>		
Group A Analysts	-	-
Group B Analysts	35,000	30,727.03
Group C Analysts	26,400	14,468.67
Group D Analysts	-	-
Group E Analysts	37,500	-
<u>SUPPORT FOR COUNTRY ANALYSTS</u>		
Supporting Faculty	15,000	20,038.02
Statis. Assist	5,000	10,122.63
Clerk-Typists	3,000	7,310.51
Secretarial, Administrative Consultants & Workshop	3,000	12,094.58
Speakers	-	-
<u>RESEARCH ON DATA FRAMEWORK</u>		
Part-Time Direction	4,000	4,000
Research Associate	12,000	12,000
Research Assistant	6,000	9,493.67
Typing, Computation	5,000	6,397.60
<u>CROSS-SECTION &amp; ANALYTIC WORK</u>		
Research Staff	15,000	10,027.78
Statis. Assist.	6,000	3,550.00
Cler. & Sec.	5,000	6,807.92
<u>ON-CAMPUS OVERHEAD</u>	61,215	60,095.55
<u>TRAVEL - U.S. STAFF</u>		
Consultants & Workshop		
Speakers	2,000	2,239.52
Field Visits & Other Travel	2,000	5,547.42
<u>TRAVEL EXPENSES FOR ANALYSTS ABROAD</u>		
International Travel including Dependents	3,700	6,026.62
Local Res. & Travel	-	4,083.14
Preparatory Expense	-	-
Overseas Allowances	750	-

COUNTRY DATA SYSTEMS AND ANALYSIS PROGRAM

Expenditures, 1965-1966

	<u>1965-1966</u>	
	<u>Budgeted</u>	<u>Actual</u>
<u>OTHER EXPENSES</u>		
Yale Computer Center	1,000	9,409.92
Supplies & Equipment	11,000	16,387.99
Publication Expenses	10,000	8,556.32
Fringe Benefits	14,582	12,939.81
Other out-of-pocket Expenses	1,762	298.67
	<u>          </u>	<u>          </u>
<u>TOTALS</u>	286,409	272,623.37

CENTER REPRINT SERIES

- No. 1. "A Theory of Economic Development" by Gustav Ranis and John C. H. Fei (American Economic Review, September 1961)
- No. 2. "A Model of Comparative Rates of Growth in the World Economy" by Dudley Seers (Economic Journal, March 1962)
- No. 3. "The Economics of Prebisch and ECLA" by Werner Baer (Economic Development and Cultural Change, January 1962)
- No. 4. "Investment Criteria, Productivity and Economic Development: An Empirical Comment" by Gustav Ranis (Quarterly Journal of Economics, May 1962)
- No. 5. "Multiple Exchange Rates and the Attainment of Multiple Policy Objectives" by Werner Baer and Michel E. A. Herve (Economica, May 1962)
- No. 6. "Production Functions, Market Imperfections and Economic Development" by Gustav Ranis (Economic Journal, June 1962)
- No. 7. "An Attempt to Construct a Realistic Theory of Socialist Economy" by Janusz G. Zielinski (Øst-Økonomi, July 1962)
- No. 8. "A Theory of Inflation and Growth in Underdeveloped Economies Based on the Experience of Latin America" by Dudley Seers (Oxford Economic Papers, June 1962)
- No. 9. "The National Peoples' Congress: Some Reflections on China's Economic Policy" by Peter Schran (China Quarterly, July-September 1962)
- No. 10. "Why Visiting Economists Fail" by Dudley Seers (Journal of Political Economy, August 1962)
- No. 11. "Inflation and Economic Growth: An Interpretation of the Brazilian Case" by Werner Baer (Economic Development and Cultural Change, October 1962)
- No. 12. "Recent Developments in the Competitiveness of American Industry and Prospects for the Future" by Bela Balassa (Joint Economic Committee, U. S. Congress, 87 Cong. 2nd Session, 1963)
- No. 13. "Firm Size and Rate of Growth" by Stephen Hymer and Peter Pashigian (Journal of Political Economy, December 1962)
- No. 14. "On the Consistency and Efficiency of Central Plans" by J. M. Montias (Review of Economic Studies, October 1962)
- No. 15. "Socialist Price Systems" by Janusz Zielinski and Aleksy Wakar. (American Economic Review, March 1963)

- No. 16. "Japanese Influences on the United States Balance of Payments" by Hugh T. Patrick (Asian Survey, May 1963)
- No. 17. "Allocation Criteria and Population Growth" by Gustav Ranis (American Economic Review, May 1963)
- No. 18. "European Integration: Problems and Issues" by Bela Balassa (American Economic Review, Papers and Proceedings, May 1963)
- No. 19. "European Economic Integration and the United States" by Lawrence B. Krause (American Economic Review, Papers and Proceedings, May 1963)
- No. 20. "Domestic Consequences of Export Instability" by Clark Reynolds (American Economic Review, Papers and Proceedings, May 1963)
- No. 21. "Unbalanced Growth in Rumania" by John Michael Montias (American Economic Review, Papers and Proceedings, May 1963)
- No. 22. "Innovation, Capital Accumulation and Economic Development" by John C.H. Fei and Gustav Ranis (American Economic Review, June 1963)
- No. 23. "Multi-purpose Economic Institutions in Africa" by Reginald H. Green (Journal of Modern African Studies, June 1963)
- No. 24. "Economic Contrasts: China, India & Japan" by Hugh Patrick and Peter Schran (Journal of International Affairs, Spring 1963)
- No. 25. "Brazil: Inflation and Economic Efficiency" by Werner Baer (Economic Development and Cultural Change, July 1963)
- No. 26. "The Gold Exchange Standard: Crisis and Reconstruction" by Robert Triffin (Amerikanische Gelehrtenwoche, 1961)
- No. 27. "The Future of Common Market Imports" by Bela Balassa (Weltwirtschaftliches Archiv, Volume 90, Number 2, 1963)
- No. 28. "The Limitations of the Special Case" by Dudley Seers (Bulletin of the Institute of Economics and Statistics, May 1963)
- No. 29. "The Latent Crisis of the Reserve Currencies" by Robert Triffin (Banker, August 1963)
- No. 30. "Substitution, Fixed Proportions, Growth and Distribution" by Edmund S. Phelps (International Economic Review, September 1963)
- No. 31. "Trade Projections and Economic Model-Building" by Bela Balassa (Joint Economic Committee, U.S. Congress, 1963)
- No. 32. "An Empirical Demonstration of Classical Comparative Cost Theory" by Bela Balassa (The Review of Economics and Statistics, August 1963)

- No. 33. "A Note on the Impact of Devaluation and the Redistributive Effect" by Carlos F. Diaz Alejandro (The Journal of Political Economy, December 1963)
- No. 34. "Income Determinants for College Graduates" by Shane J. Hunt (Yale Economic Essays, Volume 3, No. 2)
- No. 35. "Unity and Diversity of Russian and Chinese Industrial Wage Policies" by Peter Schran (Journal of Asian Studies, February 1964)
- No. 36. "Resource Aspects of Latin American Economic Development" by Joseph Grunwald (The World Role of Natural Resources: Their Place in Economic Development, 1964)
- No. 37. "Regional Inequality and Economic Growth in Brazil" by Werner Baer (Economic Development and Cultural Change, Vol. XII, No. 3, April 1964)
- No. 38. "Handicrafts in Communist China," by Peter Schran (The China Quarterly, January-March 1964)
- No. 39. "Normal Growth and Distortions: Some Techniques on Structural Analysis" by Dudley Seers (Oxford Economic Papers, March 1964)
- No. 40. "The Problem of International Monetary Reform: Major Questions and Prospective Initial Area of Agreement" by Robert Triffin (Banca Nazionale del Lavoro Quarterly Review, March 1964)
- No. 41. "Trade, Aid and What?" by Gustav Ranis (Kyklos, Vol. XVII, No. 2, 1964)
- No. 42. "The Capital Needs of the Developing Countries" by Bela Balassa (Kyklos, Vol. XVII, No. 2, 1964)
- No. 43. "Dollar Deficits and Postwar Economic Growth" by Richard N. Cooper, (Review of Economics and Statistics, May 1964)
- No. 44. "The Dynamic Efficiency of the Soviet Economy" by Bela Balassa (American Economic Review, May 1964)
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Monographs) of A.I.D. Supported Growth Center Faculty

**BERRY, Albert**

**Book:** An Analysis of Agriculture in Colombia (to be finished about December 1966).

**Articles:**

"Breve Estudio de Los Determinantes del Crecimiento de la Poblacion en Colombia," Centro de Estudios Sobre Desarrollo Economico, Universidad de Los Andes, Bogota, Colombia, 1964.

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"Rural-Urban Migration, Agricultural Output, and the Supply Price of Labor in a Labor Surplus Economy," with Ronald Soligo (to be submitted soon).

"Welfare Implications of Fluctuations of International Prices for Rigid and Flexible Economies," with Stephen Hymer (in progress).

"The Relationship of Paasche and Laspeyres Indices to True Indices" (to be submitted in a month or so).

**FRANK, Charles Jr.**

**Book:** The Theory of Production and Indivisibilities (manuscript in process of revision for Princeton University Press).

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"The Seers Modified Input-Output Table" (near completion).

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**MAMALAKIS, Markos**

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"The Export-Sector, Stages of Economic Development, and the Saving-Investment Process in Latin America" (paper presented at the DiTella meetings on the Strategy of the Foreign Sector and Import Substitution in Latin America).

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"Further Reflections on the Theory of Sectoral Clashes."

**MANESCHI, Andrea**

**Articles:**

"The Effect of Import Substitution on Foreign Exchange Needs, Savings Rates and Growth in Latin America," with Clark Reynolds, to be presented at the December meetings of the Econometric Society.

"Analysis of the Effects on Output of Factor Substitution between Investment in Transportation Equipment, Construction and Machinery, in Selected Latin American Countries, with Clark Reynolds (in progress).

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NOWSHIRVANI, Vahid

Articles:

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PACK, Howard

Articles:

"A Revealed Preference Approach for Estimating Planners Preference Functions" (to be completed during the winter).

"Input-Output Implications of Import Substitution" (to be completed late this spring).

RESNICK, Steven

Book: Development and Welfare, with Steven Hymer (in progress).

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SOLIGO, Ronald

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Research Activities of Supporting Faculty While at Yale

DIAZ ALEJANDRO, Carlos

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(a study of devaluation in Argentina, which was reworked and published during stay at the Growth Center), M.I.T. Press.

Articles:

"Industrialization and Labor Productivity Differentials,"  
Review of Economics and Statistics, May 1965.

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No. 3, 1965.

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HUNT, Shane

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"Quality Variation and the Returns to Education," presented at the Symposium on the Economics of Quality in Education at the American University (June 1966) (to be published in a volume from that symposium).

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June 1, 1966, H. Patrick, The Financing of the Public Sector in Postwar Japan.

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