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Research on Income Distribution, Growth and Public Policy

July 1, 1973 - June 30, 1974

Table of Contents

A. General Background.....	1
B. Statement of Project Objectives As Stated in the Contract.....	2
C. Accomplishments and Findings.....	3
1. Workshop seminar.....	3
2. Policy papers.....	5
3. Data papers.....	13
4. Theory, Measurement, and Integration papers.....	14
5. Student papers.....	16
6. Bibliography.....	16
D. Research Design Changes.....	17
E. Work Plans for the Next Year.....	17
F. Dissemination.....	18
G. Budget.....	19
H. Attachments:	
1. Participants and topics of workshops	
2. Drs. Frank and Webb's memo to policy paper writers	
3. Participants in June meeting	
4. Data Paper Writers and Dr. Szal's memo to paper writers	
5. Participants in September conference	
6. Budget summary	

Report Summary

- A. 1. Title. Research on Income Distribution, Growth and Public Policy, AID/CM-otr-73-273.
2. Principal Investigators:
Richard Webb, Research Economist, Princeton University, Princeton
New Jersey
Charles R. Frank, Jr., Brookings Institution, Washington, D.C
3. Contract Period: July 1, 1973 to December 31, 1974.
4. Period covered by report: July 1, 1973 to June 30, 1974
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6. Total expenditures and obligations for current year (July 1, 1973 to June 30, 1974) \$259,768.
7. Estimated expenditures for next contract year: (July 1, 1974 to December 31, 1974) \$154,244.

B. Narrative Summary of Accomplishments and Utilization

The Princeton-Brookings project is investigating the interrelationships among income distribution, growth and public policy. In order to study those interrelationships, the project has conducted research in three areas: 1) problems of definition and measurement, 2) development of an analytical framework, and 3) government policies affecting income distribution.

A series of workshops were held to introduce the problem to researchers from the U.S. and from LDCs. The workshops provided a focus for investigating the general policy areas and an opportunity for the exchange of ideas and experiences in the implementation of specific policies.

Agreements have been reached with 6 researchers from LDCs to write survey papers on the available data on income distribution in the following groups of countries: Korea, Philippines and Taiwan; Kenya, Nigeria, Ghana and Tanzania; India, Bangladesh, Pakistan and Sri Lanka; Malaysia, Indonesia and Thailand; Colombia, Venezuela and Mexico; and Brazil.

A series of ten papers analyzing the potential income distribution effects of various public policies has been written in draft form. The papers cover the following areas: 1) labor policy, 2) trade, exchange rate and industrialization, 3) public works, 4) fiscal policy, 5) urban land policy, 6) education policy, 7) health and nutrition policies, 8) agriculture policies, 9) population policy and 10) nationalization of private enterprise. In order to include an analysis of the political and administrative variables which affect the adoption and implementation of policies, each paper writer has worked with a political science-public administration consultant.

A paper covering a theoretical framework, and a paper integrating the findings with respect to specific policy areas are both being written. The problems of definition and measurement are analyzed in a draft paper. All the papers will be completed and circulated to provide a background for a major conference in September. The conference will be organized into a series of four regional panels, with each panel to discuss the applicability of the various policy alternatives to the specific problems of a region, or a country.

Annual Report

A. General Background

During the Second Developmental Decade of the 1960s, development was conceived of only in terms of aggregate growth in GNP and trade for the less developed countries. It has become increasingly recognized, however, that in many countries rapid economic growth has not significantly changed the lives of the poorest segments of the population. The benefits of growth have, in many cases, accrued to those relatively few people who have had control of economic resources and access to political power.

There has been increasing concern in aid-giving agencies that the emphasis on aggregative performance criteria has resulted in the relative neglect of the implications of economic growth for income distribution. Two main policy issues are at stake. First, how can the less developed countries themselves be given more information regarding the effectiveness of various policy alternatives at their disposal to combat growing inequality of income. Knowledge about the possible effectiveness of such policies is limited, both because until recently very little serious research has been addressed to the issue and because very few countries have pursued conscious policies to affect the distribution of income. The second main policy issue concerns the strategy to be used by the aid donors themselves. How do the aid policies affect the distribution in the countries to which aid is being given?

A number of policy alternatives can be used by the less developed countries. One of the major objectives of our proposal will be a first attempt to estimate the likely effect of a range of government policies, comparing the impact among different countries and analyzing the relative

effectiveness of the different policy options. A secondary goal of this proposed research project will be to provide knowledge about the distributional impacts of these programs to guide aid donors in setting their policies.

B. Statement of Project Objectives As Stated in the Contract

The project's objective is to develop a better understanding of the interrelationships among income distribution, growth and public policy. The research concentrates on the following three interrelated, mutually supporting topics

1. Problems of Definition and Measurement

This topic consists of three components a) a survey of the data available on income distribution together with suggestions on method to adjust existing data to make possible inter-temporal and inter-country comparisons; b) an examination of the usefulness and meaning of different types of summary measures of income distribution and of their appropriateness under different circumstances; c) the preparation by LDC economists of survey papers on the available data and literature on income distribution in their own countries or regions.

2. Development of an Analytical Framework

This investigation shall focus on the relationships among income distribution, growth, and public policies. The theoretical approach used shall be broad and attempt to be inclusive, but at the same time focus on those theoretical relationships which will be important for policy. As part of the work on an analytical framework, use shall be made of a three-sector model consisting of a) the traditional rural sector; b) the traditional or non-formal urban sector; and c) the modern sector in both rural and urban

areas comprising commercial agriculture as well as modern manufacturing, mining, and service industries.

3. Policy Papers

A series of papers shall be produced each of which will analyze the potential income distribution effect of a variety of public policy areas. These policy papers shall scan existing knowledge about each of the policy areas rather than undertake original research and shall assess which policies have been effective in redistributing income -- and under what circumstances. The researchers shall also indicate the most promising lines for future research and identify the data required for the research. These assessments of policy areas shall include significant attention to both the political circumstances which influence whether income equalizing measures are adopted by governments and the political-administrative circumstances which affect whether they are successfully implemented. The findings with respect to the specific policy areas shall be integrated and related to the theoretical framework to be developed.

C. Accomplishments and Findings

1. Workshop-Seminar

In the fall of 1973, the project sponsored a series of 14 workshop-seminars, conducted as a class in the Woodrow Wilson School with 15 students enrolled. The seminars covered a variety of policy areas that Drs. Frank and Webb defined as those central to a study of income distribution growth and public policy. (See attachment #1 for a list of participants and topics). The policy areas examined in the seminars were then further refined into 10 policy papers to be written for inclusion in the final

volume summarizing the research. These areas and the authors of the papers are:

Richard Webb and Charles R. Frank, Jr.	Labor policies
Henry J. Bruton	Trade, exchange rate and industrialization
John P. Lewis	Public works
Arnold C. Harberger	Fiscal policy
Rakesh Mohan	Urban land policy
Frederick Harbison	Education opportunities and educational finance
F. James Levinson and Olav T. Oftedal	Health and nutrition
William R. Cline	Agriculture policies
Bryan L. Boulier	Population policy
Jorge Cauas and Marcelo Selowsky	Nationalization of private enterprise

The project invited representatives from six LDCs to attend the series of seminars. The visitors were:

Hakchung Choo	Korea Development Institute, Seoul, Korea
Leoncio Durandea	Universidad Autonoma de Nuevo Leon, Monterrey, Mexico
Alper Orhon	Bosphorus University, Istanbul, Turkey
Adedotun Oluwole Phillips	University of Ibadan, Ibadan, Nigeria
Kanta R. Ranadive	University of Bombay, Bombay, India
Maria da Conceicao Tavares	Universidade de Campinas, Campinas, Sao Paulo, Brasil

The visitors were not only important participants in the seminars themselves by adding insights to the discussion, but each one conducted a seminar with the students in the course discussing data, policies and problems of income distribution. These smaller meetings enabled the students to understand, in a unique way, concepts of income and its redistribution for an individual country as well as in broad theoretical terms. The informal daily contact between the Princeton participants and the visitors cannot be evaluated numerically, but the mutual growth in understanding was clearly valuable.

2. Policy Papers

In January, Drs. Frank and Webb drew up a memo (see attachment #2) to policy paper writers containing suggestions for the approach and content of the papers. The memo contained an overall concept of the perspective for the project and the papers and sketched, in considerable detail, points for the author of each individual paper to consider. The memo stressed that the objective of the series of papers was an overall picture of policy alternatives. The paper writers were encouraged to use a scanning approach to the policies, outlining principal opportunities and limitations of a policy, and reviewing existing knowledge and ideas, rather than a narrower, in-depth approach by concentrating on a few selected topics. The memo noted, however, that the paper writers should not aim at broad policy generalizations but should attempt to provide clear and reasonably specific guidelines to the conditions under which a given policy is likely to produce certain results. The memo suggested further that the paper writers attempt to quantify such variables as the size of groups affected by a policy, their level of income, ^{and} the size of the expected income transfer. An idea of, at least, orders of magnitude is necessary to achieve a sense of perspective on the amount of change possible in a given distribution of income. The original research design called for one expert (in almost all cases an economist) to investigate one policy area. As a result of the fall workshop experience, several meetings of the project participants, and a meeting in Washington with the sponsoring agency, this initial design was somewhat altered. It was felt that more attention should be paid to the administrative and political aspects of projected policies to effect income distribution. These feasibility aspects would be important

for making the final volume of use both to AID, as a donor to LDCs, and to the LDCs, as "practical" advice. The memo carefully pointed out the necessity of examining the political and administrative aspects of policy alternatives to the paper writers.

In line with this decision to examine the political power structure more closely, a political scientist was selected for each paper and then asked to read and comment on the paper and to attend a meeting held in June to discuss all the papers. Professor Francine Frankel (a political scientist who has been associated with the project from its beginning) suggested the following as the kinds of constraints that consultants were asked to consider

"We would like to identify the specific political and administrative variables that are most relevant in assessing governmental capacity for altering distribution through this particular policy area. Once the economists have identified who are the beneficiaries of various policy instruments and how much income is transferred (within or between sectors), the problems of effective implementation remain. While in each sector, some analytical categories may be more immediately useful than others, certain broad factors appear to have some relevance in almost all areas: ideological preferences of elites; the distribution of power among major socio-economic groupings; patterns of popular participation (in terms of vertical or horizontal mobilization); the type of party system; patterns of (effective) demands and support; institutionalized political procedures and structures for decision-making; the strength of extra-legal or extra-parliamentary movements for radical change. In some cases, it may be appropriate to consider whether or not effective implementation of income distribution policies can be accomplished at all within the existing socio-political structure, and/or what kinds of changes in patterns of political participation and organization are necessary, and hopefully feasible, to improve the prospects of distributing income in favor of the poor. As far as administrative variables are concerned, it may be relevant to consider such things as numbers and skill levels of personnel; value orientations of administrators; standards of integrity; the extent to which the bureaucracy is autonomous, i.e., insulated from pressures by parochial and interest groups; and the capacity of the national administrative

machinery to penetrate to local levels of political and economic organization. I should emphasize that while these categories make up a rather formidable list, they are suggested for their illustrative value to indicate the types of concerns we would like to incorporate in the economic policy papers, and with the understanding that not each of them is equally important in every policy area: indeed, other factors not mentioned here may in some cases have more relevance. Finally, in order to address each of these issues in as concrete a fashion as possible, with the specific problems of policymakers in mind, we would like to encourage you to draw on your particular area expertise for purpose of illustration to the extent you consider relevant."

A meeting was held in Princeton in June, with both the policy paper writers and the political science consultants in attendance. (See attachment #3 for participants). Each paper was presented and discussed by all the participants.

Dr. Cline's paper on Policy Instruments for Rural Redistribution, in its draft version, had two sections. The first reviewed the tools available for raising farmer productivity, such as credit, machinery, and new seeds. The second concentrated on the redistributive effects of a fully compensated land reform program. He sketched a model to prove his hypothesis that capitalistic, fully compensated land reform would increase both output and equity. In the final version of the paper, Dr. Cline has indicated that he intends to expand his analysis to include other possible policies for land reform ranging from land taxation, sharecropping -- to the income distribution effects of the introduction of high-yielding varieties of crops. In the course of discussion at the June meeting of the project, Dr. Cline was urged to consider additional policies for effecting the redistribution of rural income such as improving the accessibility to inputs.

Professor John Lewis' paper on Experimenting with Public-Works Attack on Low-end Poverty examined the potential redistributive effects of a

program of rural public works, considering both short-run and long-run effects. In the short-run the poor are helped, through employment, but in the long-run, benefits tend to continue the existing inequities. Professor Lewis' paper argued for a massive public works program, suggesting 3 to 5% of GNP as necessary for effecting low-end poverty. The political scientists at the meeting in general felt that a public works program of this magnitude was unrealistic. A technique for overcoming local elite opposition to public works programs was suggested for creating a situation of divided responsibility at the local level. Local politicians are more often conservative, while local administrators tend to be reformist. The prospects for a public works program could be improved by setting these two groups in competition.

Mr. Rekesh Mohan's study on Urban Land Policy and Income Distribution was only in outline form for the June conference. The paper is intended to delineate the problem of rapid appreciation in the value of land as urbanization occurs and land is shifted from agricultural to urban use and the concurrent problem of windfall gains to land speculators. Mr. Mohan, in a verbal presentation, sketched the taxes and techniques available, using India as an example, for capturing these windfalls. He plans to concentrate on two areas in his paper: an analysis of how urban land policy affects income distribution directly, if at all, and a series of sketches of the typology of urban land policies, to seek successful styles.

Dr. Levinson and Mr. Oftedal wrote a first draft paper on Health, Nutrition and Income Distribution. Dr. Levinson summarized the types of traditional programs for improving nutrition, and the deficiencies of each type of program; for example, fortification of processed foods and the failure of such programs to reach the low-end poor who lack the income

necessary to purchase the food. Mr. Oftedal, in sketching programs for improvement in health care and delivery systems, stressed the benefits of expanding the use of paramedical personnel, and of decentralizing hospitals. Both authors noted the regrettable absence of data on which to base conclusions of the redistributive impact of health and nutrition programs in low-income countries. In general, the discussion was supportive of the conclusions of the paper, suggesting that pressure and leadership from international organizations could be especially helpful in the implementation of programs to extend health care.

Dr. Boulier's analysis of Population Policy and Income Distribution concluded that the result of any given set of population control programs depended on the level of fertility and mortality according to income levels when the programs are introduced. If programs have the effect of reducing mortality at the low-end of the income scale and reducing fertility at the upper end, the net result is a worsening in the income distribution. If, however, mortality is already low, and fertility high, in the absence of positive programs of birth control for the low-end poor, income distribution will worsen as higher income classes voluntarily reduce fertility control, and their potential effects.

Dr. Richard Webb's draft paper on Labor Policy and Income Distribution in Less Developed Countries is a review of the arguments and the evidence regarding the impact of labor policy on income distribution. It points out that among economists there is a negative attitude towards government pressure for wage increases because: a) in the long run market forces will predominate, b) they benefit a relatively small middle group rather than the poor, and c) they reduce employment by increasing capital

intensity in the modern sector and slow growth by reducing savings. The conclusions of the paper generally reinforce a negative view of labor policy as a redistributive device, but the paper seeks to improve our understanding of that relationship by examining under what circumstances the above objections are valid. The paper studies both the direct impact of labor policy -- the extent to which it raises or lowers real wage levels in a target group -- and the indirect impact or repercussion of other policies on wage levels. In the third section, which has not yet been written, the paper will apply the model specified in the theory paper to hypothetical and/or real country cases to derive estimates of the distributive effects of wage changes. In a final section on policy implications the paper will review feasibility aspects of wage policy linking it to the regime types developed above, and suggest possible wage policies designed more directly for the rural poor.

Professor Arnold Harberger's paper on Fiscal Policy and Income Distribution puts into perspective the possibilities for poor countries to use their fiscal systems for redistributive purposes. Most of the discussion concentrates on the taxation side of the fiscal question. The conclusion is that, given the budgetary and economic constraints, "we are better advised to think in terms of bringing about a fairer distribution of the tax burden than in terms of having a major impact on the overall distribution of income in the society in question." The paper is divided into three sections. The first analyzes some of the main constraints on tax policy. The second section consists of some redistributive policy exercises. The gist of those exercises is that the most the tax system can be expected to collect is about 8.5% of national income and that the lower income groups receive a relatively small degree of the benefit of public expenditure in spite of the

broad progressive tax structure. The third part presents an illustrative listing of some of the possible measures to improve the distributional picture. The final conclusion is that the attack on the income distribution problem must be multi-faceted, that battles can be waged independently on many different fronts, and that serious political resistance can be expected along any relevant front. The political science consultants to the project felt that Professor Harberger's paper, more than any other, had taken political and administrative constraints into account.

Professor Frederick Harbison's paper, The Connection between Education and Income Distribution divides education into formal schooling, organized non-formal education, and work-related skill and knowledge generation. It discusses how all three may have differing effects on upward mobility, low-end poverty and income variance between groups and individuals. It argues that to change the education income connection in a particular country it is necessary to study the comparative advantages of each of these components as well as the possibility of substitution or complementarity of the various components. This is presently very difficult because of the dearth of quantitative and qualitative data, particularly with respect to the latter two components. The paper concludes, however, that the most crucial considerations are the broad goals of development in each country and the strategy used to achieve them, for these shape the patterns of income distribution and determine the parameters of the nation-wide learning system. Although it cautions that sweeping generalizations about the income-education connection are not foolproof, it ends by proposing some general policy changes and a list of research priorities.

Professor Henry Bruton's draft paper Industrialization Policy and

Income Distribution is a study of how industrialization and trade policies have affected the distribution of income. The general argument of the paper is that a development policy built on a more effective use of domestically available resources can produce a growth role and a distribution of the rewards of that growth that is more nearly compatible with increasing economic and social welfare. The paper focuses on the role that manufacturing can play on the attack on low-end poverty and develops a framework that brings out the more relevant variables. It then analyzes how industrialization policy in general and trade policy in particular have affected these variables. It argues that foreign trade is perhaps the most fertile area for affecting industrialization and discusses the case for and against inward- and outward-looking trade strategies and how protection, tariffs, and exchange rates affect income distribution. It also argues that an essential ingredient of an industrial policy package is the encouragement of small scale, non-urban, non-agricultural activities and calls for case studies from which to isolate general principles for policy. The political scientists pointed out that the general thrust of the paper seemed to be a criticism of ineptness, not evil, in policy making and that it concentrated on a technical analysis of the policy implications of different strategies without giving sufficient attention to the political variables affecting the adoption and implementation of the policies it suggested.

The purpose of the paper by Jorge Cauas and Marcelo Selowsky on Potential Distributive Effects of Nationalization Policies: The Economic Aspects was to study the determinants of the potential redistributive effects of nationalization policy. The analysis is restricted, however, to the effects of nationalizing a sub-sector of the corporate sector owned by the nationals of the country in question. Using parameters which they

believe to be plausible for some Latin American countries they derive orders of magnitude for such a transfer. In general, even in the best of cases, these show the transfers to be relatively small. The main determinants of the magnitude are the reinvestment policy that is followed by the government vis-à-vis the policy that otherwise would have been undertaken by the private sector, and the effect of the nationalization policy on the investment behavior in other sectors of the economy. The main point, however, is that the net redistributive effect of the transfer will depend crucially on the ability of the government in choosing the channels of distribution -- and they imply that governments usually do not have all that much choice in the matter. The political scientists in general were disappointed that the model did not include nationalization of foreign firms which they felt was the more relevant issue for policy makers in LDCs. It was pointed out in the course of the discussion that non-economic reasons were probably more important than economic ones in the whole issue of nationalization, and it was generally argued that nationalization might not be a very efficient way of redistributing income unless it also involved a transfer of power or was a global nationalization of private property.

The policy paper writers are now engaged in writing final versions of their papers taking into account the guidelines of the January memo from Drs. Frank and Webb and the comments of the consultants from other disciplines. These final papers will be completed and circulated before a major conference of the project in September.

3. Data Papers

Dr. Richard Szal of the Brookings Institution is in charge of coordinating a series of papers dealing with data on income distribution

in a selection of LDC areas. (See attachment #4). The data paper writers have been asked to investigate existing data, for example, household surveys, expenditure surveys, fiscal data, and ^{to} summarize their findings. In addition, data on poverty levels, income shares below the poverty line, were noted as being very important in themselves, and as indications of trends. Evaluation of the reliability of the data was also to be included in the papers.

These data papers are intended to provide background information necessary for formulating plans for possible future intensive country studies. The choice of specific countries for fruitful further investigation is clearly dependent on the quantity and reliability of existing data, and on an estimate of the possibilities for gathering additional data.

Draft papers have been received from Drs. Choo, Meesook, Phillina, Rajaraman and Urrutia and final versions are due in August. The writers of these papers will play an important role in the September conference.

4. Theory, Measurement and Integration Papers

A. Theory. A paper, Income Distribution in LDC's: Some Reflections on Theory and Policy, by Charles Frank and Richard Webb was prepared as background for the discussions of distributive policy held during the Fall Workshop, and as a suggested framework of analysis for the policy papers. The paper first reviewed some of the various factors which affect income distribution, by studying the distribution of human resources, real productive assets and public assets. This was followed by a discussion of redistributive policy options. A third section then developed a theoretical framework of income distribution based on a modern-traditional (informal) and urban-rural breakdown of the economy. The analysis stressed

the role of factor pricing and factor choice in the modern sector as a determinant of labor absorption and of demand spillovers onto the traditional and rural sectors.

The revised version of this paper that is being prepared for the September conference will present the theoretical discussion in a form more easily understood by non-specialist readers and will stress the applicability of the model in the analysis of redistributive policy options.

B. Measurement. The paper The Analysis and Measurement of Income Inequality: Static and Dynamic Approaches by Rick Szal and Sherman Robinson points out that the usual analysis of inequality is undertaken using static measures applied to the data of one period. Such an analysis misses important dynamic relationships of income distribution, especially with regard to social and economic mobility. In line with this, the paper has three sections. First, traditional normative and positive aspects that have ordered the way economists have analyzed inequality are discussed. This section also includes a discussion of the criteria that ought to be considered for judging the welfare implications of a given distribution. Second, the better known measures of inequality are presented and their advantages and disadvantages are discussed. Finally, a framework for analyzing the dynamics of income distribution is presented, along with several measures that can be used to summarize the process. The conclusion is that the static mode of analyzing income inequality, which has predominated in studies to date, is inappropriate and misses important dynamic aspects of income distribution.

Dr. Szal has also written A Methodology for the Evaluation and Adjustment of Income Distribution Data, which outlines a methodology for making household survey and other income data from different countries more

comparable

C. Integration. An Integration paper will be written by Charles Frank and Richard Webb summarizing and pulling together the conclusions reached in the various policy papers. A first draft of this paper will be ready for the September conference, and will be based on the final drafts of the policy papers due in August. The Integration paper will examine the conclusions of the various policy studies regarding the effectiveness and feasibility of alternative policy approaches to income redistribution, and will draw implications for aid donor policy.

5. Student Papers

In addition to these papers, the project funded Surjit Bhalla, a graduate student in Princeton's Economics Department, for a year while he began an investigation into the impact of family income on the human capital accumulation of an individual. Next year, Rekesh Mohan will receive support. Mr. Mohan is associated with the project as the author of the paper on Urban Land Policies.

Students enrolled in the Woodrow Wilson School Fall Workshop on income distribution also wrote research papers on various aspects of distributive policy, such as industrialization policy in Greece, schooling in Latin America, and agricultural policies in Nepal. Some of these papers are of sufficient quality for circulation as Woodrow Wilson School discussion papers. They are presently being selected and will be edited for dissemination during the fall.

A comprehensive, annotated bibliography of income distribution articles is being compiled at Brookings. The project was begun by Mary

Baird, research assistant to Dr. Frank, and is being completed by Mr. J. Epstein, a graduate student in the Woodrow Wilson School.

D. Research Design Changes

As mentioned above (sec A) the research design has been altered by significantly increasing the interdisciplinary nature of the policy papers. Consultants from political science and other disciplines had been included in the early workshop-seminar series, but it was felt that they needed to be made a more integral part of the project. Therefore, a consultant was selected to provide written comments on the policy papers, before final versions were completed. A meeting was held in June for the express purpose of combining the inputs of economists and political scientists.

The original timing for a major conference to summarize and disseminate research findings has been altered. This conference was originally scheduled for June, but with the addition of a political science public administration dimension, it became clear that postponing the major conference until September was necessary.

In addition, it was determined that the original plans for more extensive surveys of data would, in many ways, duplicate existing surveys. A paper planned to cover systems of income distribution accounts and measurement techniques has been eliminated. Instead Drs. Frank, Webb and Sherman Robinson have worked with the World Bank staff to utilize existing analyses and surveys.

E. Work Plans for the Next

Present plans for the Income Distribution project call for completion of policy and data papers by August 15, a conference in September.

and publication of a final volume. Plans call for the volume to contain the ten policy papers, a paper describing a general theoretical framework, a paper on concepts and measurements and a paper providing an overall integration of the policy analyses from both an economic and a political administrative perspective.

The conference is being organized on the basis of a series of four regional panels covering the areas of Latin America, Africa, South Asia, Near East, and Southeast and East Asia. Each panel will consist of the data paper writer of the region plus other participants from LDCs. These new invitees from LDCs are social scientists or public administrators with experience in the field of income distribution policies who will be able to provide knowledge of the policy experiences and problems in their own country. (See attachment #5)

The data paper writers and LDC social scientists have been invited to stay several additional days in September to assist in the completion of plans for future research in specific countries. Several meetings of the Princeton-Brookings personnel have already been held sketching tentative guidelines for possible future research design. The LDC visitors represent, in many cases, institutions interested in the possibilities of future collaborative efforts.

F. Dissemination

The design of research of the income distribution project has had a built-in dissemination dimension. The workshop seminars involved researchers and scholars from a variety of U.S. institutions, as well as six visitors from LDCs. Draft papers and detailed summaries of the discussions of these seminars were widely circulated. The social science

consultants increased the dissemination of the ideas of the project not only to other educational institutions, but to a broader range of disciplines and departments within institutions.

Collaborative work with local researchers in LDCs is an important aspect of the project, and has led to the agreements with the data paper writers. The plans for a second phase of investigation of a series of intensive country studies -- would involve institutions and scholars in LDCs directly in the implementation of research.

The September conference itself is intended to provide a forum not only for summarizing the results of this phase of research, but to "broadcast" those results. The LDC participants in the conference represent a wide range of involvement in the development field -- universities, government planning commissions, development institutes.

The participants in the September conference will all receive copies of all the policy papers, data papers, and theoretical papers. When the various papers are combined into the volume expected to result from the project, this publication should have a wide circulation.

G. Budget

Expenditures for FY '74 and estimated expenditure for FY '75 are summarized in attachment #6.

Attachment # 1

2/26/74

PRINCETON UNIVERSITY
PRINCETON, NEW JERSEY

Woodrow Wilson School of Public and International Affairs

Brookings-Princeton Income Distribution Project Workshop Seminars

October 15 - November 27, 1973

1. Theories of Income Distribution, Economic Growth and Relevance to Policy Issues

October 15, 1973

Presentation: Richard Webb, Princeton University and
Charles R. Frank, Jr., Brookings Institution

2. Data on Income Distribution in Less Developed Countries

October 16, 1973

Presentation: Albert Fishlow, Berkeley

Comments: Carmella Ullman, IBRD and Sudhir Anand, IBRD

Visiting Participants to Sessions 1 and 2.

Martin Bronfenbrenner, Duke University
John Eriksson, AID
Dermot Gately, New York University
Charles Montie, AID
N. Nadiri, New York University
Gustav Ranis, Yale University

3. Agricultural Policies, Rural Development, and Income Distribution

October 22, 1973

resentation: William Cline, Brookings Institution

omments: John Gerhart, Princeton University

4. Policies Directed toward the Urban Poor

October 23, 1973

Presentation: Michael Cohen, World BankComments: Michael Todaro, Rockefeller FoundationVisiting Participants to Sessions 3 and 4.

Dale Adams, Ohio State University
 L. Fletcher, AID
 John Harris, M.I.T.
 Peter Kilby, Wesleyan
 Donald McLelland, AID
 Joan Nelson, Urban Institute
 William Thiesenhusen, Wisconsin University
 Wayne Thirsk, Rice University

5. Direct Application and Promotion of Labor Intensive Techniques

October 29, 1973

Presentation: John P. Lewis, Princeton UniversityComments: Howard Pack, Swarthmore College

6. Labor Markets, Labor Policies and Income Distribution

October 30, 1973

Presentation: Richard Webb, Princeton UniversityComments: Jorge Salazar, Brookings Institution and
Juan Buttari, Brookings InstitutionVisiting Participants to Sessions 5 and 6:

Henry Bruton, Williams College
 David Davies, Harvard University
 John Gerhart, Princeton University
 Edward Hawkins, IBRD
 James Mudge, IBRD
 John Thomas, Harvard University

7. Educational Opportunities and Education Finance

November 5, 1973

Presentation: Frederick Harbison, Princeton UniversityComments: John Simmons, IBRD

8. Nutrition, Health and Population Programs

November 6, 1973

Presentation: James Levinson, M.I.T. and
Dieter Zschock, SUNY (Stony Brook)

Comments: Bryan Boulier, Princeton University

Visiting Participants to Sessions 7 and 8:

Kristen Conner, U.N.
Joseph Davis, AID
David Dunlop, Meharry Medical College
Jean Pierre Jallade, IBRD
D.C. Rao, IBRD
Carmella Ullman, IBRD
Manuel Zymelman, Harvard University

9. Trade and Exchange Rate Policies and Direct Controls

November 12, 1973

Presentation: Henry Bruton, Williams College

Comments: Carlos Diaz, Yale University

10. Nationalization of Private Enterprise

November 13, 1973

Presentation: Marcello Selowsky, IBRD

Comments: Dwight Brothers, Harvard Business School

Visiting Participants to Sessions 9 and 10:

Bela Balassa, IBRD
Peter Kenen, Princeton University
Gordon Winston, Williams College

11. Fiscal Incidence

November 19, 1973

Presentation: Al Harberger, Chicago and Princeton University

Comments: Charles McLure, Rice University

12. Political and Administrative Variables in Policy Implementation

November 20, 1973

Presentation: Francine Frankel, Princeton University and
Univ. of Penn.,

Comments: John Montgomery, Harvard and
Henry Bienen, Princeton University

Visiting Participants to Sessions 11 and 12.

Marguerite Barnett, Princeton University
Glynn Cochrane, Syracuse University
Jacob Meerman, IBRD
Wallace Oates, Princeton University
Norman Uphoff, Cornell University
Luc de Wulf, IMF

13. Policy Summary and Implications for Theories of Income Distribution
and Growth

November 26, 1973

Presentation: Charles R. Frank, Jr. and Richard Webb

14. Relevance of Policy and Theory Discussions for Data Collection and Use

November 27, 1973

Presentation: Charles R. Frank, Jr. and Richard Webb

Visiting Participants to Sessions 13 and 14:

Paul Isenberg, AID
Dermot Gately, New York University

Regular Participants:

Chairmen: Charles R. Frank, Jr., Brookings Institution and Richard Webb,
Princeton University

Mary Baird, Brookings Institution
Surjit Bhalla, Princeton University
Bryan Boulier, Princeton University
Henry Bruton, Williams College
Edwin Cohn, AID
Carl Dahlman, Princeton University
Francine Frankel, University of Pennsylvania and Princeton Univ
Arnold Harberger, Chicago and Princeton University
Frederick Harbison, Princeton University
John Lewis, Princeton University

Regular Participants (cont'd.)

Jacob Meerman, IBRD
Rakesh Mohan, Princeton University
Indira Rajaraman, Princeton University
Sherman Robinson, Princeton University
Richard Szal, Brookings Institution.

Foreign Visitors:

Hakchung Choo, Korea Development Institute, Seoul, Korea
Leoncio Durandau, Universidad Autonoma Nuevo Leon, Monterrey, Mexico
Alper Orhon, Bosphorus University, Istanbul, Turkey
A.O. Phillips, University of Ibadan, Ibadan, Nigeria
K.R. Ranadive, University of Bombay, Bombay, India
Maria da Conceicao Tavares, University de Campinas, Sao Paulo, Brazil

Attachment #2

JOINT PRINCETON/BROOKINGS INCOME DISTRIBUTION PROJECT

January 11, 1974

TO: All policy paper writers for joint Princeton-Brookings project on income distribution in less developed countries. (See distribution).

FROM: Charles R. Frank, Jr. and Richard Webb

The purpose of this memo is to spell out in some detail the outline of the volume which is expected to come out of the income distribution project. In drafting these guidelines for the paper writers, we were helped by a meeting in Princeton with a number of the Princeton participants in the project and a meeting held in Washington with the AID people responsible for monitoring the project (see attached letter from Robert Muscat of AID).

The schedule for the project is as follows:

1. March 31, 1974 -- Rough draft of detailed outline of each paper.
2. June 1, 1974 -- Advanced draft of each paper due.
3. June 7th or 8th -- A meeting of all paper writers in Princeton to discuss papers jointly.
4. September 1974 -- Conference at which papers will be presented and discussed.

The rough drafts or outlines due on March 31 will be distributed to various consultants and readers for comments -- we particularly hope to have at least one political economist or other broad social scientist look at each draft and consult with the paper writers about political and administrative aspects of the various policy instruments.

I. Outline of the book and authors of papers.

A. General Papers.

1. Theoretical Framework -- Richard Webb and Charles Frank

2. Concepts and Measurement -- Sherman Robinson and Richard Szal

B. Policy Papers.

1. Labor -- Richard Webb and Charles Frank.
2. Trade, Exchange Rate and Industrialization -- Henry Bruton.
3. Public Works -- John Lewis.
4. Fiscal Policy -- Arnold Harberger.
5. Urban Land Policy -- Rakesh Mohan.
6. Education -- Frederick Harbison.
7. Health and Nutrition -- James Levinson and Olav T. Oftedal.
8. Agriculture -- William Cline.
9. Population Policy -- Bryan Boulier.
10. Nationalization -- Jorge Cauas and Marcelo Selowsky.

C. Overall Integration.

This section will consist of one or two papers integrating the policy analyses from both an economic perspective and a political-administrative perspective.

II. General points for all authors to consider.

The ultimate aim of the proposed research on income distribution is to analyze the effectiveness of various types of government policies in altering the basic trends in income distribution. Since the main objective of this volume is an overall picture of policy alternatives, the papers should at least outline the principal opportunities and limitations that face the policy-maker. The following general points are designed to ensure that each paper contributes to that goal.

1. In each policy area the paper should follow a scanning approach, that is, it should review existing knowledge and ideas within a broad perspective rather than attempt to deal in depth with a few selected topics. The paper should thus strive for comprehensiveness in its analysis of issues and of policy options and seek to identify promising options for original investigation at a later stage.
2. At the same time, papers should back off from broad policy generalizations ("correct factor price distortions," "expand primary schooling," "don't expand primary schooling," etc.), providing instead, a specification of the conditions under which a given policy is likely to produce certain results. In this way, the paper would reinforce what, in our view, was the principal contribution resulting from the rich variety of experiences and viewpoints brought out in the workshop, namely, the challenge to many commonplace generalizations by a more detailed understanding of the specificity of policies, or sets of policies, with regard to variables such as countries (and regions within countries), periods of time, market structures, types of institutions and poverty characteristics.
3. The notion of distributive justice is in reality a composite of several ethical principles. Reducing income variance, alleviating low-end poverty, increasing mobility, and eliminating excess concentrations of wealth and income are separable ethical ingredients of distributive justice. Since persons and societies attach different weights to each, and since policies affect each differently, (even.

at times, in opposite directions), all policy discussions should disaggregate the adduced "distributive effects" in terms of these separate ethical outcomes. A good rule might be to forbid summary statements of the kind "...improves (worsens) the distribution of income." At a minimum, the policy area papers should indicate which policies would improve the position of middle groups and which would help the really poor.

4. What is the range of effectiveness of various policy instruments on income distribution? Who are the beneficiaries, and how much income is transferred? If the effect of an instrument under any conceivable circumstances is likely to be minor, then there is little reason to consider that policy instrument seriously in discussions of income distribution.

What have been the extremes in terms of use and effectiveness of various policy instruments in less developed countries? Which countries have had substantially favorable results and which have had very unfavorable results on income distribution from the application of particular policy instruments? Has the use of policy instruments in these countries been with the express purpose of altering income distribution or have effects on income distribution been the inadvertent result of policies directed at other objectives?

5. A related point is that separable policy decisions should also be discussed separately. The choice of revenue sources on the one hand, and the allocation of fiscal expenditures on the other, can, and normally are, made independently so that combining the incidence of both types of decisions, as Jallade does when estimating the

distributive incidence of the educational system, merely obscures the effects that are specific to one type of decision.

6. Perhaps the most important request to be made of the policy papers is that they attempt to quantify. This involves putting numbers on the size of affected groups, on their income levels and position within the income distribution, on the size of the expected income transfers, and on the time period involved. Even extremely rough numbers on these variables would advance the level of discussion considerably. In discussing a specific policy, are we talking about peanuts? potatoes? or pumpkins? Without some idea of orders of magnitude it is impossible to draw together the conclusions obtained from the analysis of each policy area, or to obtain a sense of perspective on the amount of change that is possible in a given distribution of income.

7. It is useful to distinguish between questions relating to initial distributive effects, and those relating to the secondary effects or repercussions of the initial income transfer. Repercussions arise because income transfers cause shifts in supply and demand schedules in both goods and factor markets. They may offset or reinforce the initial transfer, and may also affect third parties; they are both static and dynamic.

A balanced policy paper would have some discussion of both types of questions. Much research of a fairly straightforward nature is still needed regarding primary effects, particularly with respect to the question, "Who benefits?" Most policy instruments are

inherently biased to favor some groups over others because they are, for example, location-specific, or type of occupation-specific, and these structural characteristics of policy instruments have not been adequately mapped. More needs to be known on the extent to which such biases are indeed imposed by economic and technical constraints, and, thus, on the extent to which greater political and administrative willingness could result in more progressive forms of implementation and delivery. The design of health delivery systems, and the introduction (or rather, failure to introduce) forced-sale, real estate self-assessments are cases in point.

Although repercussions are complex, and difficult to estimate, some notion of their direction and order of magnitude is required. Indeed, in the case of some policy areas, e.g., wage and trade policies, repercussions seem to outweigh initial effects, so that policy papers in those areas must rely heavily on a model of the economic mechanism. The evaluation of secondary effects ties in with the question of separate equity targets because if one is talking about reducing income variance, growth effects are perhaps less important, but if one is talking about raising the incomes of the very poor, growth effects might be the most important part of the analysis.

8. Each paper should discuss policies, and/or data, with reference to the modern vs. traditional, and urban vs. rural sectoral framework proposed in the first draft of the Frank-Webb theory paper for this volume. In particular, policy instruments should be analyzed in terms of how they affect the distribution of income within and between these sectors. This sectoral breakdown is suggested because it

coincides with the "structural" limits in the coverage or reach of many distributive policy instruments, as well as with the principal breakdowns in the market structure of most LDC's.

9. In each policy area it is necessary to examine the political and administrative aspects of possible redistribution. Views differ on "the tightness of fit" between the distributions of power and income, i.e., on the extent to which change in the political power structure must precede or / however, on the presumption that in-
congruencies and slippage between those distributions do exist and may be taken advantage of in designing a redistributive strategy. Even if political and/or administrative change is a prerequisite, the degree of change required for a given amount of income redistribution clearly differs in different social contexts, and according to the particular policy instrument used.

Thus, some improvements seem to be blocked less by a lack of political willingness than by biased administrative attitudes and procedures, e.g., middle-class standards often inhibit the use of medical auxiliaries, or the construction of low-grade roads, or the design of rural and work-relevant educational systems. Feasibility also varies because much of the final distributive outcome of a set of policies is produced as a by-product of decisions responding principally to other objectives and often made with little knowledge of their long run distributive implications. Another major source of slippage between power and income is that perceptions of economic gain or loss are not independent of the manner in which income is transferred.

In examining the relationship between politico-administrative and economic variables it would be particularly fruitful to search for instances of the reverse causation, where economic changes have changed the political environment.

These, and other questions relating to "tight fit" should be raised by every paper, even if it concludes in a pessimistic vein that social engineering was impossible.

10. The organization of this volume in terms of policy areas is clearly not meant to preclude a discussion by each policy paper writer of important complementarities or relationships with other policy areas. These discussions will both illuminate the workings of a particular policy area, and will form the basis of a section of the relationships between policies which will be included in the volume's summary paper.
11. What has been the role of aid donors, both bilateral and multilateral, in influencing the use and effectiveness of policy instruments? In particular, how have project loan criteria and criteria used in giving commodity and technical assistance affected the use of policies and their impact on income distribution? Have the criteria used by aid donors been chosen consciously with income distribution objectives in mind? What changes in aid donor policies would have a more desirable effect on income distribution in the less developed countries?
12. To what extent are the answers to the questions and issues raised in each paper ^{ambiguous} because of lack of relevant data and facts? What kinds of data and what conceptual framework for collecting data on income distribution would be most useful in providing better answers to

to these questions? Which countries have the data base which would be most relevant for further research on particular policy issues?

What further research should be done in individual country studies with respect to particular policy issues? Which countries are the most interesting to look at? How should the research be designed?

III. Discussion of Individual Papers.

Theoretical Framework. Most of the theorizing about income distribution in less developed countries has focused on the relationship between income distribution and growth. The most widely accepted theory is that at very low levels of income the distribution of income is relatively equal. During the early stages of industrialization, the distribution of income seems to worsen. At later stages of development, the distribution begins to improve again. The data on the distribution of income for countries at varying stages of development tend to support this theory. The evidence, however, allows for considerable variation about this rough characterization of trends, and recently available time series data for particular countries show few systematic trends over time.

In the theory paper we will examine a number of basic questions. First, what seem to be the mechanisms at work which produce a tendency for the distribution of income to follow the postulated U-shaped pattern through time? What causes variations from this basic pattern--in particular, what kinds of policy measures might affect trends in income distribution? Are there differences in economic and political structures and institutions which cause the trend

over time in income distribution to be so different from country to country? The theoretical model in which we propose to analyze some of these questions will involve three basic sectors: (1) the traditional rural section, (2) the traditional urban sector, and (3) the modern sector. These distinctions are not always well-drawn--in some countries the division between modern and traditional is clear (dualistic societies) while in other countries the distinctions are very hazy (relatively homogeneous societies).

The distribution of income depends on the distribution of assets, asset income, and current income within each sector, the distribution between sectors, and the flow of labor and capital assets between the sectors. Of particular importance is the wage determination mechanism within the modern sector. Modern sector wage rates are important not only in determining the distribution of income within the modern sector, but also in influencing the flow of labor and capital between modern and traditional sectors.

The theoretical framework postulated in this paper should help provide a frame of reference for all of the policy papers. In particular, we hope that policy instruments can be analyzed in terms of how they affect distribution of assets and income within sectors and the distribution of income and assets and the flow of factors between sectors. Some policies affect mainly within-sector distributions, while others tend to act most prominently on between-sector disparities.

A draft version of this paper is available through Princeton's Research Program in Economic Development. Revisions to this paper will be made, and a revised draft should be available by the end of March.

Concepts and Measurement:. This paper will deal with a number of conceptual issues and problems as well as outline some difficulties in obtaining data in order to calculate various measures of income distribution.

Every proposed aggregative measure of income distribution such as the Gini coefficient or the log variance of income involves implicitly a theory of individual and social welfare. The most basic question about measures on income distribution is what they imply about individual welfare functions and interpersonal comparisons of utility. There are two basic theoretical approaches. The first allows for identical individual utility functions, diminishing marginal utility of income, and the "adding up" of individual utilities to obtain a social utility function. Under this assumption, any redistribution of income which takes from a rich person and gives more to a poor person is unambiguously better from a social point of view. Any redistribution can be evaluated provided only that one can estimate the elasticity of the marginal utility of income. The optimal distribution for a given level of total income is one in which every individual receives exactly the same amount of income.

A modification to the first approach is one in which the total amount of income available is dependent on its distribution. For example, if the supply of capital, the supply of work effort, the willingness to take risks, the amount of innovational intensity, or any factor of production is dependent on income payments to the owners of those factors of production, then the optimal distribution of income is not necessarily equal even though one assumes a diminishing marginal utility of income, identical utility functions, and an "adding up" of individual utilities. In fact, however,

the optimal distribution which results from such assumptions tends to be regressive.

A second basic approach is to assume neither identical utility functions nor the "adding up" of individual utility functions, but to postulate that each individual has other people's incomes or the distribution of income in the society to which he belongs as arguments in his own utility function.

In this case, movement toward a more equal distribution of income improves everyone's utility without making anyone worse off if the loss of an individual's own income is compensated by an increase in the income of poorer people or a decrease in income of richer people. With the second basic approach, one can speak of a Pareto optimal distribution of income (one in which any change in the distribution of income would leave at least one person worse off). In general, however, the set of Pareto optimal distributions will contain many elements--there will be no one optimal distribution of income. With this approach, furthermore, a change in distribution in which the distribution of high income groups is reduced with no compensating increase in the income of lower groups may improve everyone's utility. With the first basic approach, such a redistribution would unambiguously reduce social welfare.

The choice of which basic welfare theory to use is not trivial with respect to implications for policy. The first approach suggests that, abstracting from supply considerations, incomes should be distributed absolutely equally. The only argument for unequal incomes is an incentive argument. The second approach suggests that one need be less concerned about the efficiency aspects of income distribution--that a policy of

soaking the rich with a net loss of total income and no compensation for the poor, except that the rich are now more like the poor, may be socially desirable.

A second set of issues to be discussed in the paper refers to the nature of the social welfare function or the individual utility functions which contain the distribution of income as an argument. This relates to what should be the basic goals of policies which affect income distribution: (1) a soaking of the rich, (2) elimination of abject poverty, (3) any reduction in the overall variance of income as measured by the Gini coefficient, the Pareto coefficient, the variance of the logs, the coefficient of variation, the Kuznets ratio, the maximum equalization percentage, the Theil information measure, or the Chenery-Ahluwalia welfare index, or (4) an increase in the mobility of people within the income distribution or a widening of economic opportunities.

A third set of issues to be discussed in this paper relates to more disaggregative measures of the distribution of income. These disaggregated measures may be particularly useful for policy purposes. For example, many of the above measures of overall variance in income can be disaggregated into between sector and within sector variation. If the greatest proportion of total variance is due to variance between sectors, then one might wish to concentrate on policies which have their greatest effects on between-sector variance of income. Poverty profiles are another way of examining the characteristics of the poor and looking for basic associations and causes of extreme poverty. Finally, a standardized system of distribution accounts can be used to analyze the basic set of relationships between social, cultural, and economic

characteristics and the distribution of income. The United Nations has developed a basic system of income distribution accounts which still needs to be adapted to the needs of the less developed countries. This effort on the part of the U.N. is similar to their earlier efforts to standardize national accounts.

The fourth set of issues to be discussed in this paper relates to the data on income distribution in less developed countries. Data are scarce and often unreliable. They are difficult to interpret and evaluate. They are often subject to inaccuracies. Definitions and the methodology of data collection differ considerably. Some data are based on expenditure patterns while others are based on direct attempts at income measurement. Not all types of income are always included. Some include subsistence income; others do not. Some include non-earned income, i.e., income deriving from assets, while others do not. Some data on income distribution are based on sample surveys while others are derived from census results. The quality of sample survey design varies significantly. Surveys often reveal glaring discrepancies with census data. Survey and census data may use different units of observation: the individual, the income earner, or the family. The definitions of the latter two units of observations are often ambiguous and income distributions vary significantly depending on the unit of observation.

Perhaps the most important difference in the way income distribution data are compiled is in the treatment of fiscal incidence. Some studies are based on the distribution of income before taxes, others are net of direct taxes only, while still others attempt to estimate the incidence of indirect taxes. A relatively small number of studies consider

tax incidence at all and fewer still take explicit account of expenditure incidence. What little evidence there is from past studies indicates that tax incidence is roughly proportional, while expenditure incidence tends to be progressive (i.e., pro-poor).

These differences in definition and methodology make it difficult to compare income distribution data over time and among countries. Only a limited number of countries have reasonably comparable data for two or more years. Other special problems arise in making comparisons. There is some evidence that the trade cycle has discernible effects on the pattern of income distribution. Price movements may differ significantly for various income classes. It is important to adjust the data with appropriate price deflators for different income groups as has been demonstrated in the case of India.

Despite the infirmities to which data on income distribution are subject, we believe that much imaginative work can be done to overcome these deficiencies so that it would be possible to conduct meaningful policy-oriented research. First, existing data may be modified so that various sets of data are more comparable. For example, there is some evidence that income distribution data using different units of observation are related in a well-determined way, depending on average family size and average number of income earners per household. It should be possible to develop a reasonably accurate method of transforming a set of data based on one set of units of observation into an implied distribution for other units of observations so that different data may be compared. To take another example, data on a rural income distribution may not include rental incomes. One might use statistics on the size distribution of land region to correct for this deficiency.

Second, by concentrating on changes in major components of income distribution for which relatively good data are available, it may be possible to infer the magnitude and direction of changes in income distribution over time. There is no need to consider comprehensive estimates of income distribution if certain components of income are either relatively unimportant or their distribution can be expected to change little over time.

Third, for policy purposes, we want to concentrate on those components of income which are most likely to be changed by those policies.

Labor. This paper should examine, first, the forms and extent of government interference in labor markets, second, the apparent direct effects on wage levels of such interference, and, third, the indirect consequences of labor policies on the economic system and its distributive outcomes. The last section will necessarily draw heavily on the theory paper of this volume.

The forms of government intervention in labor markets may be classed as direct, indirect or unintentional: the direct include minimum wage laws, direct wage-setting in government and other sectors, and legislation regarding wage supplements: the indirect include legislation regarding union activity, and the degree and form of intervention in collective bargaining; finally, large changes in relative wages are commonly produced, often unintentionally, by devaluations, inflation and other price policies. A first task of this paper should be to survey LDC practice with respect to these different forms of wage policy. A closely related question involves the coverage or reach of such policies within the labor force. By and large coverage is limited to employees in the modern sector, and perhaps to

permanent employees in larger farms: the relative size of these sectors should be estimated for different LDC's.

The second question concerns the actual effect of these policies on wage levels. Since market forces also operate to raise modern sector wages, it will be statistically and conceptually difficult to separate the contributions of policy and market forces, particularly where government intervention tends to be indirect. On the other hand, it should be possible to discuss the upper and lower limits of such policies, determined respectively by minimum acceptable rates of return to capital and by wage levels in markets that appear to be relatively free of government intervention.

The most important indirect consequences of wage policies, which will be analyzed in the theory paper to this volume, are their effects on choices of technique in the modern sector, and, as a result, on the time paths of employment and income growth in both the modern and traditional sectors. Since the choice of technique is simultaneously affected by capital pricing and capital allocation policies on the one hand, and wage policies on the other, the discussion should refer to both. This paper complement the theory paper with an examination of some cases. An effort should be made to quantify the principal outcomes of the model, regarding changes in sectoral incomes and employment, with data from specific countries.

Trade, Exchange Rates and Industrialization. This paper should deal with the set of policies affecting the access to, and price of, foreign exchange and imports. And, since industrialization has traditionally been a major objective of those policies, the discussion should also refer to the use of investment licensing and controls, which are closely related tools of industrialization policy.

The direct income transfers resulting from these policies can be substantial, especially in countries with large foreign trade sectors. The available literature on the allocative effects of protectionist trade policies, and on their effects on the gross terms of trade among sectors in an LDC economy should be used to build up a picture of the amounts and direction of such transfers in different LDC's. How true is the common view that such transfers generally favor the better-off modern sector at the expense of the rural population?

The direct distributive effects of trade and investment controls, and of foreign exchange and investment licenses should also be explored. A cascaded tariff structure, by itself, shapes allocative decisions and provides protection, but, in principle, entry into industries is open and competition can take place. Licenses--or their equivalents-- for imported capital goods, raw materials, and consumer goods create artificial scarcities and severe barriers to entry. Licenses on consumer goods provide a windfall to their holders and thus have a direct effect on income distribution. Licenses on capital goods and raw materials--particularly if a country is largely dependent on imports for these--provide windfalls for their holders, make it difficult for new entrepreneurs to break into an industry, and thus solidify monopoly-oligopoly market structures. The development of entrepreneurship generally may be discouraged. The social-political consequences of the economic power generated by these controls may serve to reinforce and perpetuate these controls. They may also inhibit other income redistribution efforts through the political mechanism. Further, market structure and the degree that firms are buffered from the rigors of competition may affect the choice of production technique (and hence

income distribution). Firms with market power may have open to them a whole range of profitable techniques, including those which are very capital intensive, but firms constrained by competition cannot afford to indulge themselves. This paper would explore thoroughly these connections between trade controls, market structure, income distribution, economic power, and political power.

The secondary effects of these policies are probably similar to those of wage policies. By affecting the allocation of capital between modern and traditional sectors, and the choice of techniques in the former, they influence the rates of growth of employment and incomes in each sector. A major question concerns the size of the impact of such policies on the incomes of the very poor.

Public Works. This paper will examine the role of public works as a policy instrument which affects income distribution. The effect of public works on income distribution is indirect through either increasing total employment or increasing general wage levels, or raising productivity. Employment effects may be either short-run, i.e., related to the actual construction of the public works, or long-run, i.e., related to employment generated by the creation of public assets. Public works also have a long-run distribution aspect determined by the long-run beneficiaries of the assets created by the public works.

The short-run employment effects of public works are assumed to be positive, that is, it is assumed that the construction of public works is more labor intensive than the alternative use to which the resources used in the program are put. It is also usually assumed that there is surplus labor, often of a seasonal nature, that is employed on the works

projects and that the workers employed represent a net increase in total employment. This also assumes that the demand for labor in other sectors of the economy is inelastic.

The long-run employment effects often are not analyzed. The long-run employment effects depend crucially on the nature of the assets created. Public housing and roads built to high standards require little maintenance so that the assets created generate little long-run employment except perhaps indirectly, in the case of roads, through increased transportation and increased general economic activity induced by the reduction in transport costs. An irrigation project which permits double-cropping and more intense cultivation may, on the other hand, have substantial long-run employment generation prospects. Thus, it is crucial to distinguish among different types of public works projects and to analyze both short-run and long-run employment effects.

The effect of public works on increased wage levels may be more important than the employment generating effects. While the employment effect depends on an elastic supply of surplus labor, the wage effect is more important the more inelastic is labor supply. Thus, one must recognize that the employment effects and the wage effects are trade-offs. The wage effect is also stronger the less the long-run elasticity of demand for labor outside of the public works project. For example, if a slight increase in rural wages generates increased farm mechanization, both the wage effect and the net employment effect will be reduced.

The long-run distribution effects of public works depends on who reaps the benefits from the public assets created. Many rural public works projects can be expected to benefit mainly the largest landowners. Transport

and irrigation facilities increase the rental values of land. The small landowners and the landless laborers may benefit only to the extent that there are spill-over effects. The long-run distribution effects may be favorable only if there is a prior land reform effort.

There is often a tendency to think of public works projects as make-work projects. Thus, there is a tendency to relax benefit-cost criteria in approving public works. Yet, there may be in fact public works projects which are both efficient from a benefit-cost point of view and from the point of view of employment and income distribution. Furthermore, make-work projects may generate no favorable long-run employment and income distribution.

The political and administrative aspects of public works projects are crucial and a substantial proportion of the paper could be devoted to them. Some of the goals of public works projects may be expressly political. They may be viewed as a way of devolving authority and political power to the poor at the grass-roots level. Thus, from this point of view public works may be a precursor to more radical forms of income redistribution such as land reform. Another point of view holds that radical reform is a necessary precondition to the successful implementation of a public works project. Otherwise, the administrative machinery is captured by the local village elites who use the projects to enhance the value of their assets and their political and social prestige. These problems should be explored in detail. Another view holds that the administrative structure of the implementation machinery affects its degree of immunity from capture by local elites.

The public works paper should emphasize the distinctions among various types of works projects with respect to their efficiency and their long- and short-run employment and income distribution effects and the administrative structures which are appropriate. Both rural projects and urban projects such as site and service projects ought to be considered. The financial implications of a massive public works program are important, but a prior issue is whether public works are the most efficient way to generate employment and improve income distribution per dollar of government expenditure. The problem of generating an attack on problems of employment and income distribution through increased government taxation and expenditure is more general than the public works issue and probably belongs in the paper on taxation.

Fiscal Policy. The paper on fiscal policy should deal specifically with the limits of progressive taxation. While many of the efforts to measure fiscal incidence have foundered on the shifting problem or have suffered from poor data, they do indicate that different taxes have substantially different regressive effects and that there seems to be some differences in the regressivity or progressivity of the total tax burden among different countries. While few countries have very progressive tax systems, there are major differences between the most progressive and the most regressive, which indicates that tax policy can have significant redistributive effects. Furthermore, a tax system substantially designed to redistribute income might have more potential progressivity than existing tax systems.

Since revenue objectives are often paramount in determining actual tax policies, the trade-off between income distribution and revenue objectives should be explored. Individual countries may have been successful in achieving a successful system from both a revenue and income distribution point of view. Do any of the existing studies of tax incidence show this to be the case? Individual taxes may have different revenue and income distribution trade-offs. Can these tradeoffs be estimated? Another set of important trade-offs relates to efficiency and income distribution objectives. Incidence should be examined with respect to individual taxes as well as with respect to the total tax package. In particular, it would be interesting to examine the relative revenue, efficiency, and distribution effects of taxes on income, consumption, and assets, particularly in the context of less developed, often very open, economies.

A particularly important theme to develop is the question of tax administration. In some countries, legal rates of taxation are irrelevant. Administration was the whole story. Rules of thumb are used for assessment purposes. The level of revenue obtained from many taxes is often dependent on the administrative rule of thumb which is used and the skill and persistence of the administrative apparatus in enforcing that rule.

There are a variety of administrative problems faced by tax officials in a less developed country. In a poor country, only certain segments of the population are likely to be affected by taxation--in particular, government workers and wage and salary earners in the modern sector. Accurate records of wages and salaries are kept regarding these workers, and many less developed countries have instituted a pay-as-you-earn system of wage and salary deductions. It is much more difficult

to tax non-export agricultural incomes and incomes in the urban traditional sector. It is also difficult to tax most forms of unearned income. This is especially serious if a major cause of inequality derives from an unequal asset distribution. Unearned incomes are difficult to assess and may easily be hidden in enterprise costs in the form of expense allowances, company housing, and company transport.

Problems such as these are often cited in support of the notion that taxation is unlikely ever to be an effective instrument for income redistribution. Yet, a number of countries have made substantial efforts to reform tax administration and increase efficiency (e.g., Korea and Brazil), especially for direct tax collections which have the greatest potential progressivity. It would be interesting to ask whether these tax reform programs have, in themselves, made taxation more progressive and to what extent they have increased the potential progressivity of the system.

The other side of the coin of tax incidence is the benefit incidence of taxation. Of particular interest is the net incidence of transfer programs such as welfare and social security programs. Also interesting are programs which transfer income in kind such as free or subsidized distribution of food, housing, and clothing. The distributional and efficiency impact of such transfers in kind should be examined.

The overall incidence of other kinds of government expenditures should be given at least a cursory examination. It would be useful to wade through some of the thorny analysis which would be required to determine the incidence of other types of governmental expenditures, including public goods type expenditure on defense, internal security

and general administration, investment expenditures such as public works, education expenditures, current expenditures on transport and public utilities, etc.

Finally, the analysis might consider the problem of reconciling the revenue requirements of government expenditure programs which have desirable distributional impact. There may be a trade-off between the revenue objective and the distribution impact of tax programs if increased revenues are used to finance programs with a favorable benefit incidence.

Urban Land Policy. At the present time, only the basic outlines of this paper have been thought out. It may be appropriate to fold this paper into the fiscal policy paper. Given the high degree of interest in urban land policy in a number of developing countries, however, perhaps a separate paper will emerge.

In developing countries (as, indeed, in rich ones) one of the more radically redistributive phenomena is the sudden, then continuing, appreciation in the value of land that occurs when, in connection with urbanization, land is first shifted from agricultural to urban use and then acquires increasing scarcity value as urban concentration proceeds. Using a cross-country comparative approach, it may be possible to determine (a) whether and how much, assuming the resulting windfalls accrue to private account, this process contributes to wealth and income inequalities, (b) under alternative assumptions about rates and deployments of urbanization, what order of magnitude of development financing is implicit in the process if substantial fractions of the windfalls can be captured to public account, and (c) what the alternative mechanisms for such capture may be (e.g., real property assessment and taxation compared with government purchase

and resale or leasing arrangements) and what the comparative experience with them has been.

Education. Education is probably at once the largest single redistributive transfer in LDC's, and the most difficult to evaluate from a distributive point of view. The first set of questions on this subject concern the allocation of educational opportunities over the population. There is a surprising variance, for instance, in the extent of rural primary school enrollment in countries of a similar level of development (e.g., Guatemala 30%, Peru 75%). What does this imply for political feasibility? Also, given that it is unlikely that any LDC can afford 100% enrollment in secondary schools, and given that some secondary and higher level education is necessary for development, is there an inevitable conflict between the requirements of equity and those of growth? Is the current pattern of allocation in LDC's, characterized by a steep educational pyramid, both inefficient and inequitable? If so, at what point does a flattening of the pyramid become inefficient? Finally, what determines access to educational opportunities, and, in particular, to what extent do private costs (chiefly opportunity costs) limit access?

The second, and more difficult set of questions, concerns the productivity of education considered as an investment in human capital. This issue goes beyond the question raised above--who receives public expenditures on education--to ask what those expenditures are really worth to the recipient. General answers are difficult first because education is not a homogeneous product; productivity depends on what is taught. Second, human capital is combined with other factors and thus productivity depends on the nature of the production function and on the supply of other resources. And, third, some education is an investment with a particularly

long maturation period, and a long life span, so that much may happen to the supply of other factors, and to the demand for specific types of human capital (e.g., urban vs. rural skills) over a life span.

With regard to content, there is a need for a quantitative evaluation of the scope for, and costs of, work-oriented forms of education, especially in the rural sector. What are the administrative, teaching force (number and educational level), and budgetary requirements of mass work-oriented forms of education? Why are such programs too scarce compared to the much wider availability, and high cost of traditional schooling? Is work-oriented education an alternative to traditional schooling? This may not be so because very different age-groups are involved, and because literacy and other disciplines acquired at schools may facilitate future work-oriented education. For the very young, opportunity cost may be minimal, so that any benefit from schooling increases welfare. What changes in content would be relevant in primary schooling? Finally, are jumps or discontinuities in the productivity of schooling and other education related to specific contents or stages? In particular, is this true of literacy?

What is known with regard to the complementarity (substitutability) of (a) human capital and other resources? (b) primary schooling and later forms of education? (c) each main type of human capital and other resources? The greater the degree of complementarity between these resources, the more difficult, of course, is any prediction of the productivity of investments in any form of education, since that prediction will depend on the ability to predict changes, over a very long period, in the supply of other resources. Thus, if rural schooling and literacy are complementary

with other rural development inputs, then schooling investments would be productive even if they long preceded the other development inputs.

In the case of education, more than with other redistributive instruments, it is important to disaggregate the concept of equity, noting separately its impact on income variance, absolute poverty, and mobility. Often, for instance, it is argued that broader education "improves equity" in circumstances where the principal effect is likely to be an increase in mobility with no significant reduction in variance or absolute poverty. Conversely, educational systems in LDC's are sometimes said to have a negative effect on income distribution because the rich receive more, thus increasing variance. Yet what the rich receive is irrelevant to the goal of reducing poverty; a large educational budget, even if it gives proportionately more to the rich, may make a large absolute transfer to the poor.

Education also requires especial treatment when discussing feasibility because, of any economic policy instrument, it is the most likely to generate the political change which may be a prerequisite of other forms of redistribution. In a very backward and stagnant rural society for instance, schooling may have the least effect on productivity, for lack of complementary resources, but the most effect on political change.

Health and Nutrition. In the area of nutrition, traditional programs of improving nutrition can be categorized into four broad strategies: (1) school or community feeding programs, (2) fortification of processed foods, (3) educational and promotional campaigns, and (4) breeding of high protein-content grains. Some fortification programs often have only a potential for middle income, urban populations who use processed foods. Other types of fortification programs may have broader potential in terms of the target population. Breeding programs, however, may be the only way to get to the small subsistence farmer.

There is some evidence, however, that direct attempts to improve nutrition, such as some of those in the above four categories, may be misdirected, at least as far as the very poor are concerned. The biggest impediment to improved nutritional status among the very poor is lack of income to purchase enough quantities of food. This suggests that income supplementation and direct feeding, or food distribution programs, may be the best type of programs for this target group. At somewhat higher income levels, the relevant constraint is the belief patterns or the traditional and cultural practices of the family. In these income groups, fortification programs, educational and promotional campaigns and improved varieties may be more important.

In the area of health, there are often controversies over preventive and community health programs as opposed to more standard treatment programs in hospitals and dispensaries. Some countries rely on paramedical personnel and small dispensaries more heavily than on highly trained doctors and large hospitals. More paramedics can be trained for a given expenditure and they are more likely to reach remote and poor segments of the population. The choice of medical specialities and types of diseases on which to concentrate

research, training, and treatment facilities can have widely varying impact on different income strata.

Health and nutrition are policy areas where the indirect impacts are very important. At the more direct level, improved health and nutrition for the poor is usually considered as a good in and of itself. Improved health and nutrition for the poor, however, also increases their productivity. According to one hypothesis, improved productivity leads to higher incomes, and hence a more equitable income distribution. While plausible for selected individuals, the concept might become problematic when one considers this route for large population groups. Where the country has a labor-surplus economy, increased productivity could exacerbate an already bad un- and under-employment problem. In addition, in many, probably most, production processes in low income countries, the brute strength or even mental agility of workers may not represent the limiting factor in the production process (which usually is constrained by agricultural inputs, landholdings or spare parts).

A second hypothesis is that improved health and nutrition will mean decreased infant and child mortality and, in turn, a smaller number of births. According to the theory, a couple desiring two surviving sons will, on the average, have to have four children. If half of their children die before the age of five, they will have to have eight children, and to be on the safe side, they'll overcompensate and have ten. If the couple believes its first two sons will survive, they'll have fewer. According to the theory then, the same income would be spread over fewer persons. There is little in the way of conclusive evidence on this hypothesis one way or the other, although there has been some interesting analysis of retrospective data.

A third way in which the indirect effects may be important is the effect of nutritional and health status on intelligence and learning ability. If this effect is important, then expenditures on health, nutrition and education

may be complementary in helping improve the income of the poor over the long run.

Finally, one must consider the indirect effects of improved nutrition and health on reduced infant mortality and morbidity, the effects of these on fertility, the net effect of the change in fertility and mortality on family size and population growth, and the effect of the changes in family size and population growth on income distribution. It is probably true that a decrease in child mortality is a necessary condition for a permanent reduction in the level of fertility, but in the short run the effect is likely to be an increase in family size and the rate of growth of population. The net effect is dependent on the speed of response to decreased mortality (which in turn depends on knowledge and ability to control fertility) and the elasticity of demand for surviving children.

Another aspect of health and nutrition efforts which should be investigated is the problem of distribution of income within the family unit. Frequently, customs and belief patterns result in a very skewed distribution of income between adults and children or between male and female members of the family. For example, in parts of Uganda one of the few sources of protein is fresh eggs and chicken. By custom only adult males consume these products. Nutrition and health programs may be the primary or perhaps the only way in which these intra-family inequities can be overcome.

Agricultural Policy. In the paper on agricultural policy, there are three basic approaches which should be examined. The first is the strategy of attempting to improve small farmer productivity. The kinds of policies which can affect the small farmer include pricing and buying policies of government marketing organizations, government subsidization of inputs such as seed and fertilizer or government help in the distribution of inputs, government sponsored research of agricultural varieties and farm practices, irrigation improvement, better credit facilities, farm extension, rural education. Many

of these policies, however, while it is expected that they might help the small farmer, often provide little help to the small farmer and a great deal of help to the large farmer. For example, credit for the small farmer is difficult and costly to administer because the size of loans is very small. Improved farm technology at best can be expected to be neutral with respect to scale. If neutral, then large and small farmers gain proportionately and while small farmers' absolute incomes improve, the differences in incomes between large and small farmers increase. High prices for agricultural products may help large and medium-sized farmers, but injure the very small farmer who is a net purchaser of food. A strategy of improving small farmer productivity, then, may alleviate some poverty, but it will not make the distribution of income more equal as long as these policies cannot be made more specific. Thus attempts to improve productivity may in fact worsen income distribution unless there is a prior redistribution of land assets, so that farmers benefit from productivity gains more equally. Furthermore, improvements in small farm productivity may do very little for the landless laborer.

The second basic strategy which can be pursued is that of redistribution of land assets. The historical record, however, has not been good. Political opposition in many countries has effectively stalled or severely diluted plans for drastic land reform. Land reform seems to be carried out only in the wake of major social upheavals such as the Communist revolutions in Russia and China, the South of the United States after the Civil War, the United States take-over in Japan and Korea after the Japanese defeat in World War II, the nationalist take-over of Taiwan after expulsion of the nationalists from the mainland, the revolutions in Mexico, Cuba, and Bolivia, and the socialist election victory in Chile.

Even in the successful cases of land reform, questions have been raised with regard to the total distributional impact. Some farmers and landless laborers may gain substantially, while many very small farmers may be worse off after the land reform. Large farms may be taken over by the organized, full-time workers on the farm who reorganize production so that the casual workers on the farm, either small farmers in the area or landless laborers, no longer have an irregular income supplement.

There may be methods by which successful land reform can take place within a variety of political contexts. There is some evidence that the nature of the administrative structure is important in determining the success of a land reform program. Certain types of administrative structures may be less permeable with respect to the influence of interest groups and local elites which are inimical to land reform. Other work suggests that the method of compensation to former landowners is important. If a net increase in production is possible through a land reform program, then current owners could be fully compensated and income distribution improved through a land reform program. An alternative method of improving land distribution is through colonization. This may be feasible where land expropriation is not.

The third basic approach is to improve working conditions of farm workers. Minimum wage legislation, laws regarding minimum facilities to be provided for itinerant workers, and government encouragement of farm labor organizations are some of the measures which might be pursued which can help landless laborers or farmers with very small plots. The problems with many of these measures is that, while they may improve the lot of those who are employed, by raising the cost of labor, they may in fact reduce the total demand for labor.

Many policies pursued in the agricultural area have little direct association with income distribution objectives, yet their income distribution impact may be substantial. General efforts to improve productivity usually are not specifically designed so that they improve income distribution. In fact, in the desire to increase productive efficiency, governments often focus their efforts on helping the large farmer. Mechanization programs, while they sometimes permit double-cropping and result in an increase in employment, often result in the replacement of labor, reduce employment, and worsen rural income distribution.

Population Policy. Population policies generally take one of three forms: (1) coercion, (2) persuasion, and (3) rearrangements of the price system. It is usually assumed that the net social benefits to such programs are positive and the reason why such programs are desirable is that the private costs and benefits of having children diverge from the social costs. Depending on the technique used to reduce fertility, the net private benefits of a population control program may be positive for some families or members of families and negative for others.

The private benefits of having children include the social security aspect of having surviving children when one reaches old age, the use of children as productive assets whose marginal productivity exceeds their marginal cost to other members of the family, and the social status and prestige of having a large family. Coercive and persuasion methods of population control may have, therefore, a negative income distribution effect, particularly if lower income families derive net private benefits from having children. Similarly, a price restructuring program which increases the private cost of having children rather than reducing the cost

of not having children can have an undesirable income distribution effect. For example, a restructuring of tax incentives through reduction of child allowances may have a negative effect on low income families.

Population control programs usually have two types of content: (1) provision of information, and (2) provision of services and materials at less than market cost. Provision of information generally has a positive impact on low income families since they are generally less well-informed about potential methods of population control and may be resorting to sub-optimal types of fertility control or no fertility control even though they have the desire to restrict their fertility. Furthermore, low income families are more likely to falsely assume that society expects them to follow high-fertility norms and psychic costs to defying those norms may be reduced with family planning propaganda.

High income families are more likely to benefit from the subsidization aspects of population control programs in that they are more likely to be following birth control practices and have more to gain from subsidization of birth control services. As a proportion of total income, however, the rich may spend less on birth control services than the poor so that the relative subsidy may be greater for low income families.

The indirect effects of birth control programs are usually longer run in nature. Reduction of population growth alters the relative values of labor and capital. The relative abundance of labor is reduced and the relative abundance of capital may be increased, especially if per capita savings are a decreasing function of fertility. The research to date on this issue gives ambiguous results as to whether the change in factor prices improves the distribution of income or not.

If the net effect of a population control program is to reduce fertility relatively more in the high income groups, then the long run income distribution may be adversely affected for two basic reasons. First, the per capita savings and therefore assets accumulation of a family tends to increase with a reduction in family size. Second, with fewer children, a given amount of assets is distributed among fewer children

As in the health and nutrition paper, intra-family distribution of income must be considered in analyzing the income distribution effects of population control programs. The private net benefits of having children, to the parents who make the decision, may be positive, but the net impact on other children in the family could be negative. Parental care and attention are reduced, nutrition and health status may decline, and, in general, per capita consumption of the older siblings may be reduced when new children are born into the family.

Nationalization. It is frequently said that redistributive instruments such as taxes, education, health programs, etc., are at best remedial, because the main problem lies in the concentration of property ownership and income. Nationalization or redistribution of private property is thus held to be, potentially, the most powerful redistributive device. Yet very large questions arise concerning this instrument, not only with regard to political feasibility, but also with respect to (a) its use for alleviating low-end poverty and (b) its effectiveness when nationalization only affects part of the private corporate sector.

In this paper, therefore, it is particularly important to ask who is involved on the losing and winning sides, potentially and in practice. In most, or all, LDC's at least part of the private corporate sector has

been nationalized, usually for reasons not primarily connected with the internal distribution of income. The principal such motives are, first, the transfer of assets from foreign to national ownership, and, second, the desire for state control over strategic sectors such as power, communications, steel, oil, and banking. Other non-distributive cases include bankruptcies in the private sector, and fiscal monopolies. Nationalization intended primarily to attack internal income inequalities is likely to be either minimal or total. It would be useful to examine how much nationalization has occurred for each of these various motives, how much of national income, total property income and modern sector income is involved and, particularly, under what conditions nationalization has occurred for primarily redistributive purposes.

The nationalized property income may go to workers in the affected enterprises, through wage increases or new hirings, to consumers of the affected products, through price reductions, or to others in the economy, through the budget. Is the order of listing also the order of probability? What can be said regarding who benefits in practice, and why? In particular, do the very poor ever benefit directly, i.e., are there cases where the budget has both captured part of nationalized property income and channelled the additional revenues to the very poor? And, at the other end of the spectrum, do nationalized enterprises at times end up reinforcing the remaining private corporate sector?

Another set of questions has to do with secondary effects of nationalization. Surplus in the affected sector may rise or fall depending on the relative competence of public management. Government may use their

control over the nationalized sector to impose other distributive policies, such as wage policies in the rest of the corporate sector, or credit allocation by nationalized banks. To the extent that workers in affected enterprises acquire some control and higher wages, they are likely to bias future investment in a more capital-intensive direction. Finally, nationalization of part of the corporate sector changes expectations and behavior, particularly investment behavior, in remaining enterprises.

C. Overall Integration

This section will summarize and integrate all of the individual policy papers from the point of view of some key economic and political-administrative questions. The outlines of a strategy for achieving more equality of income distribution will be formulated and discussed. For example, it may not be wise to evaluate the desirability of each individual policy measure in terms of its distributive effect, but to place it in perspective of an overall aggregative redistribution strategy. This paper will also examine the implications for aid donors of the conclusions about LDC policies affecting income distribution.

Some of the main points to be discussed are the following:

1. How much of a dent in inequality is being made by different policies? What is the range of experience in this respect? What aspects of inequality--overall variance, absolute poverty, mobility, and excessively high incomes--are being affected most, and which policies are relevant to each? Ideally, this set of questions would be answered with the help of a distributive matrix relating current pre-transfer income

levels and shares of different social groups to the positive and negative transfers that result for each group from different policies.

2. A related question concerns the limits to individual policy instruments. It is likely that any one instrument, if pushed too far, will cause excessive market distortions, and lose effectiveness. Most policies have such inherent limitations, e.g., land reform can at most redistribute total farm property income; "confiscatory" rates of income taxation become extremely difficult to enforce, and/or, cause capital and managerial resources to emigrate.
3. To what extent do the special characteristics of different policies fit the modern-traditional and urban-rural breakdowns, or would a different set of distinctions be more useful in analyzing the workings of policy? How do the workings of policy relate to the theoretical framework developed in the earlier paper?
4. What are the most potentially relevant interrelations between policy areas? There is a presumption that many policies, in the areas of nutrition and education, or of trade and labor for instance, will be complementary, and indeed that it makes little sense to discuss them separately.
5. To what extent do indirect or secondary effects of transfers offset, or reinforce the initial or primary effects? Are there policy combinations that seem favorable to both equity and growth?

6. What is the potential for effecting some forms of redistribution without some prior, significant political change?

This discussion of political feasibility, which may take the form of a separate paper, will analyze the policies discussed in the preceding papers in terms of the political variables and constraints which operate to affect implementation. Experience in various countries will be compared to see what political factors were operating in countries in which various policies were successfully implemented and compared with those where successful implementation did not take place.

7. A closely related question is whether one can identify "optimum policy sets" for different levels of political feasibility, or for different political arrangements. It seems likely that where a great deal of redistribution is politically feasible, the optimum policy mix may differ significantly from that which is appropriate to a country where political rigidities allow little change, and where, for instance, the best feasible strategy will be less overtly redistributive and more opportunistic in taking advantage of the favorable distributive effects of policies aimed at other goals.

This section should also discuss the implications of the policy-area papers for policy formulation within LDC's and by aid donors.

An effort will thus be made to outline the considerations involved in designing an optimum feasible policy package. This outline will

discuss use of poverty profiles, ways of evaluating policy alternatives, and of judging political feasibility.

These considerations will also be relevant as suggestions to aid donors. Aid donor policies can affect the distribution of income inadvertently as well as by conscious design. Donors whose general goals include more equal income distribution ought to be aware of the inadvertent effects of specific policies whose primary aims are other than income distribution.

Attachment #3

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PRINCETON, NEW JERSEY

5/1/74

Woodrow Wilson School of Public and International Affairs

AID Princeton/Brookings Income Distribution Project

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Attachment #4

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Richard J. Szal
December 13, 1973

Notes on Regional Papers to be Done in Connection
with Joint Brookings-Princeton Project on Income
Distribution in LDC's

As part of the Brookings-Princeton project on income distribution, a series of six or seven papers have been commissioned to deal with research and data on income distribution in a few geographically proximate countries. The purpose of papers is to provide survey and background material for a possible research proposal to do a series of intensive country studies dealing with income distribution. We hope that the intensive country studies would be conducted mainly in the less developed countries themselves by LDC researchers with Princeton and/or Brookings providing support and coordination.

The papers should have three main sections: 1. a short survey of existing studies on income distribution in the countries concerned; 2. analysis of data availability and problems with data relating to income distribution; 3. some suggestions as to some lines of inquiry for future research.

The survey of the literature on income distribution should be kept relatively snort. Emphasis should be on main conclusions, methodology, and the data base for these studies. Critical analysis of the methodology and data would be very useful.

The section on data should provide a review of existing data on the size distribution of income. The strengths, weaknesses and gaps in these data should be pointed out. Suggestions can be made as to how the data should be improved.

We are particularly interested to determine if data on the size distribution are available at two or more points of time for inter-temporal

comparisons. The authors should point out any difficulties in making inter-temporal comparisons with two or more sets of data and make suggestions as to how the data should be modified so that inter-temporal comparisons can be made.

The sector on data should also concentrate on primary and secondary data that might be useful in constructing a size distribution of income and various breakdowns of the size distribution such as rural-urban, ethnic, regional, traditional-modern, income source (i.e. labor income compared to non-labor income or farm income compared to non-farm income). The kind of breakdowns which would be most useful will depend on the country. For example, in Malaysia, ethnic breakdowns would be crucial. In India, regional breakdowns would be desirable to have. Richard Webb's paper on Peru,^{1/} shows how size distributions can be further broken down to yield useful information for the analysis of policies affecting income distribution.

The kinds of data most directly relevant to compiling a size distribution of income include the following:

1. Household Surveys
 - a. Rural Surveys
 - b. Urban Surveys
2. Expenditure Surveys
3. Price Data and Poverty Levels
4. Wealth Holdings Data
5. Fiscal Data
 - a. Taxable Incomes

1. Richard Webb, The Distribution of Income in Peru, (Princeton: Woodrow Wilson School of Public and International Affairs, 1972), Research Program in Economic Development Discussion Paper No. 26.

- b. Taxation Statistics
 - c. Taxation Incidence Studies
 - d. Government Expenditure Data
 - e. Government Expenditure Inciden
5. Population Censuses containing questions concerning individual or household income and wealth.

Peripheral data may sometimes be useful in constructing a size distribution. The peripheral data may be used either to provide a consistency check, to make estimates of income distribution for certain classes of households not included in the coverage of household surveys, or to help in making further breakdowns of a size distribution once it is obtained. For example, crop production and acreage data may help in specifying income from those crops or in providing a breakdown between farm and non-farm income. Data on size of land-holdings may provide a consistency check on the distribution of farm income. Each author will have to decide what breakdowns or consistency checks would be most relevant for the countries with which they are dealing and point out the data sources which are available to do such consistency checks.

A question closely associated with income distribution is that concerning poverty. The major problem of inequality is the poverty population and any study must deal with this subject. To this end, we would be interested in work that has been done on poverty levels, the income shares of those below the poverty line, the lowest quintile, and/or the lowest 40 percent of the distribution. Trends of these data are extremely important and the data section should incorporate a discussion of them.

Finally the data section of the paper should, if possible, refer to

a list of general data sources, less directly relevant to compiling a size distribution, but which would be useful in a general study of income distribution. A partial list of the kinds of data which might be useful is the following:

1. Manpower Related Data
 - a. Economically Active Population Surveys
 - b. Employment Surveys
 - c. Technical Manpower Surveys
 - d. Education and Training Statistics
 - e. Wage Surveys
2. General Data
 - a. National Accounts Data
 - i. Functional Categories
 - ii. Quality and Breakdown of Property Income
 - b. Population Censuses
 - c. Censuses (or surveys) of Manufacturing
 - d. Agricultural Output Surveys
 - e. Input-Output Data

For these data, a listing of whether or not they exist, and if they do, their producing agency will suffice. This presentation might take the form of a checklist so that one can immediately discover the types of manpower related and general data available for a given country. In depth evaluations are of much less importance in these areas. An overall evaluation of the country's data base would be helpful, since this would facilitate the selection of the most promising candidates for intensive country studies.

In the final section on possible future lines of research, we offer only a few general guidelines. We would be most interested in research dealing with crucial policy issues or specific policy interests. The suggestions as to future research should be clearly linked to data availability or possibilities and feasibility of further data collection. Finally, we hope that the policy paper writers will consult with knowledgeable researchers and other interested persons concerning their priorities for future research.

Attachment #5

Participants for September Conference to Date

Participating Members of the Project (policy paper writers, research assistants, several political science consultants) and the following:

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Sr. Miguel Urrutia	Banco de la Republica, Bogota, Colombia

LDC Invitees

Prof. Pranob Bardhan	University of Delhi, Delhi, India
Dr. Julio Cotler	Instituto de Investigaciones Sociales, Ciudad Universitaria, Mexico
Dr. Kemal Dervis	Middle East Technical University, Ankara, Turkey
Dr. V.P. Diejomaoh	University of Lagos, Lagos, Nigeria
Dr. Kodwo Ewusi	Institute of Social, Statistical and Economic Research, University of Ghana, Legon, Ghana
Dr. Lourdes Ferran	Banco Central de Venezuela
Dr. Adolfo Figueroa	Pontificia Universidad Catolica del Peru Lima, Peru
Mr. Manuel Gollás (Confirmation pending)	El Colegio de Mexico
Dr. Rajni Kothari (unconfirmed)	Dir., Center for the Study of Developing Sciences Delhi, India
Krishnan (unconfirmed)	Centre for Development Studies, Kerala State, India

LDC Invitees (cont'd.)

Dr. Shirley Kuo

Economic Planning Council, Taipei, Taiwan

Prof. F. Olu Okediji

Head, Faculty of Social Sciences
University of Ibadan, Ibadan, Nigeria

Dr. Harry Oshima
(Confirmation pending)

Council for Asian Manpower Studies, Ltd.
Makati, Rizal, Philippines

Prof. Ergun Ozbudun

University of Ankara, Ankara, Turkey

Dr. Jose Pastore

Universidade de Sao Paulo, Sao Paulo, Brasil

Dr. Chai Anan Samudavanija

National Institute for Development Administration,
Klong Chan, Bangkok, Thailand

Other Invitees

Dr. Montek Ahluwalia

Chief, Income Distribution Division, IBRD

Dr. Shahid Javed Burki

International Bank for Reconstruction and
Development

Prof. Pi-chao Chen

Center for Population Planning
University of Michigan
Dept. of Population Planning

Prof. Wayne Cornelius
(Confirmation pending)

Massachusetts Institute of Technology

Dr. Ralph K. Davidson

Deputy Dir., Social Sciences
Rockefeller Foundation, New York

Dr. Edgar O. Edwards

International Division, The Ford Foundation, N.Y.

Dr. Dharam Ghai

International Labour Office, Geneva, Switzerland

Prof. Albert Hirschman
(Confirmation pending)

Institute for Advanced Study, Princeton

Dr. Jacob Meerman
(Confirmation pending)

Brookings Institution

Dr. Gustav Papanek

Development Advisory Service, Harvard Univ.

Dr. Felix Paukert

International Labour Office, Geneva, Switzerland

Prof. Gustav Ranis
(Confirmation pending)

Economic Growth Center, Yale University

Prof. Richard Sandbrook
(Confirmation pending)

University of Toronto

Other Invitees (cont'd).

Dr. Ronald Soligo

Rice University, Dir., Program of
Development Studies

Prof. Richard Wilson

Dir., International Programs
Rutgers University

Attachment #6

Budget

	FY '74 July 1, 1973 <u>thru June 30, 1974</u>	FY '74 July 1, 1974 <u>Dec. 31, 1975</u>
Salaries	45,796	18,711
Benefits	9,618	3,929
Overhead	38,925	15,907
Consultants	13,005	18,850
Travel		
U.S.	3,059	2,500
International	5,654	753
Allowances	11,442	800
Other Direct Costs	2,094*	33,900**
Participant training	3,637	6,000
Brookings sub-contract	115,000	42,594
Williams sub-contract	<u>11,538</u>	<u>10,300</u>
	259,768	154,244

* includes June Conference

** September Conference