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EMPLOYMENT RESEARCH

A Concept Paper for AID

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EXECUTIVE SUMMARY AND RESEARCH AGENDA

This concept paper outlines four approaches — getting the prices right, improving the performance of economic institutions, managing the domestic macro-economy, and adjusting to a changed international economic environment — that must be integrated to serve as the basis of developing AID's employment strategy. In reviewing the research implications of such a strategy, the paper places considerable emphasis upon the interaction between competitive markets and market institutions at the micro level, and on the interaction between micro markets and their macro-economic and political environments. It suggests the importance of a research strategy which reorganizes existing findings and seeks to fill the gaps in knowledge within this framework.

The paper raises a series of research questions in the following areas:

1. Perfecting labor, capital, and foreign exchange markets: How do a variety of economic, social and political institutions affect wages, employment and productivity? How serious are wage distortions in the labor market? More specifically, how important are informal distortions — caused by institutions other than governments, labor unions or other formal organizations — that are not readily subject to policy change? What adjustments in policy are required as a result of such distortions?

When capital markets are subsidized, and when foreign exchange is regulated, how are employment levels, the mix of employment among sectors, and choice of technology affected? What are the key differences between investment and employment decisions between public and private enterprises? How do such policies affect comparative advantage?

In the face of economic distortions in labor, capital, and foreign exchange markets, what compensatory policies should be adopted? Does comparative advantage still dominate in formulating national strategies?

2. Institutional factors in labor and capital markets: What role do the labor market institutions of the family, the large enterprise, the government bureaucracy, and the trade union play in wage determination, employment, and human resource development? Do they have a positive or negative effect on labor productivity? How are formal and informal sectors linked together on both the demand and supply sides of the labor market, and how can these linkages among enterprises of all sizes be improved to promote growth, efficiency, and employment? What are the consequences of informal training and labor market information systems based around the family and the workplace and how should they be linked to formal programs of education, training and labor market information? What effect do institutional changes in the public enterprise sector, infrastructure construction, services, and trade have on the generation of productive employment? How will declining migration and reverse migration impact upon employment and earnings in

various sub-markets? Do labor markets become segmented in the course of economic development and how does such segmentation impede market efficiency and adversely alter income distribution?

In what ways do capital market institutions — financial intermediaries, public financing agencies, large corporations, and ethnic-based entrepreneurship — introduce distortions and non-price rationing into capital markets? Do these institutions also affect technological choice and do the alter employment patterns in important ways?

3. Domestic macro-policy: How can stabilization policies be designed which expand supply, and therefore employment, rather than depressing demand and, with it, employment? How should they take into account factors such as the responsiveness of product and factor supplies to economic incentives? What are the key non-price obstacles to supply and employment expansion? What changes need to be made in legal and regulatory arrangements to facilitate growth in productive employment? How can market demand for the employment-generating products of LDC be improved without violating international trade treaties or bringing about domestic deficits? How do macro-economic policies directed at stabilization, investment, and corrections of price distortions feed back into micro-level markets? What arrangements need to be made to facilitate the transition from inward-looking and unstable economic regimes to more stable and outward-looking regimes?

4. The international environment: What are the implications of technological change in developed countries and especially of automation for the dynamic comparative advantage and, therefore future employment in particular LDC? Specifically which labor intensive industries are likely to relocate to developed countries and which will remain competitive if located in countries with low labor costs, and high capital and technology costs? What are the implications for employment strategy of these potential shifts?

How do factors that contribute to international uncertainty — debt problems, demographic changes in the labor force, widespread export promotion or import substitution strategies, rapidly changing technology, and world-wide excess capacity -- impact upon employment in particular countries? What decision process for employment issues should governments use in light of this uncertainty?

5. The politics of employment: Given that there are gainers and losers from any policy shift, what can be done to improve the political tradeoffs faced by governments seeking more efficient and equitable policies? How can growth be reconciled with the desire for job protection in both developed and developing countries?

Addressing these questions carries important implications for the design and implementation of employment and growth policies. The principal product of the research program organized around markets and institutions should be a firm analytical base, consisting of both theoretical and empirical findings, for dealing with the employment problem in developing countries.

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There is increasing recognition that the provision of productive employment is the central issue for both growth and equity in less developed countries (LDC). The less developed countries have economies that are abundant in unskilled labor, much of which is dramatically underutilized. A strategy of development that intensively uses this abundant resource, and conserves scarce capital, imported technological know-how and foreign exchange will generally produce a higher rate of growth and a faster reduction in poverty than one which leaves much of this labor underemployed in very low productivity jobs. At the same time, growth strategies based upon expanding productive employment will also improve the distribution of income by providing jobs and earnings for the unemployed and by upgrading the productivity of those underemployed.

Alternative strategies, which concentrate resources in a small, capital and technology-intensive enclave, usually turn out to be non-viable, even in the medium term. In labor abundant LDC, they slow growth (Krueger, Bhagwati) and worsen income disparities (Lee). The result can be social and political tensions which are difficult to manage as important groups are left behind in the development process. These tensions, in turn, can force a change in strategy, often to a more nationalistic, controlled and inward looking one (Papanek).

The challenge for development strategy is to determine the best mix of policies to encourage the growth of productive employment. Despite decades of programmatic experience and massive amounts of scholarly analysis, this goal remains elusive for most LDC. In part, this is because several key employment issues have been inadequately researched in the past.

This paper outlines a new research framework. It is intended to illustrate a set of research directions, rather than to review prior research.

Research Approach

First, the design of development strategy, and of research supporting it, needs to make the growth of productive employment central, rather than subordinate, as a goal of development policy. For the most part, analysts have assumed that the primary objective is growth, with stabilization and self-reliance secondary objectives. Equity has been seen as of lesser importance, especially for really poor countries, and as difficult to deal with except at the cost of growth. But failure to focus directly on the problems of the poor has caused political problems which have aborted some promising growth-oriented strategies. Pakistan in the late 1960's and Egypt in the 1980's are but two examples. The two objectives can be reconciled by a strategy which focuses on productive employment.

Second, employment issues have usually been analyzed in narrow terms. The major emphasis has been on "getting prices right" in labor markets so that they will function "efficiently" (Liedholm) and on job creation projects targeted at specific regions or labor force groups. What is needed instead in an effective approach to employment problems is consideration of the complex interrelationship among: (i) the macro policies, laws and regulations of government and their effect on relative prices and aggregate demand, (ii) the functioning of markets, and especially labor markets, including the institutional factors which greatly affect their operation, (iii) the constraints put on national economies by international circumstances, and (iv) the influence and constraints imposed by political objectives. All four of these areas have been more or less explored, but their interaction has been neglected, particularly in the design and implementation of donor-financed projects.

Third, the non-economic factors affecting productive employment have been inadequately explored. Most studies have not fully recognized that economic activity is not controlled solely by prices and economic incentives. In reality, every economy represents a somewhat unique system of micro-level markets and micro-level institutions that interact with one another to yield observed patterns of employment, earnings, and labor productivity. These institutions — unions and other collective organizations, market regulatory agencies, large firms, social customs and norms, family and kinship economic practices — are not simply organizational entities that reflect or transmit market forces. Instead, they structure markets, wield power, and exert an independent influence over market processes in ways that affect market outcomes.

These micro-level systems of markets and institutions are, in turn, embedded in a larger set of macro-level market, technological, and political contexts. The macro-level market context sets the limits on the operation of the micro-level system. There is in addition a technological context, broadly defined as the methods of production, which influences the composition of factor demands and the organizational structure of micro-level institutions. Finally, the exigencies of the political context can passively constrain, or actively shape, micro-level systems.

If only "getting prices right" mattered, it would be a relatively straightforward problem to correct distortions and, therefore, to employ surplus labor productively and to accomplish other efficiencies in production that are often absent in developing countries. But micro-level institutions can modify the influence of prices and introduce various non-price considerations relating to income distribution, social obligations, non-economic objectives, and the like, that severely limit the effectiveness of prices as a guide to economic activity and efficient resource use.

Similarly, the macro-level market and political contexts, both national and international, affect the way in which policy becomes translated into practice. For instance, fostering employment generating economic growth and structural change in LDC is far easier under conditions of global prosperity than when widespread economic slack encourages countries to restrict trade and otherwise protect jobs. Moreover, the gains and losses that inevitably accompany the movement from excessively-managed to competitive economic regimes are more readily accommodated when there is both expanding demand and national political stability.

This assessment suggests that an employment strategy must be developed in a broad framework which takes into account both markets and market institutions at the micro level and macro-economic and macro-political considerations at the national and international level. In terms of the research agenda needed to support such a framework, it suggests that knowing how competition should be used to promote employment is not enough. Policy-makers must also know how to get from a highly controlled, highly distorted, and inward looking economy to one which is more market oriented in ways that are consistent with existing political and institutional constraints.

The most important holes in our knowledge relate to the institutions that affect micro level markets and to the interaction between the micro-level markets and institutions and the macro-economic and political contexts in which they operate. A crucial element for any research plan is, therefore, to incorporate an understanding of the influence of business, labor, government, and cultural institutions on economic activity. This means achieving a better understanding of micro-level systems of markets and institutions. These micro-studies then need to be systematically related to macro-economic and political considerations. With this information, it should then be possible to provide fresh guidance about how to move from one economic regime to another.

Methodology and Priorities

Various research priorities are implied by this framework. With respect to international and domestic macro-economic issues, the first and probably most important element involves sythesizing and re-interpreting existing work in terms of the impact on employment and the identification of the important connections between the macro-level factors and micro-level systems. For instance, interest rate policies have been effectively and extensively studied (Adams). So has the debt problem of LDC and the impact of oil price changes (especially in work by the IMF and the World Bank). However, these studies have focussed on efficiency and growth questions. Clearly, changes in macro-economic magnitudes and policies have implications for employment as well. It remains to spell out these implications. What this means for employment research is discussed further below.

Second, there are several aspects of the international system which have received little or no attention, but which have profound implications for employment policies:

a. increased international competition, much of which incorporates barriers to the free operation of markets and therefore weakens the appropriateness of standard neo-classical policy prescriptions.

b. technological change, especially the revolution in micro-electronics which is is eroding the competitive position of LDC in some labor intensive activities.

c. great uncertainty in the world trading system, as the result of these two changes, plus others, most notably sharp fluctuations in commodity prices, (e.g. oil and agricultural products). As a result solutions which are best in the short term, and which can be achieved by the play of market forces, may be poor medium-term strategy in some cases because they do not take adequate account of risk and uncertainty. Again the implications are spelled out below.

At the micro level, it should also be possible to build upon the large body of available employment and labor market research conducted by AID, the World Bank, the ILO, and others. Much of this work, however, has been descriptive and has failed to analyze the consequences of the economic institutions being studied. For instance, insufficient attention has been given to the dynamics of the institutional processes and the institutional constraints as they have affected economic performance. The distributional consequences of institutions have also been neglected. As a result, a strong factual base has been provided, but some of the important analytical questions remain to be addressed

The most difficult challenge and priority is to integrate these themes into a coherent whole. This requires taking account of both market and institutional approaches, identifying the inter-relationships among these approaches, and specifying the way in which both the micro-level and macro-level factors are likely to evolve under various policy scenarios. To accomplish this, the research methodology will almost certainly have to be somewhat eclectic in order to integrate the different themes into a coherent whole.

The suggested approach does not lend itself easily to mathematical or econometric modelling. The relationships are too complex and some of the factors too difficult to quantify, at least with present knowledge and data, for a formal model of the whole system to yield useful results. Nevertheless, such methods can make a limited contribution to understanding how micro-level systems operate and tracing some of the consequences of macro-level policies.

It is critical, however, that the full extent of the complex interrelationships not be ignored. This will involve the development of verbal models, schematic models, and process models which emphasize dynamic, rather than static, relationships between markets and institutions in developing countries. While such models have been used only infrequently by economists in recent years, there is a history of such research in labor economics and in the other social sciences. Recent examples include the study of "social assets" (Jagannathan), non-competing groups (Doeringer 1983, 1986) and rents in "entry barrier" labor markets (Dey, Papanek, Wheeler). In our view, the limits of what can be learned from studies of purely economic relationships is rapidly being reached and more complex approaches such as these will have the greater payoff in the future.

In the balance of this paper, we discuss each of the approaches in turn and then their integration. We identify both those areas where knowledge is relatively well-established and those where considerable additional research is needed. In so doing, we have placed special emphasis upon the role of market institutions, since this is the area most in need of additional research attention. We have not attempted to be exhaustive in our review of the various approaches, but have sought instead to provide illustrations of the key issues.

1. Perfecting Markets: "Getting Prices Right"

Without doubt, the strongest tendency in development economics for the last twenty years has been to place greater reliance on the market to "get prices right". Originally advocated to improve efficiency, increase output and raise the rate of growth (e.g.: Little/Scitowsky/Scott), the same policy prescription has more recently been seen as desirable on employment and equity grounds as well (e.g.: Fields, Papanek). Research on the production effects of greater reliance on markets is not very high priority, because so much has been done in the last two decades, but the employment implications have only been begun to be explored (Squire).

a) Labor Markets. In the area of labor markets, there have been extensive empirical studies demonstrating that:

— labor demand is sensitive to relative wages and other factor costs;
— individual and family labor supply decisions reflect rational wealth-maximizing goals;
— education and skill contribute to productivity and are rewarded with higher earnings (Berry and Sabot).

Many of these analyses have emphasized the negative impact on employment of institutional influences on wages such as minimum wage legislation and labor union activity (c.f.: Harris and Todaro and the large literature based on that concept). These studies, however, focus on the types of formal interventions in the labor market that characterize only some developing countries. The prevalence of unusually high-wage employment situations is not limited to countries with strong unions or high minimum wages, but is much more widespread. Moreover, high wages are not limited to large firms, the public sector, or the regulated and protected sector. We are finding that pockets of high wages are scattered throughout the economies of developing countries. This suggests that the effect of wage setting by large scale enterprise in general, and government owned enterprises in particular, may be more important than focusing simply upon unions and minimum wages (Kannappan).

Moreover, the causes of elevated wages more generally, regardless of sector, is almost never addressed. For example, it has been argued that, as a result of labor market segmentation and barriers to entry into sub-markets, employment and production decisions in labor abundant countries are often based on average, not marginal, product considerations (Manove/Papanek/Dey). As a result, employment in agriculture (and in other informal sector occupations as well) becomes "excessive" in terms of static efficiency criteria.

This "distortion" could have profound implications for future changes in employment. For example, as agriculture becomes more commercialized, substantial numbers of farmers might well adopt the marginal criterion for most employment decisions. This could drastically reduce the number of workers employed, even if job opportunities do not increase in other sectors. Such a development may already be occurring in Indonesia. Where such underemployment, with low social marginal product, is widespread, as it may be in much of South and Southeast Asia, employment policy would need to be designed to cope with millions who can be driven out of their current jobs if social or political relationships change. It would also then be quite justified to adopt extensive programs and far-reaching policies to encourage labor to move from very low productivity activities in the informal sector, where they receive their average product, to higher productivity activities compensated according to marginal product. Determination of the extent of such underemployment is therefore a high priority research task.

Further research is generally needed on the extent of "excess" labor in various countries and informal sector occupations, and especially in agriculture, as result of deviations from competitive conditions in the labor market. In addition to looking at traditional courses as high wages, and at the rate of social assets, there are other wages issues that need to be explored. For example, there is an emerging body of research on "efficiency wages" (Yellen, 1984) which suggests that high wages can induce greater labor productivity and solve various supervisory problems connected with monitoring labor effort. The extent to which this is a feature of LDC labor markets has not been established.

In short, rather than concentrating on only visible sources of distortion, such as unions and minimum wages, we suggest the need for a much more broad-based examination of the forces, both negative and the positive, that cause earnings to vary from competitive levels. Research on such issues would provide a better basis for determining what the "right" prices are in the labor market. It would also shed light on the extent to which prices can be gotten "right", that is to which a competitive labor markets can be established, simply by government withdrawing from the labor market.

b) Capital Markets. The choice of technology and, even more important, the composition of investment are obviously influenced not only by the cost of labor, but also by its cost relative to that of capital. These decisions, in turn, affect employment levels. Economists often assume that capital markets are more likely to operate efficiently than are labor markets. Yet interest rates below the market are widespread in LDC (Lecraw).

Subsidized interest rates and credit rationing are widely seen as the other villain, comparable to minimum wages in the labor market, in leading to a capital intensive pattern of production and of technology. But there is precious little empirical evidence on this point. It is quite possible that in many LDC little investment is financed by borrowing and that the mechanism for financial intermediation is quite rudimentary and segmented. As a result, the interest rate may be a minor factor in the cost of capital compared to the exchange rate, the financing practices of governments, and the operating procedures of publicly-owned credit institutions. In addition, the price of capital may be only one factor influencing capital intensity. Credit rationing, capital availability, and informal mechanisms for capital allocation can also be important, as can the risk associated with capital or labor intensity.

The capital market for publicly owned enterprises is usually quite separate from that supplied by financial intermediaries and the interest rate may not be at all relevant in that market. The effective price for capital for these enterprises has been little studied. Nor is the interest rate very relevant to decisions on the technology to be used in public infrastructure investment. Again, little is known about the basis for decisions in that sector on the use of labor or capital-intensive technology.

Further work is therefore needed on four interrelated issues: (i) what factors are important in determining the effective price of capital. This would naturally involve analyzing the relative importance of such factors as the foreign exchange rate and commercial policy, the interest rate, various extra-legal levies, and the lending policies of government and semi-governmental institutions. But it would also call for studying the impact on the cost of capital of intra-firm or conglomerate capital pricing, capital flotations and foreign borrowing; (ii) how and to what extent do government policies influence that price. Clearly some of the factors which influence the price are directly determined by government fiat (e.g.: lending rates of government institutions). Others are little affected by government (e.g.: intra-conglomerate lending practices). These need to be distinguished. (iii) what non-price factors influence decisions on the use of machinery. Capital rationing and capital market segmentation is an important issue in this connection,but so are government capital allocation decisions; and (iv) what are the consequences for employment. Some policies which may be politically difficult to change may have little effect on employment in some countries (e.g.: subsidized interest rates for peasant agriculture). For policy purposes, these need to be distinguished from policies that have profound effects.

c) Foreign Exchange and Product Prices. What matters about prices is not their absolute level, but their relationship to other prices. For most LDC, the price ratios that matter, especially for employment, are between the cost of labor and of capital, and between labor and foreign exchange. The LDC that have been successful in achieving both growth and equity have achieved a ratio which made it profitable to produce labor-intensive goods for domestic consumption and especially for export.

The importance of the latter relationship stems from a variety of factors, such as the impact of the foreign exchange rate on the cost of capital goods and on the availability of foreign exchange, often the binding constraint on growth. But the most important effect is via the ability to export labor intensive manufactures. In most LDC, the only sector that can initially generate a large number of jobs is industry. Agriculture already has very low marginal productivity and tertiary employment depends on increased output in agriculture and industry. Industrial output is soon adequate to supply the limited domestic market with labor-intensive goods. The alternative then is between import-substituting capital intensive production, with little impact on employment and exporting labor-intensive goods. The feasibility of the latter strategy in turn depends on the competitive position of industry in the country, as determined by labor and capital costs in international prices, hence the importance of the exchange rate to exports and therefore employment.

The distortion of the relationship of product prices to factor costs has been well documented in research over the last twenty-five years. So has been the result: the perverse encouragement of investment in activities which lack comparative advantage. The focus has been on the costs in terms of inefficiency and slower growth, not on employment. Research can establish the consequences of such perverse policies for employment. Equally important, it can shed light on why such policies are followed despite their economic costs and explore the costs and benefits of alternative policies, with an emphasis on creation of productive jobs.

2. Institutional Factors in Micro Markets

Research findings repeatedly confirm the predictions of competitive market theory and demonstrate the potency of competitive market forces, even in economies where there is considerable regulation and distortion. But there are also significant limitations to these research findings. For example, there are differences in international competitiveness that are difficult to explain by market factors alone. Differences in wage rates for unskilled workers in the same region are also difficult to reconcile with a competitive labor market. Most important, the competitive paradigm rarely suffices to explain the underlying causal mechanisms and provides little guidance about policy design and implementation in political and institutional settings.

The institutional perspective on economic development emphasizes that economic growth cannot occur without corresponding changes in social, political, and economic institutions (Emmerij and Ghai). From this perspective, employment problems persist in part because of institutional flaws in areas such as technological innovation and choice, the quality and strategic planning skills of enterprise managers, and labor relations at the workplace. Problems of competitiveness, though partly traceable to distortions in wage and factor costs and to the rationing of scarce capital and foreign exchange, can also be traced to institutional failures — the persistence of inappropriate labor market and industrial structures; rigidities in family income-protection strategies; the failure of managers to exploit opportunities for innovation, scale economies and new markets; and the inability to maintain adequate production and quality controls.

In contrast to studies of competitive market arrangements, there have been relatively few studies of institutional factors affecting labor markets. Those that exist are mainly descriptive — the structure of unions and collective bargaining, case studies of rural villages and the small-enterprise sector, and studies of technology, labor requirements, and productivity of various types of large enterprises. There are only a few attempts at quantification of the effects of institutional factors on labor market outcomes (such as of the time budgets of families or of the role of gender in earnings determination), and attempts to develop more general theories or hypotheses about institutions and markets are rare.

a) Institutional Studies of Labor Markets. By far, the largest proportion of research on market institutions in developed nations has involved the labor market. This reflects a widespread belief that labor markets are governed by a more complex set of social and economic forces than are other factor and product markets. These include family and kinship influences, the exercise of economic power through collective institutions such as trade unions, discriminatory tastes and preferences, customs and cultural taboos about work, and the importance of social comparisons and norms of fairness.

More recently, there has been increased interest in institutions on the demand side of the labor market — the role of the hiring and training practices of large firms, the introduction of political considerations into the hiring and pay decisions of multinational and public enterprises, and the idea that productivity can be promoted by creating labor hierarchies and an artificial scarcity of attractive jobs.

Institutional studies of labor markets, primarily in the West, have also highlighted ideas of non-competing groups and of labor market segmentation which involve barriers to mobility and the generation of rents for workers who have devised shelters against competition and economic insecurity (Ryan). These studies have emphasized the relationship among competitive efficiency, dynamic changes in productivity, and income distribution.

(i) Agricultural and Rural Institutions. The largest group of institutional studies of labor markets in LDC has involved agricultural and rural labor markets. An increasing number of micro-studies have been concerned with family decision-making in rural areas. But very few have explored all aspects of the complex agricultural labor market including: employment decisions with respect to family members and hired labor on the family farm; factors in commercial agriculture employment and labor income decisions; the relationship among these different labor sub-markets and patterns of employment; and the extent to which labor may be pushed out of agriculture as a result of changing social or political relationships.

Recent work on agricultural households provides still another line of explanation of labor supply and labor productivity on family farms. Rather than assuming individual or household utility maximization, these studies have asked what determines the allocation of family labor, who receives the income from such labor, and why. The studies tend to emphasize uneven power within families between male household heads and wives and children. The result may be longer hours of work and higher average (but lower marginal) productivity of family labor than would be economically optimal, and sometimes inefficient organization of farm work.

Future work does not need to emphasize new surveys or in depth studies. Rather, existing work needs to be analyzed from a different perspective.

Also micro-studies need to be related to the limited conceptual and econometric work which exists.

There are also important issues relating to productivity, employment, and earnings on larger farming establishments. Such establishments may require large volumes of seasonal labor to be quickly available at relatively low costs. The consequence can be a variety of labor relations arrangements that retain sufficient labor in rural areas to meet seasonal labor needs: various kinds of land tenure and tenancy arrangements, paternalistic employment practices, long term labor contracts, importation of seasonal labor, and the like. In addition, labor effort on large agricultural establishments must be maintained at high levels during key parts of each season. This requires various combinations of labor contracting, compensation arrangements, reciprocal relationships and obligations between workers and farm owners, training of supervisory employees, and tied labor and credit markets to ensure adequate work effort. During off seasons, the livelihood of such labor must also be provided for.

One important result is that seemingly non-competitive differences often emerge in the pay and job tenure among seemingly identical workers in rural areas (Hart). Various hypotheses have been offered to explain this — the supervisory and incentive benefits that arise from such differentiation, the technology of agricultural production, and unmeasured differences in the productivity of different workers. Choosing among these explanations carries different implications for economic inequality and for policies to promote employment growth.

A second common result is that agricultural workers must often devise multi-faceted employment packages, rather than specializing in one line of work, in order to survive. However, the extent to which these packages are shaped by labor practices devised by plantation and commercial farm owners to meet their labor needs, as opposed to being the result of unrestricted choice by workers from among a limited range of options in the labor market, has not been verified. Again, the different interpretation carry different predictions for future trends in employment and income and different implications for policy.

(ii) Informal Sector Labor Market Institutions. The informal sector has been the focus of considerable policy attention because of its quantitative importance in many economies and because of the labor intensive character of its employment. The original implication that the informal sector is a homogeneous body of atomistic economic activities has been replaced by the view that there are many types of informal sector employment, in terms of size of unit, number of workers, self-employment and income levels. Along with this more complex view of the informal sector has come the realization that the distinction between formal and informal sectors is not at all sharp. In many economies, large-scale enterprise extends directly into the informal sector through an ever-widening net of sub-contracts and and cottage industry. Looked at as a vertical production process, many of the workers in informal sector activities are part of an extended formal sector that depends on such workers for many goods and services. There are supply-side connections between the two sectors as well. For example, there are a few studies suggesting that many workers are dual job-holders — working in the formal sector and moonlighting in the informal sector, or else moving between informal and formal sector work following the ebb and flow of formal sector labor demand.

The small-scale enterprise can be an important fulcrum in this process of linking formal and informal sector employment. For example, small-scale enterprises may be explicitly created by larger establishments which seek to find alternate supplies of intermediate goods at lower costs than they can be produced in the formal sector. At the same time, the availability of lower cost sources of production can also act as a disciplining force to help formal sector employers to resist wage and cost pressures on formal sector production. We know very little about subcontracting relationships, or about the strategic use of small enterprises by larger employers (however, see Watanabe).

Even less is known about the way in which small-scale enterprises organize their production. To what extent do they conduct their own subcontracting to still smaller firms and to household production and do they "spin off" additional small enterprises? As a result of various types of linkages among small enterprises, and between large and small enterprises, does the industrial structure evolve in efficient or inefficient ways in different countries? How do public policies of regulation, subsidy, and resource allocation impinge on these production arrangements? Particularly important in some countries may be the constraints on growth imposed by a variety of government policies favoring small informal enterprises, or rather imposing restrictions and requirements on larger enterprises (e.g.: Thailand, Indonesia, South Asia generally). To what extent are these policies unfavorable for growth and efficiency because they abort the growth of firms before they can benefit from economies of scale?

We are equally ignorant about the role of labor market linkages among small firms, between small firms and the household production sector, and between small firms and larger ones. What are the different employment and compensation strategies involved and how do they affect earnings, employment, and labor productivity.

However, what is known about the durability, credit creation, entrepreneurial capability, human resources, and overall productive capacity of the informal sector strongly suggests that this is a valuable resource for expanding production and employment. Potentially, it also has a rapid response capability to meet surges in demand and to conserve resources in periods of decline. The challenge is to identify constraints which may prevent growth, ways of expanding conventional markets for the output of the informal sector, and the potential for discovering constructive linkages (labor, credit, purchasing, marketing, and technological) both among small firms and to larger firms. We can observe enormous excess capacity in this sector in terms of labor and equipment, yet if markets were to be expanded, would there be capital, intermediate input, or labor constraints on growth?

Finally, if one treats the informal sector as consisting of firms with certain production characteristics, independent of the particular industries in which firms may be involved, does this suggest any possibilities for innovations in marketing and production? For example, such firms are well known for their ability to remain "on-call" to customers at all times of the day and to ferret out intermediate inputs from other informal sector firms in order to meet demand when it arises. The automobile repair shop that is available immediately to search for used auto parts and effect repairs on short notice is a feature of the informal sector that is rarely available in the formal sector, or in more developed countries. Are there systematic ways of turning these generic abilities of the informal sector into new production areas or integrating them more effectively with formal sector operations?

Unfortunately, the existing literature is not helpful in pursuing these questions. While much is known about the number, size, and socioeconomic characteristics of informal sector enterprises, the adjustment and business decision-making processes of these firms have rarely been explored and our understanding of formal-informal sector linkages is seriously deficient. Some of these issues, but by no means all, will be explored by the AID sponsored project on employment and enterprise policies.

(iii) Formal Sector Labor Markets. There are a set of widely-held, stylized facts about the large enterprise sector in developing countries that stress the irrationality of high wages and of capital intensive methods in countries where labor is relatively abundant and capital relatively scarce. Wage setting in this sector is assumed to be influenced strongly by government regulation or collective bargaining and employment is generally thought to be sheltered from the strict discipline of competition.

In addition to a number of wage determination issues in large-scale enterprises that have not been adequately addressed — work incentives, "political" wage determination, labor retention, and effort monitoring — much work needs to be done on the workplace labor markets of large enterprises. What accounts for the wide variation among wages, employment practices, and staffing strategies i large firms? To what extent are these arrangements rigid or flexible, efficient or inefficient, productivity-oriented or dominated by custom? All of these questions relate to the role of large firms as an instrument of growth policy in the areas of human resource development and the creation of productive employment (Morley et al, 1979).

Research on large-scale enterprises is all the more critical because of recent development. Many of the success stories of development were based on rapid creation of employment in labor-intensive manufacturing. In the 1970's it was widely argued and accepted that other LDC would be able to follow the path pioneered by Japan and successfully followed by the NIC's (newly industrializing countries) (see for instance Little). The "Korean model" gained widespread credibility, not only among aid donors, but also in many Asian countries and in Central and South America. But the world economic environment has changed in the last decade (see below). Slower growth of trade has been compounded by severe restrictions on trade in some of the industries that have been the mainstay of NIC's industrialization (e.g.: garments) and the threat of rapid technological change which will erode or destroy the advantage of low labor costs in some activities (see: Wheeler and Mody). Research is crucial to pinpoint those industries or, more often, specific activities within industries, where LDC will be able to maintain their comparative advantage despite these changes.

Appropriate prices were a key to the success of the NIC's and will continue to be crucial in the future. But the changed international environment may alter the role of price policy. An appropriate exchange rate may still be a necessary, but may no longer be a sufficient, condition to encourage manufactured exports if dynamic comparative advantage changes rapidly. Institutional changes may become more important (c.f.: for instance Korean attempts at consolidation of enterprises and the fostering of large trading houses).

Similarly education and training of the labor force were and will continue to be important. But it is possible that the new environment will call for somewhat different priorities: the comparative advantage of many LDC may in the future rest much more on low-cost technical and professional personnel, not low-cost production labor. This possibility requires examination.

(iv) <u>Publicly Owned Enterprises, An Important Factor in Labor Demand</u>. Controversial, publicly owned enterprises may well have been the most rapidly growing economic institution of the last twenty years. One reason has been their use for employment creation. The jobs they have created have not necessarily been productive from a national perspective. In many cases the resulting high costs may in fact have reduced total employment in the economy by reducing the ability to compete in the world market. In order to improve the functioning of public enterprises or to provide an employment justification for their privatization, their total impact on productive employment should be determined.

Even if the research on employment strengthens the case for privatization, as is likely, it is unrealistic to expect that most publicly owned enterprises will be sold off in the near future — their assets are so large that a lengthy transition period is likely even in countries that have adopted a firm policy of divestiture. Therefore, it will be important to understand better how such entities can be encouraged to operate along more efficient lines. This will require research on the management guidelines and incentives which govern investment, employment and pay decisions so that performance can be improved.

(v) <u>Demand for Labor by Infrastructure, Services and Trade Institutions</u>. While manufacturing has been central to a job-creation strategy in the successful NIC's, secondary jobs in construction, operation of transport, trade and services have often been equally important and, in a few countries, more important (Lal). Much of the work in such sectors is more formally organized than in the informal sector, but often involves more casual and family work than would be typical of formal sector enterprises. Little work has been done on these areas of employment, but what is available suggests that this would be a fruitful area to explore.

For example, a number of micro-studies by AID, ILO and World Bank have examined the employment potential of different construction methods (e.g.: Barwell). Similarly, there is now a good deal of experience with special, labor intensive, locally managed, public works programs, designed to build roads, schools, irrigation and drainage works and so on with off-season labor. The success and problems of several such programs have been described (e.g.: Patten et al), but their role has not been examined in the context of an overall employment strategy. For instance, how cost effective are they compared to other steps to create productive employment? Are they appropriate only where seasonal agriculture is a large source of employment or do they play a useful role even where the employment strategy emphasizes increasing formal sector employment? Can they be organized without raising wages, which might hamper a strategy of employment creation through industrial development? Since labor intensive works programs appear to have a good deal of potential for providing large scale, productive employment during a period when many rural people have little work and since they have provided substantial political benefits, an analysis of such questions is well warranted.

Little research has been done on the employment potential of trade, services and transport or on the changes that are taking place in these fields, which may substantially reduce their employment potential. But it is clear that changes are taking place, for instance from bicycle and bullock carts to pickup trucks, from sidewalk peddlers to stores, from bicycle rickshaws to motorcycle taxis, and from hand-pounding to machine hulling of rice. These changes greatly reduce employment, especially of unskilled and semi-skilled workers (all of these have occurred in Indonesia). These are important changes in what were once clearly informal sector activities and their consequences for future employment and income need to be better understood. It is worth investigating: (i) the social costs of alternative technologies; (ii) the impact of policies on such costs; and (iii) the implication for employment as the modern technologies take over particular activities.

(vi) The Impact of Migration. Most studies of migration have emphasized the importance of economic incentives in shaping the direction and rate of both interregional and international migrant flows. Recently, however, there have been some studies indicating the importance of village and kinship factors in regulating migration processes. Friends and relatives provide important assistance in locating employment, financing mobility, and providing a host of social and economic support services to recent migrants. In international migration, employers and labor contractors may provide similar services. Studies which focus only on wage and employment incentives, and on publicly-provided programs of migration assistance, may fail to predict the supply of migrant labor at critical points in time. The extent of employment linkages has been substantially influenced by the extent to which the new resources are used for domestic or imported goods.

Migration may also have an unappreciated impact upon the distribution of income. We are beginning to learn more about the importance of migrant remittances which provide resources to purchase land, housing, farm equipment, education, or to start businesses, especially in trade and transport. Remittances have also financed consumption, and indirectly generated employment. The income and employment linkages and feedback between migrants and rural areas deserves more study. Net reverse migration can generate a serious worsening of the employment problem in a number of countries.

(vii) Factors in Labor Market Segmentation. Evidence is accumulating that labor markets in LDC are frequently segmented by gender, ethnicity, class, and kinship (Kannappan; Fields; Mazumdar). This can be observed most readily in analyses of earnings which show substantial differences in income received by different groups that, at least superficially, appear to have comparable endowments of education and experience. Many of these segmenting forces appear to persist, even in the face of modernization. For example, some aspects of technological change continue to have a differential impact on the employment of different groups. Studies show that some technologies reduce opportunities for regular, reasonably well paid employment for poorer, less educated groups in less developed regions and especially of women from these groups (H. Papanek).

Government policies can also segment the labor market. For instance, if there is excess demand for well paying jobs, then one of the easiest, most efficient methods to control access is to use educational credentials as a screening device. Credentialism inevitably benefits the middle and upper income groups at the cost of the poor. Programs which create an excess supply of educated personnel further promoted credentialism. The development of lower cost, more automated technology re-enforces the tendency. So does a high level of protection for industry producing for the domestic market, which can then indulge engineering preferences for labor saving, advanced technologies (Wells).

It is important to analyze: (i) whether there is indeed a tendency for the employment problem to become more severe for lower income families; (ii) the extent to which this is due to policies and programs which can be altered, or to developments in technology or elsewhere not readily affected by changes in policies and to what extent to institutions which can be changed only slowly; and (iii) if the problem is a serious one, how can programs and polices be shaped to help those with the most serious problems.

b) Institutional Factors in Capital Markets. While labor market institutions have important direct consequences for employment and earnings, capital market institutions often have a significant indirect influence. Many studies of capital markets have focused on the problem of distortions, but they have failed to emphasize sufficiently the importance of understanding how and why subsidies arise and capital becomes subject to non-price rationing. Nor has there been much attention to the decision-making process in financial intermediaries. For example why is it that their loans go predominately to larger, more capital intensive enterprises in many countries despite government policies and specific programs to favor the small, labor intensive firms? Finally, labor market segmentation has its counterpart in capital market segmentation. In some countries, where an ethnic minority is dominant in some economic activities and disposes of large per capita pools of capital, this can be quite widespread (e.g.: the Lebanese in West Africa, Indians in East Africa, Chinese in Southeast Asia). The result may be excess capital employed in some activities, with access to these pools of capital, and low productivity elsewhere in the economy where access is limited.

Another aspect of the capital market about which little is known are the bases for investment decisions where enterprises self-finance out of retained earnings. In theory firms should value investible resources at their high opportunity cost, even if they self-finance, and should therefore try to conserve this costly resource. That would argue for a labor intensive pattern of investment and choice of technology. Yet where firms invest their own resources they often still opt for a highly capital intensive pattern than would be warranted if they took account of this cost. This obviously affects the number of jobs the firm creates.

Other institutional factors in the capital market which affect the number of jobs created in an economy have already been referred to, notably the methods of financing of publicly owned enterprises, the functioning of public financial intermediaries and so on. They may turn out to be less complex and less important than factors in the labor market in their impact on employment, but some are clearly significant and sufficiently murky to warrant further study.

3. Internal Macro-Economic Policies

A closely related approach in policy and research has been concerned with broad, macro-economic issues of economic management and especially economic stabilization. Rather than emphasizing relative prices, it has been concerned with monetary, fiscal and of balance of payments policies. The objective has been price stabilization, the control of serious inflation, the servicing of debt and similar issues. More recently, with the emphasis on "supply-side economics" there has been increasing attention to the production and employment consequences of stabilization programs. It is well known that standard prescriptions for stabilization, which rest on contracting demand, often have disastrous consequences on employment — and therefore on political stability. That has spurred the search for alternatives, for a workable supply side approach to stabilization in LDC.

Whether the perspective is Keynesian or supply-side, in most LDC the theoretical and empirical base for short term counter-cyclical programs, as well as for medium term stabilization efforts that create, not eliminate, jobs is quite poor (Jolly). The problem, of course, is how to achieve the desired employment effects without high inflation, and unbearable budget and balance of payment gaps. We know too little about the magnitude of expansion that is feasible without unduly exacerbating these problems. What policy packages work and how they need to be adapted to fit different institutional and political circumstances is a crucial issue in an employment strategy.

Little work has been done, even on the conceptual framework for such programs. The issue, and therefore research, has been dominated by contractionary stabilization packages. But a few key questions can be identified:

(i) how quickly and to what extent will supplies respond to more favorable price incentives?

(ii) how can these incentives best be provided without creating either international problems (e.g.: violating GATT or U.S. non-dumping rules) or domestic difficulties (e.g.: increased fiscal deficits)?

(iii) what non-price obstacles are there to supply expansion and how can they best be overcome e.g.: restrictions on investment, on multiple shift working, on exports?

(iv) for what commodities are there international markets at present, if output can be increased. In the absence of such markets, what are the limits on domestic absorption before balance of payments problems limit the process?

(v) how does one best deal with such transition problems as shifting from an inward looking, inflation-ridden, foreign-exchange constrained economy to one that emphasizes exports and tries to sharply slow inflation.

These are difficult questions and it will not be easy to carry out research on alternative stabilization policies. But the payoff is potentially equally great. Current stabilization programs almost invariably reduce employment. A strategy that uses existing capacity can, conversely, increase employment in Latin American countries by an estimated 10-30% in a short period of time (Schydlowsky). Those are gains worth considerable effort and the attempts by countries like Peru to actually follow an employment generating strategy for stabilization need urgently to be analyzed.

Another neglected area in macro-economic management is the impact of government laws and regulations on policy. Both can have an important impact on employment.

4. <u>International Variables: The Consequences of an Uncertain World Setting</u>

Such domestic macro-economic issues as stabilization have gained increasing salience, and become more difficult in many cases, because of changes in the world economic environment. Remarkably, donors have paid virtually no attention to these changes. This is unfortunate, for they will significantly influence the chance for the success of any employment-generating strategy. They include a more competitive environment for labor intensive goods exported to the world market, technological change and the increased unpredictability of the international environment.

a) <u>A more competitive, less hospitable world market</u> is the result of several changes in the international trading system:

i) <u>High World Unemployment</u>. The world economy has only partially recovered from the recession that followed the second oil price run-up in the late 'seventies. As long as significant unemployment exists in the developed countries, LDC can expect barriers to trade from the West. In such circumstances, an appropriate employment strategy becomes a more complex problem. One possible reaction for LDC is to impose import restrictions of their own or to create a common market with some neighboring countries. Another would be to require that a foreign company generate local jobs as a condition for entering the country's domestic market. This may happen either through requiring some local production or through requiring the firm find new foreign markets for the country's produce. More generally, countries are beginning to engage in "international bidding" for employment opportunities. All of these measures carry a cost and may precipitate retaliation. Yet they, and other restrictions on trade, will increasingly be resorted to as industrial countries restrict access to their markets.

ii) Population and Labor Force Growth. Population growth in the last twenty years has increased the labor force on a world-wide basis. Despite rapid expansion of educational systems, the number of illiterate and poorly educated workers is actually greater now in some countries than twenty years ago. Under population pressure, cultivable but uncultivated land has virtually disappeared in most of the LDC, largely eliminating extension of agriculture as a source of employment. It is the hundreds of millions of poorly educated workers, now widely underemployed, who have to find productive employment, while traditional jobs are largely closed off in newly cultivated areas and in some industrial lines where barriers to trade make rapid expansion infeasible.

iii) The growing role of large LDC. A number of large, labor-abundant LDC are simultaneously trying to enter world markets on a major scale. The most notable is of course China, but others include India, Brazil, Mexico, Indonesia, Pakistan and Bangladesh. All are seeking productive employment for millions of unskilled and semi-skilled workers by exporting labor intensive goods. Their competition in such industries as textiles and garments creates serious problems of absorption.

The emergence of these large nations into outward-looking export strategies also has obvious implications for all LDC employment strategies. And this is particularly true at a time when the world is still operating at considerably less than a full employment rate. For instance, while part of the export decline in Africa was attributable to inappropriate macro-economic policies, a significant part of their problem stemmed from the emergence of Brazil as a competitor in many of the markets formerly dominated by African nations.

iv) The debt problem forces a number of countries, some of them large, to run a substantial export surplus. They are under pressure to push exports, especially of labor intensive goods, even at high costs.

b) Technological change.

It is becoming increasingly clear that the effects of computerized production are as fundamental in terms of world economic and social activity as the coming of mass production technology. The long-term ramifications of this new technology remain uncertain. That is, while the immediate effect involves very significant labor-displacement, new jobs will be created in capital goods and various software and service industries. For LDC, the revolution has a very clear and troubling significance: it will reduce the competitive advantage they derive from their low-cost unskilled labor. Indeed some activities are already moving back to the U.S. and Japan from the LDC, as automation has destroyed the comparative advantage of the latter. New jobs are being created in some high-tech industries. But that does not help in solving the employment problem for tens of millions of unskilled workers for whom little or no role exists in these industries. Indeed, the development exacerbates the problem of income disparity between the highly educated and the great mass of poor and unskilled workers. At this point, the broader ramifications of the technological revolution for employment strategies in developing countries are not clear. It is an area that deserves far more attention than it has received to date.

A second consequence of technological change is that the market for many primary goods is likely to be depressed. For some foods a large part of the problem is caused by uneconomic subsidies to farmers in developed countries. For others it is a proliferation of LDC suppliers which are driving the price down. Both are caused by declining imports and rising export potential as a result of changes in bio-technology. For most industrial raw materials, a depressed market is due to the computerized production revolution; the shift of developed economies from growth in industry to growth in services; the shift to technologies which are less materials-intensive; and the substitution of such products as chemical sweeteners, fiber optics and plastics for the sugar, copper and steel produced by farms or mines. The direct effect on employment can be serious for some agricultural products (e.g.: sugar, oil seeds, rice). For most mineral products (e.g.: copper, aluminum, oil) it is the indirect effect via declining foreign exchange earnings which matters. Both effects are already being felt in a number of countries.

c) Uncertainty compounds the problem. Nobody accurately anticipated oil price fluctuations, the microelectronics revolution, or the imprudence of international banks in lending to Latin American countries. An important current issue with an unpredictable outcome is the effect of measures to control the U.S. Government deficit and their consequences for world aggregate demand and the value of the U.S. dollar.

Further important and unpredictable changes are likely, possibly with ever-increasing frequency. One implication is that donors and governments may need to adopt a different decision making framework. For instance, for areas of uncertainty, it would be desirable to develop alternative future scenarios, assessing their probabilities of occurrence and weighing the costs and benefits of alternative actions (Sarris and Adelman). The implications for strategy could be profound. For instance, economists have generally recommended that countries specialize on products where they possess clear competitive advantage. For LDC, these will usually be labor intensive. But if there is great uncertainty, as the result of various factors discussed earlier, about the ability to sell these products on the world market, then a less specialized, more diversified portfolio of export products may be desirable. So may regional trade arrangements and production for the domestic market. All of these alternatives are likely to have costs in terms of lower efficiency, less output and less employment. These costs need to be weighed against the possible benefits in terms of less risk as a result of uncertainty and against alternative measures to cope with uncertainty, such as greater foreign exchange reserves.

The increases in competition, the new technology, and greater uncertainty have added to the complexity and difficulty of framing an employment strategy for LDC. Yet we know little about some of them, in part because the trends are so new. It is only in the last few years, for instance, that several populous countries have simultaneously opted for an outward-looking, export oriented strategy and that the consequences of the micro-electronic revolution are being felt. Relatively little research has therefore been done on the consequences of these trends for employment.

5. The Politics of Employment

These four approaches — getting prices right, improving the performance of economic institutions, improving domestic macro-economic policy, and adjusting to the international economic environment — must be considered in framing a comprehensive approach to increase productive employment. Regardless of which of these approaches to issues of employment is emphasized, political factors need to be taken into account if research is to have relevance. While this subject is generally ignored by economists, governments naturally have to be concerned with the political costs and benefits of different courses of action. Lack of acceptable or any jobs may be second only to the price of basic food as a source of political disaffection and employment programs tend to have a powerful political appeal.

The politics of employment is affected by the fact that many of the policies and programs advocated by economists for employment creation have long-term benefits and short-term political costs. For instance, a more open, competitive economy for a labor abundant country will, over time, encourage labor intensive technology, investment in the production of labor intensive goods, the efficient production of labor intensive exports and therefore a rapid rise in employment. But these beneficial effects are likely to come with a lag of one or more years. The most immediate consequence of a more open economy may be the loss of jobs in industries no longer protected against more efficient imports.

Research and policy analysis must take political costs and benefits into account if it is to have a chance of being used and useful. It would be especially useful to analyze the political benefits of policies and programs widely adopted although they have substantial economic costs, especially in terms of employment (e.g.: to lower the cost of capital in relation to the cost of labor). It is also useful to establish the longer term economic and consequent political costs of these measures and the potential costs and benefits of desirable employment generating ones.

Again, analysis of these issues is not easy. Two related aspects can be explored. First, who receives economic benefits and who bears economic costs is an important political fact. These costs and benefits can often be quantified to some extent. For instance it is clear that abolishing effective minimum wages can harm workers in covered firms. Conversely, it is likely to help the unemployed or underemployed now outside the formal sector. The extent to which it does so depends on the elasticity of demand for labor. The magnitude of these consequences can be estimated and will provide some guidance for the likely political costs and benefits.

Second, one can trace some of the political consequences of particular economic actions in a few cases. This type of analysis is in its infancy with respect to LDC. It is epitomised by the studies in the U.S. using the rate of inflation and unemployment as an index of economic misery, and comparing the index with election returns. Some of this type of analysis is possible in LDC, but it is complicated by lack of useful data.

6. Summing Up

Clearly these various approaches are interrelated and overlap. The most important task of the research will be to integrate the different strands into a coherent overall structure. Much research has already been done, and more is now being undertaken under the Employment and Enterprise project. What has been missing has been an integration of the different elements and analysis of the importance of different factors. Research has especially neglected the institutional approach and its integration with other approaches.

Both price and non-price (institutional) factors in particular markets affect labor demand and supply. Both interact with macro-economic variables and especially with both internal policies and the world economic environment. The integrative aspects of the research would stress three elements: (i) relating the different approaches to each other; (ii) the use of methodological approaches which gives an important role to institutional factors rather than largely neglecting them and (iii) an attempt to specify the importance of different variables.

(i) Integrating Different Approaches. While the different approaches are clearly related, it is far easier — albeit less useful — to treat them in isolation in a research effort. Research that focuses on market relations often ignores or subordinates all institutional factors. Micro studies take macro-policies as given. Macro-policy research usually ignores how policies are modified as they are carried out by and impinge on institutions. To accept that decisions and their consequences interact in these spheres makes research far more difficult, but also potentially far more useful. Particularly important will be the relationship between:

— market and institutional factors at the micro-level;
— micro variables, both market and institutional, and macro-policies and changes;
— the limits placed on macro-policy and its micro-consequences by the international environment;
— the constraints imposed on the system by the need to limit political costs and overbalance them by political benefits.

(ii) Integrative Methods. Such an integration requires, in methodological terms, a more comprehensive and institutional approach which emphasizes four elements: (a) it involves the study of economic change in historical as well as contemporary terms, since the future direction of an economy cannot be determined independent of its past; (b) it recognizes that there are contemporary differences in cultural, political, and social institutions, specific to particular countries, that cannot be easily transcended by economic forces and that must be incorporated into economic policy; (c) it emphasizes a differentiated approach to labor markets, and a disaggregation of analysis to the level of the workplace and the firm to determine what labor market processes govern different sectors of the economy so that determinants of skill needs, productivity, earnings, and employment can be directly studied to provide guidance for both program development and institutional modification; and (d) it recognizes the important interplay between the behavior of labor markets at the micro level (where overall levels of demand, availability of technology, and institutional structures are largely given and where individual decision-making looms large) and at the macro level where political decisions affecting overall economic directions are made. The key to the success of this approach is to be able to move from the specifics of particular cases to general policy prescriptions.

Examples of the implications of this approach with respect to the labor market include: (a) what should be the division of training responsibilities between workplaces and schools (now should this vary by type of skill and scale of enterprise and how should evolve with growth and changes in technology); (b) the personnel practices of formal sector firms and how they affect employment levels, permanency of employment, pay, labor productivity, and labor mobility among enterprises and sectors; (c) counterpart studies to (b) of employment and training decisions, practices, and problems of small firms and self-employed individuals in the informal sector; (d) the informal links between employment sub-systems — agricultural, rural non-farm, urban informal, and urban formal sectors — to understand how information and connections assist or impede efficient labor utilization; (e) closely related, the wage, or rather labor income, determination mechanism in different sub-markets for labor and how it is affected by labor market segmentation and other non-market forces; (f) the role of government wage policy and other regulatory measures on actual wages and employment; and (g) occupational, industrial, educational and demographic composition of international skill flows as a measure of labor scarcities and as a means of documenting potential labor reserves outside countries. While many of these questions have been examined in the literature, the perspective is often descriptive and static.

Our proposed approach involves looking at social as well as economic dynamics. However, because we lack well-verified theories of socio-economic dynamics, empirical research is tremendously important in the endeavor. What is needed is the development of an "empirical" data and analytical base that relies less on narrow statistical materials and dubious assumptions and that draws more heavily upon historical and contemporary case studies that "get behind the numbers". Such studies would allow us to understand the more qualitative processes of evolution and change in the labor market. They would also help immensely in interpreting the results of statistical studies. Finally, they would shed important light on how institutional arrangements affect the implementation of policies and programs.

This empirical base would consist of both micro-studies and macro-studies of particular country labor markets which can then be linked to more customary statistical analyses to provided a comprehensive understanding of labor market evolution. They would emphasize the development of the social and political dimension as important inputs into what are often seen as "economic" decisions made by business, labor and government. By studying decision-making by key institutions and aggregating these micro-level decisions into more comprehensive process models of how market systems operate in particular countries, this approach will improve the prospects of designing policies and programs that are truly "workable".

The key to the success of this approach is to be able to move from the specifics of particular cases to general policy prescriptions. At present, the "generality" of existing research is obtained by relying upon the concepts and assumptions underlying competitive economic theory, as modified by simple models of market power. To obtain generality from studies of more complex relationships it will be necessary to place case study materials within the historical growth context of each country, and in a comparative framework that permits contrasts among countries to be identified. The historical and comparative approach is needed both to help identify idiosyncratic findings and to help interpret the data. Second, the case studies must be selected in such a way that they begin to provide a sense of "representativeness" of more general classes of development problems. Third, the case studies can provide the empirical foundation for the development and refinement of better theories and concepts that can link the specifics of case studies to more general solutions for developing countries. These new theories can then be "tested" for their generality using the more standard statistical approaches.

Multi-country and comparative studies can be a particularly useful methodological approach. In single country studies causality is particularly difficult to trace, although a historical perspective helps. But causal direction can more readily be determined if one compares and contrasts different and similar countries over time with each other. For instance by examining the evolution of industry in 15 or 20 countries over time, one can assemble some 400-600 observations for countries with different characteristics. That can yield quite robust conclusions about the consequences for employment of export promotion versus import substitution, of low wage versus high wage policies, of different exchange rate and commercial policies, with different roles for public enterprises and so on. Some of these countries would then need to be studied in greater depth to pursue particular questions for which cross-section analysis is too blunt an instrument. On the other hand some issues involve a simple enough relationship so an econometric approach covering 100 countries can shed light on it.

(iii) Indicate the Importance of Variables. It is premature to define at this stage the particular specification of the model or models to be developed; to suggest what will be the key variables to be studied; and what the mix of additional case studies that would be needed to help build the new concepts required to improve policy-making. These are questions that need to be resolved through research design and implementation, once the basic approach is chosen.

We have, however, suggested throughout this paper that many of the traditional factors that have been given importance in the research literature may have been overstated while others that are critical have been omitted. In our view, this pattern of emphasis and neglect can be traced to an undue reliance on conventional economic theory and analysis and the failure to also assess the political and social aspects of markets in developing countries.

Research has sometimes studied concentrated on phenomena amenable to existing techniques, rather than adapting techniques to study important issues. In this phase of the research, it should be possible to establish, with some reasonable margin of error, which policies and programs are marginal and which central to a solution of the employment problem.

(iv) Developing Policy Packages. The final step then should be to develop policy packages, adapted to different types of economies, but which incorporate some common features. These would be based on the interrelationship of policies and programs and the relative importance of different factors. For instance, if "excessive" wages are a serious obstacle to employment in a number of countries, but little can be done to influence wages because of political costs and because institutional barriers to entry keep wages high even without government intervention, then the policy conclusion may be to change the cost of capital and the price of labor intensive goods. This would take advantage of the interrelationships of variables, of the fact that the absolute level of wages does not matter, but only the ratio between wages and capital, and wages and product prices. Similarly, if institutional arrangements in the labor market were found to impede policies designed to promote growth and equity, attention should be paid to the redesign of the existing institutions, or to promoting their restructuring through the use of incentives for improving institutional performance. This policy research should be coupled with a program of implementation research to ensure that policy is effectively translated into action.

The principal product of the research program described above should be a firm analytical base, both in theory and empirical data, for policies to deal with the employment problem in LDC. In the 1970's the perception grew that employment is central to achieving growth, equity and a measure of political stability. In the mid-1980's it is becoming all-too-clear that the changes in the world economic environment have compounded the difficulty of dealing with it. A better understanding of the elements of the problems is therefore of increasing importance.

AN APPROACH TO EMPLOYMENT RESEARCH

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Effective research on employment will not be easily done. The most important task and the most difficult challenge will be to integrate the various strands of approach into a single, coherent whole. This will require, for some tasks at least, multi-disciplinary teams: institutional economists, organizational specialists, economic historians, sociologists, anthropologists, and public policy analysts, as well as the more usual development and other economists. Above all it will require some highly imaginative analysts, able to perform the necessary integrative tasks.

Second, the effort needs to be informed by AID Missions (and Washington) concerns. Only in this way can research take account of Mission priorities, draw on their expertise and, in turn, work with them in communicating and implementing research findings in ways which are useful.

Third, LDC institutions should be involved from the beginning in carrying out the research. The needs of LDC governments obviously are an important factor in determining the nature of the research that should have priority. Their knowledge and that of LDC research institutions should be drawn upon and the research should be used to strengthen LDC institutions. Achieving all achieve all three objectives suggests the following approach:

1. <u>A Lead Institution</u>.

If an integrated analysis is to result, it is highly undesirable to parcel out the project into a series of discrete components to be carried out by different institutions. An inter-institutional coordinating or steering committee could take such a fragmented research program and try to fashion the pieces into a coherent whole; but this would be an extremely difficult task and the chances are good that it would not be successful. That is the principal reason why it would be desirable to make a single institution responsible for the research program — for bringing separate approaches, pieces of research and points of view together into a coherent whole.

2. <u>A Flexible Administrative and Contract Structure</u>.

At the same time, the agenda is a broad one, requiring a wider variety of competences and a greater number of analysts than can be supplied by any single organization. We, therefore, recommend that the lead organization have the professional standing and established contacts necessary to mobilize high quality research talent from a number of sources.

We also recommend that the project work with AID missions in addressing their particular concerns and work with institutions in the less developed world, so that the research effort becomes a truly joint one, to which AID Missions and host country institutions and governments are committed. This requires an even larger group of analysts with a wider range of expertise. Finally, it would be desirable to begin the work with widely differing approaches, reflecting not only differences among disciplines, but also in experience and perspectives on development issues. The ultimate aim should be to end up with definite conclusions and a single integrated document that has a distinct intellectual point of view. But this goal should be achieved through intellectual give and take, the accumulation of evidence as the research proceeds and the development of a single analytical framework.

These considerations all imply a broad-gauge intellectual leadership, coupled with a flexible administrative and contractual structure, with a lead institution fully responsible for assuring an intellectually coherent product. Flexibility would allow the establishment of a consortium of scholars and institutions to carry out the project and extensive sub-contracting with both U.S. and LDC institutions. This would give the project access to a wide range of expertise, interests and approach.

3. AID Involvement.

For the research to have the desired payoff, it must be informed by AID activities and concerns. This will only happen if the research and resulting recommendations appear relevant to AID. To maximize the chances of this happening AID, and especially the Missions, should be involved from the outset. This will allow the researchers to gain immediate information on the problems as perceived by the Missions and facilitate continuous interaction between AID and researchers at all stages.

4. LDC Involvement.

There are several obvious reasons for associating LDC inst ions, including governments, as closely as possible with the res

a. they have invaluable knowledge of to country circumstances;
b. collaborative efforts can permanently strengthen intellectual ties between LDC and US analysts;
c. participating in research with experienced US institutions can help build institutions in LDC;
d. conversely, research carried out solely by US institutions and analysts increasingly causes resentment and resistance to what is often seen as "data mining";
e. above all, the ultimate users of research results will be LDC governments and other institutions. If they are involved actively in the research, it will be more relevant, accepted, and used than if they are brought in after the fact and presented with a finished report.

5. Implementing Institutions.

Since this is a research project with a broad agenda, calling for a very difficult intellectual effort, most consulting firms are likely to face problems in acting as the lead institution. They are unlikely to have the critical mass of highly skilled analysts and the contacts with research institutes in LDC. Nor is the alternative of hiring individual academics likely to be very effective, because it compounds the problem of intellectual coherence and the development of an overarching analytical framework.

On the other hand, universities are usually not very flexible in responding to short-term research needs or in deploying their resources effectively in response to changing needs. A consortium may be the best solution, but probably with a university responsible for the ultimate integration.

6. Implications for AID's Research Strategy.

The Request for Proposals (RFP) should call for:

a. proven capability to carry out the massive and difficult intellectual effort involved, and especially the ability to integrate a multi-faceted, multi-approach and multi-region effort into a coherent whole. The lead institution needs a large enough in-house capability to carry out the necessary task of intellectual integration.

b. established connections and proved access to major research institutions and governments in LDC.

c. successful experience in conducting policy research for developing countries.

d. a three-phase approach, with the phases overlapping to a degree. In the first phase, a preliminary research program would be developed after consultation with AID. The second phase would involve visits to selected LDC to discuss the research with AID Missions, governments, and potential LDC collaborators. The third phase would include drawing up a more definitive research program incorporating these discussions and then carrying it out.

e. throughout the life of the effort, there should be continual interaction between the responsible research institution(s), AID and LDC governments and researchers. Such a joint effort would clearly take longer than a project designed and carried out by a single US research organization alone, but it would be far more useful. Instead of trying to transfer the knowledge gained by the research, after it has been set down on paper, to those who would need to use it — AID and governments and other institutions in LDC — potential users would have a proprietary interest in it and in seeing it implemented.

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