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SOME PRIORITIES FOR EMPLOYMENT RESEARCH

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## Executive Summary

Given the widespread economic slowdown or stagnation in so many Third World countries in recent years, there is an appropriately increased concern for problems of poverty and various types of unemployment and underemployment. One broad objective of employment related research in the coming years should be to contribute to the still very partial understanding of the degree of consistency between the goals of growth and equity and of the most efficient policy packages with which to pursue those goals jointly.

Several criteria should be borne in mind in the selection of research areas and methodologies for the study of employment issues. Relationship to policy is the most obvious, though the use of this criterion must be tempered with a realistic assessment of policy-relevance, which is often much harder to achieve than appears at first glance to be the case. Some important lines of research cannot have any significant short-run policy relevance. An appropriate mix of theory and empirical content is needed; probably the lack of good data work damages more research now than the lack of a useful theoretical framework.

Various methodological approaches are called for according to the particular piece of research, but one approach which must be used with greater frequency in the future than in the past is in depth comparative work which draws on the experiences of a few countries to assess the effects of differences in economic structure, in institutions and in policy. Finally, greater attention should be given in the future to the political-economy approach, at least to the point at which it steers economic research away from those areas where its results can be seen to be irrelevant for obvious political reasons. True integration of the two disciplines in research is very hard to achieve, so realism is again important with respect to this desirable goal.

Analyses of employment and income distribution issues over the last decade or so have taught us on the one hand that the more dire predictions that the Third World was heading for an unemployment crisis unless major policy changes were made was wrong; Brazil's recent economic history exemplifies the fact that employment opportunities can improve and even the poor can benefit from growth based on an economic strategy which appears to give virtually no weight to the poor. On the other hand it has also become clear that the development strategy a country pursues, together with its socio-economic structure, can make a great difference to the employment and income opportunities of the poorer groups. The contrast between the recent evolution of Taiwan and that of countries like Brazil highlights this point.

At a more detailed level, recent research has clarified or thrown up a number of significant findings. The effects of the Green

Revolution, or more generally of rapid technological change in agriculture, have thus far appeared to be positive as far as the employment opportunities and the income levels of the poor are concerned, but not as positive as some optimists had calculated. And there remain serious reasons to wonder whether the medium and long run effects will be considerably less wholesome than the short run effects have been.

Very rapid growth of labor intensive exports, à la Taiwan and South Korea, seems to have contributed nicely to a healthy labor market situation. We have become increasingly aware of the large amount of employment found in small and medium sized enterprises in the non-agricultural sector of the economy, and the assured importance of this sector as an employment generator in the foreseeable future for most of the Third World. We have learned that the sector is often characterized by high or at least reasonable levels of economic efficiency even when its labor productivity is quite low.

Many of the particular fears we have previously held with respect to malfunctioning of the labor market have been at least somewhat dispelled in recent years. We no longer expect that rates of open unemployment might rise continuously to levels of say 30 percent in urban areas. And we have no very good reason to suspect that rural-urban migration has typically been excessive from a private point of view, not perhaps even from a social point of view, though on all such questions we have to expect considerable differences in the experiences of different countries. As for the impact of such labor market "distortions" as minimum wage legislation and unions we have little feel for their possible impacts.

We do, on the other hand, have very good reason to believe that capital markets typically function very imperfectly in LDCs, and that the major impact of those imperfections may be to discourage labor intensity on the part of the larger firms which benefit from them and to slow the development of the smaller labor-intensive firms which suffer from them.

Future research focus should reflect both what we have and have not learned up to now, and the changing situation of most LDCs now as compared with the years of buoyant growth of the world economy up until 1980. A major need is to monitor very closely what is happening to the agrarian structures and the income opportunities of poorer rural families in that majority of the Third World where most of the poor are still found in the rural areas. Because of serious delays in getting information which is normally crucial to an effective analysis of what is happening, and because of some worrisome possible effects of rapid technological change on that structure, this need is much more urgent than might at first glance appear to be the case.

Much more work will be needed in the field of small enterprise. Although good work has been done in the last decade, the base of

knowledge is still small, and the chance to test for the effects of alternative policy packages has thus far been quite limited.

Given the importance of international trade policy in the overall discussions of economic policy, it is important to learn more about its employment and income distribution implications. There is a rather well supported presumption that specialists in the exportation of labor-intensive manufactures will benefit substantially, but it remains unclear how increased trade affects employment and income distribution in the great majority of LDCs which do not fall in this category. Further study is also required to probe how the implications of outward orientation change when world markets are less buoyant than in earlier decades.

As with international trade, education is an important area of public policy. Fiscal costs have been soaring as enrollments rise inexorably. Many observers are worried that the markets for various types of "graduates" are becoming flooded, and that this flooding will lead to some unhappy combination of rising open unemployment, rising frustration, increased use of distortions in the labor market as groups try increasingly to defend their turf against interlopers. Still, most rate of return estimates based on the human capital model are coming up with good to very good rates of return to expenditure on education. The human capital estimating technique is the only one we have, but accuracy depends sensitively on certain assumptions it makes about how labor markets function. Those assumptions must be tested for their validity as soon as possible, and this requires a careful look at selected aspects of the labor market.

Public sector employment has risen rapidly in many LDCs in recent decades, and now constitutes a severe fiscal drag on many. To better understand how excessive hiring occurs in the public sector, and to better recognize the condition itself will call for much more attention to be directed at this issue than has been true in the past.

Both labor markets and capital markets suffer from some degree of malfunction in any country. Given the strong evidence that the capital market suffers very seriously from distortions in most LDCs, and given our very spotty understanding of it, further work in this area takes on high priority. Its importance is underlined by the fact that its imperfections may work to the significant detriment of small scale enterprise, a key sector in any employment strategy.

Although past research has tended to suggest a less imperfect labor market than many models would suggest, it is of particular importance at this time of slow growth to ascertain whether rigidities and distortions (minimum wage legislation, government hiring practices and wage scales, unions) are having perverse effects on employment generation and on the incomes of the poor. Often the same research would help to throw light on these issues and at the same time aid in the evaluation of the rate of return to education.

Research in the relatively new area of the determinants and effects of female participation in the labor market remains important, partly because it has not yet been impossible to resolve too many of the interesting and important questions, and partly because the major unexplored aspect in the whole of the income distribution area is precisely the determinants and effects of intra-family distribution.

## I. GENERAL CONSIDERATIONS

Studies of employment and of labor market functioning are important for several types of reasons. Most obviously, one hopes that they may contribute to a better understanding of how the labor market functions and thereby to more effective policy making with respect to that market. The same goes for other markets; employment and income distribution (not to mention output) may be as affected by capital market characteristics as by those of the labor market. A second major reason for the study of what might be called "labor market outcomes" (employment levels, unemployment, wage rates, etc.) and related phenomena like certain features of agrarian structure might be dubbed the "monitoring function". The labor market and agrarian structure provide a crucial window into important aspects of how well the economy as a whole is performing, since the variables which are, at least in a proximate sense, determined in those markets are among the key indicators of economic performance of the system. Thus some very important research in this broad area of "employment" may have nothing whatever to do with labor market policy or any other type of policy, nor may it help us to better understand any aspect of the functioning of the economy. Rather, it may simply help us to gauge the overall success of the economy in achieving the objectives set for it by the society. If the evidence it provides is negative, this can act as a warning signal that, whatever the reasons for the unsatisfactory performance, it is becoming crucial that something be done differently in the future vis-à-vis the past.

### A. Shedding Light on the Relative Merits of Competing Development Strategies

Employment related research should be able to throw some light on many specific aspects and issues in development. In a more broad ranging sense, it should be important in helping us to assess the relative merits of major approaches to development, in particular the approach which gives weight only to the speed of economic growth and those approaches which consider also the distribution of income and the ease of access by the poor to income earning opportunities. There are, of course, other major distinctions among development strategies: currently much attention is directed to international trade and investment policy and the degree of outward orientation of the economy, to the degree of intervention by governments in the free functioning of markets and the level of government and para-statal involvement in productive activities, and to the relative attention given to the agricultural sector vis-à-vis other sectors.

Employment research can help to assess the merits of the contending viewpoints in each of these areas, and each of them overlaps to some extent with the more general question of "growth first" vs. "growth with equity" strategies. But probably the broadest distinction

and the most difficult decisions a country must make involve the latter categorization of strategies. Since good access to productive jobs and the resulting wide diffusion of the fruits of growth are the key to growth with equity in a market economy, employment related research must be at the heart of any serious attempt to judge the relative merits of these two approaches to development.

Whereas, on some of the other major disputes about what constitutes the most promising policy to promote development, there has been some reduction in our area of ignorance over the last couple of decades (during which, among other things, the growth-promoting potential of export-oriented strategies have become clearer, at least under certain conditions, and the inefficiencies which are likely to plague the public sector have been amply exemplified), this is less true of the central question of the feasibility of "growth with equity." It has become clear that there is no general inconsistency between the two goals (Taiwan being a vivid example), but also that in countries which could be roughly described as following growth-first strategies, or perhaps more precisely "growth for the benefit of the already well off" strategies, there has nonetheless been considerable "trickle down" or diffusion of the benefits of that growth to the poorer groups. (Brazil would be a striking example of this.)

Between these two extremes and their known existence, lie all sorts of other cases among which it is sometimes hard to distinguish properly and from which it is usually hard to draw lessons. Well-intentioned strategies which are often described as pursuing equity sometimes do backfire in terms of slow growth and sometimes even in terms of the equity which is said to be an objective. To use the age-old example, under some conditions, minimum wage legislation may both slow down the rate of growth and worsen the distribution of income. So a key question in the political economy of development is how likely it is that the pursuit of equity with growth will backfire, according to the political and economic characteristics of the country.

A number of important contributions to the "growth with equity" discussion, like those of Chenery et al. (1974), Mellor (1976) and Owens (1974), have elaborated on what they argue to be the key components of such a strategy. Since the "growth with equity" debate heated up in the early 1970s, we have had the experience of a few countries confirm for us that the structural and policy features of a country which contribute to equity are neither necessary conditions for growth in all countries (though they may be in some) nor necessary retardants of growth. But we have not seen the arguments proceed either to a more refined use of income distribution and employment data to test for the effects of those structural and policy features on how development occurs, or to a more refined discussion of what an integrated "growth with equity" strategy might look like in an individual country, taking advantage of the various advances in our understanding of the component parts of LDC economies.

B. The Implications for Employment Research of Recent Changes in the Setting for Third World Growth

The setting for Third World growth and development has changed markedly in the course of the last few years in ways which naturally change some of the central questions which people interested in development must ask, and hence the sorts of research which are most likely to be useful. Two to three decades of fast growth in much of the Third World and in the level of international trade have been followed by a slowdown, and in some cases by outright output and income declines. Balance of payments deficits and higher than traditional interest rates produced unmanageable levels of international debt, when accompanied by depressed export markets for many of the products of Third World countries. Fiscal deficits of dramatic proportions became the rule rather than the exception in the Third World, as countries tried to keep economies growing and incomes up by spending more than their fiscal revenues or international borrowings (now much reduced) would support, and also found that many of the now built-in types of public expenditure were very hard indeed to cut back.

Economies have become much more urbanized than they had been when the fast growth phase had started a few decades earlier, with a higher share of their labor forces in paid employment and in the modern sector. In most cases the share of employment in the public and parastatal sectors had risen rapidly, even if it did not look particularly high in absolute terms. An educational revolution had hit the Third World, partly a result of political independence, and partly of other factors. Levels of educational attainment had risen faster than economic structure had changed, creating a situation calling for considerable flexibility on the part of job seekers if unemployment and/or frustrated aspirations were not to become serious problems.

In sum, whereas the Third World as a whole, and quite a few individual countries, had undergone fairly smooth growth and development processes during the preceding decades (much smoother than some of the more vocal critics believed to be the case), without major disequilibria such as would necessitate major adjustments in economic structure, in earnings levels, and so on, this was no longer true; major disequilibria were found in a number of markets, including most obviously the foreign exchange market, and the labor market. How to achieve "structural adjustment" effectively and at minimum social and economic cost became a key question; in some countries the matter of how to push modern sector wages down to their now lower "equilibrium" level was a key aspect of that question.

Not only did the issues on which employment research might throw some light change with the crises of the 1980s, but the evidently different setting compared with earlier post-war decades implies that some of what was learned about labor market functioning and other determinants of an economy's employment performance may no longer be valid (in some cases) or relevant (in other cases). Many corners of an economy may function differently during periods of sustained growth

than they do in periods of stagnation or crisis, so an understanding of how things worked a decade or so ago, no matter how accurate, may now be misleading or may require adjustment before it can be useful.

C. Criteria in the Selection of Employment-Related Research Priorities

At a basic level, the appropriate criteria for the selection of research priorities are more or less tautological; one wishes to focus on those areas from which the most useful results are likely to emerge. The second section of this paper focuses on which areas I believe they are. A few more general methodological points may be in order at this point, however. At a practical level of research area selection, there are things which I think should be borne in mind, because I believe they are related to the likely payoff to research. They relate more to the way research is carried out than to the topic of the research; but because there tends to be a relationship between topic and research methodology, they ultimately are relevant to choice of topic as well. Some of the points will be made in negative terms, since they have their origin in what seem to me some of the weaknesses of past research efforts in this and other areas.

1. Relation to Policy

Other things being equal, one would prefer that research results be directly relevant to policy making. In some research areas this is probably not an idle hope. But in others our understanding around a particular area is inadequate to permit any expectation of this sort, and it is important to assess seriously whether with a reasonable amount of basic research the ground could be laid for later more policy-oriented work.

For research to pay off as much as should be expected, it is important to have an appropriate balance in the design and selection process between those who are optimistic about policy relevance and those who are more cautious. The optimists include those who are so anxious to be relevant that they have blind spots to the problems of relating various types of research results to policy, those who suffer from one of the many ideological strains which abound in our intellectual atmosphere and are correspondingly unaware of the possible errors in the lessons and interpretations they may be drawing from research, and those who simply do not know enough about the complexities of the real world to have developed the pervasive doubts of any true professional scientist. The latter group are of course likely to be less impressed by what may be learned from many particular bits of research.

Much research of potential value is more or less wasted because the research design does not have from the start inputs from the more experienced and hence usually more cautious people. One manifestation which this problem takes is the tendency for the research design to constitute a test only for consistency with one particular model or

interpretation of the reality under discussion, rather than having the capacity to distinguish among competing hypotheses as to how the system works. Proof of consistency tends to be rather trivial after a certain amount of (usually unconscious) favorable selection of the data to be analyzed occurs, but it often does not get us too far. Usually only one hypothesis is on the table because of some ideological proclivity of the researcher, or because of a lack of intellectual scope or experience.

The extensive research from which several decades ago we learned that farmers are price responsive provides an example. The result itself was primarily interesting to persons without much direct association with the agricultural sector and hence not reasonably persuaded by direct observation that farmers of many sorts would indeed behave in this way. But because no articulated alternative hypothesis was also on the table (apart from the naive view that the farmers were totally unresponsive to price) this body of research did not move, until quite recently, to a more serious look at the degree of responsiveness of different groups, the conditions determining that degree of responsiveness, and so on, i.e. to the only issues which even from the first would have proved of interest to someone well and directly informed on what goes on in an agricultural sector.

I would tend to assign low priority, on the grounds of low likelihood of policy relevance, to a good deal of work on rural-urban migration and some on attempts to explain certain aspects of agricultural tenure systems, a popular endeavor in recent theoretical literature.

## 2. Appropriate Mix of Theory and Empirical Content

As will be elaborated below, it is my impression that much research in the employment area, as in other areas in the development field as a whole, suffers from a lack of the right mix of methodological inputs to make it pay off well. I think the best work involves (a) careful empirical work; (b) careful consideration of the way in which it may help to answer some relevant questions, with this requiring of course a good feel for what the relevant questions are; and (c) lack of any feeling of obligation to employ high theory, together with a recognition of when the precision of the answers can indeed be improved by the use of sophisticated methodologies. While these do not constitute necessary conditions for valuable work, they sometimes border on that; and the more each condition is flouted, the less likely is it that the conclusions of the work will have much value.

Careful empirical work (or perhaps better, competent empirical work, since not only care but skill are needed to avoid the many pitfalls of using data well in LDCs) has been a feature of the vast majority of the research on Third World economies (including that on employment-related questions) which strikes me as having made an important contribution. Putting it negatively, most of the work which

has turned out to be counterproductive has had as its defining characteristic a lack of good feel for the quantitative aspects of LDC reality. Much of the concern with the very rapid rural-urban migration in these countries, for example, immediately loses a good deal of its logic when certain elementary features of the income structure in such countries are laid on the table, i.e., the usually measurable income gap between the two areas, even after allowing for differences in skills and so on.

Knowledge of the data being used becomes important partly, no doubt, because some of the common interpretations of how aspects of LDC economies function have at various times been wide of the mark, and it was the solid empirical student who was able to steer clear of the misinterpretations fostered by these interpretations. But the quantifier is also especially important because there have been very few theoretical developments which have thrown interesting light on how LDC economies function. Useful theory typically either gives us new and valuable ways of looking at and interpreting the way economies function, or allows us to predict the direction (but not the magnitude) of certain effects. The theory of comparative advantage thus allows us, under certain assumptions, to predict that free trade will raise an economy's income and welfare relative to trade under restrictions, but one has to do simulations using carefully selected data to be able to predict how much difference trade rules will make. As it turns out, the qualitative theoretical result, taken by itself, is of very little practical value, since the validity of the assumptions one might make becomes central; the bulk of the work required to learn something useful about how trade policy would affect the welfare of a country lies clearly in the empirical domain.

Careful empirical work may also be of little value if it cannot be used to address an issue of importance. Good research thus must be guided by a knowledge of and feel for what the important questions are. While this may seem too obvious to warrant mention, it is, I believe, an unhappy fact that much research over the last decades has been informed by questions which later were revealed to be uninteresting, wrongly asked, or otherwise defective in terms of the role they should have played. To again exemplify, much discussion has been addressed to the question of why growth in certain countries and categories of countries has not produced any significant "trickle down" to the poorer members of the society.

More recently it has become increasingly clear in some cases that the "trickle down" was, while perhaps not large, at least large enough to render uninteresting the way some of the research questions were asked. Specialization of researchers in their own sub-field, together with situations in which the conventional views on some other branches of development are still not duly reflecting the best research, makes it easy for one to ask questions in his own sub-field which are based on misperceptions of what has in fact been learned in other sub-fields. The prevalence for some years of the belief that open urban unemployment was on a secular upward trend was amazing in the light of

the absence of any impressive empirical evidence to that effect. The idea that there was little technical substitutability in most of the production functions of relevance in LDCs, while laid to rest some time ago now, had a very long life given the similar lack of empirical evidence in support.

One of the sources of this lag in the dissemination of frontier level research results is the large scope of the field of economic development. Even the best written textbook cannot help but be 5-10 years behind in its appreciation of those results in areas in which the authors are not themselves specialized. Another is the tendency for looser pieces of research in any given area to get published before tighter ones, often because the former worried less about alternative or ambiguous interpretations than the one to which they gave voice, and/or because they reflected less careful and hence more quickly undertaken empirical work. The problem is evidently not one of easy resolution, but its existence bears underlining, and thought is needed as to how its costs might in the future be mitigated.

Finally, there is the question of how sophisticated and state-of-the-art theory, either economic or econometric, is related to the quality of research on employment issues. Sophistication can either help or hurt quality, the former through the obvious route of making the analysis more refined than it would otherwise be, the latter through becoming an end in itself and leading to either excessive sophistication for the task at hand or to the downgrading of more important inputs for a particular piece of work, e.g., careful marshalling of the facts.

Doctoral dissertations well exemplify the dangers of over-sophistication and over-concern with the theoretical side of an issue. Since it is expected of the student that he/she display the modern tools, that "display" tends to become the main criterion on which the acceptability of the thesis is often judged. In most of the areas of development research, other inputs are very important to the achievement of a valid and useful result. The upshot is that many theses make little or no contribution to knowledge in their respective areas.

Another one of the more difficult aspects of organizing good research in many areas of development is in providing the right mix of conceptual validity and sophistication and empirical care and accuracy. The problem owes a good deal to the tendency for good empirical economists to be unimpressed by the more theoretically inclined (often on the grounds that their models are silly and/or that they are not really interested in getting accurate results at all but in the flair of the methodology and modernity of the theory), and for the more theoretically inclined to give little attention to the need for good empirical work, often out of innocence as well as impatience. Representatives of the two types of skills sometimes seem almost to constitute non-intersecting groups.

### 3. The Merits of In-depth Comparative Work

Employment research, like most other branches of development economics, has proceeded mainly via in-depth country analysis and many-country cross-section work. Each of these approaches, of course, has its advantages, but it is increasingly evident that for many types of analysis neither is very satisfactory. The third, and by far the least common, approach is in-depth comparisons of the experiences of small groups of countries (say two to four or five). This is probably the only way to sort out some of the key aspects of causation linking employment outcomes to various aspects of economic structure and policy. The one-country approach provides no variance on many of the relevant variables, while the many-country analysis is inherently too superficial and needs to impose too unrealistic assumptions in order for any conclusions to be drawn. The "few-country" approach offers the hope of variance of experience, together with some depth of analysis; the main stumbling block is the need to achieve good and comparable depth of detail for the various countries included. Sometimes this may be quite difficult unless the research is collaborative among specialists on the different countries, but even then it can suffer from non-comparabilities in the way the experiences of the different countries are interpreted due to the different perspectives (not always even recognized by themselves) of the country specialists. But this approach does offer a lot, and for some types of research (more precisely, for research on some issues) it is probably the only methodology offering much hope, and is therefore worthy of consideration as a criterion in the selection of research projects.

A number of projects have, in recent years, been designed along the lines of this "few-country" model. A look at how they have worked out in practice would be revealing and would allow one to draw some conclusions as to which variants of the general model have performed most adequately. My impression, from the cases I am familiar with, is that on average they fall substantially short of potential, and that more detailed thought to organizational questions at the beginning would help to avoid some of the problems.

### 4. Political Economy Approach

Many problems with an important economic element can be best understood in a political-economic framework. This is a sort of truism whose operational significance sometimes seems rather limited due to the great difficulty of attaining good quality research of this sort, usually involving as it does close collaboration between economists and political scientists. A more feasible goal than really top-notch work in political economy is simply to try, when considering possible research on the economic side, to check the probable political feasibility of its being put to some use. Too much otherwise good work in economics has no potential policy payoff for lack of elementary understanding of what determines the political feasibility of certain policy alterations.

On the political science side, there is clearly a crying need for work on the politics of development policy which goes into the details--the nuts and bolts, as some people would put it--of what determines the feasibility of certain types of policies. William Ascher's recent book, Scheming for the Poor (1984), is a fine example of a sort of analysis of which we need much more. It deals with the details of the political processes surrounding decision-making on important issues, and reflects a good understanding of the economics of quite a few of the issues under discussion. Among economists working in the Latin American context, the work of Carlos Diaz-alejandro and of John Sheehan reflected the sort of balance from which the economic discussions and analysis could greatly benefit.

## II. SOME LESSONS FROM THE LAST TEN YEARS AND PRIORITIES FOR FUTURE WORK

This section discusses some of what has been learned from research to date and what, in my judgement, are some of the areas which should receive priority in the future. It is convenient usually to proceed from a look at the accumulation of understanding in a given area to its implications for future research.

### A. Employment Issues as Part of the Processes Linking Growth, Income Distribution, and Poverty

A decade or two ago there was great concern about whether or not economic growth as it was occurring in many developing countries was being accompanied by a wide distribution of the benefits. Not a few observers suspected that even the fast growth occurring in some countries was actually making the poor worse off. The increasing concern with the achievement of "growth with equity" reflected this fear and this assumption that "trickle down" was by no means an automatic thing. One particular mechanism of growth, the Green Revolution in agricultural technology, received special attention in this connection, with many analysts suspecting that it was leading to an increase in the concentration of agricultural income and even to the impoverishment of the poor.

With respect to both the Green Revolution and, more generally, the process of economic change in the LDCs, the truth seems to have lain somewhere between the optimists, who saw none of these distribution-related issues as cause for concern, and the pessimists, who saw no "trickle down" at all. In countries where growth has been fast, from those whose policies would be expected to benefit the poor (such as Taiwan) to those which seemed to pay virtually no attention to the poor (such as Brazil), the poor have appeared to benefit significantly from economic growth, though certainly more in the Taiwans of the world than in the Brazils.<sup>1</sup>

The great fear that growth in peripheral market-oriented economies to put it a different way, in late-developing economies, would of necessity be qualitatively different from that in the now industrialized countries, and that widespread distribution of the fruits of growth could not be expected, should be laid to rest. The differences between contemporary growth in the LDCs and the historical process in the now industrial countries are doubtless significant, but there is no empirically based reason to believe that it is less likely that growth will benefit the poor now than it did at the comparable stages of development in those front-runners. When growth of per capita income is slow, however, there are still valid reasons to worry

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<sup>1</sup> See Fei, Ranis and Kuo, 1979, and Kuo, 1983, on Taiwan; Pfefferman and Webb, 1983, on Brazil; Gregory, 1985, on Mexico; and others.

that the outcomes will be bad in terms of income distribution, so this general area remains one in which good research is still sorely needed.

What we know is that when growth proceeds at, say, six percent per year or faster, with the result that per capita income is growing at three percent per year or so, all major groups seem to benefit from spillovers even when the development strategy appears to be heavily biased against the welfare of the poor, as in Brazil.<sup>2</sup> We do not know whether economic advance of each major group is almost as likely, but just slower, when output growth and hence the advance of average per capita income is slower, say four percent per year for the former and one to two percent for the latter. The uncertainty reflects both empirical and conceptual differences between the two settings.

When overall growth is slow (as, for example, in India or in Peru) over lengthy periods of time, it requires more finely tuned data to detect the smaller changes in the per capita incomes of the various categories of the poor which could be expected. The combination of the harder job and the relative lack of good income distribution data and in-depth studies of income distribution in most of the poorer African and Asian countries has conspired to produce this ambiguity of results.

From a conceptual point of view also, one cannot simply expect that what fast growth will do fairly rapidly for the poor, slow growth will do more slowly, as if the processes in the slower-growing country were qualitatively similar but simply quantitatively smaller than in the fast-growing country. In particular, many of the countries with slow growth of per capita income are also characterized by rapid population growth, which would per se be expected to worsen income distribution. The combination of population growth and rapid improvements in agricultural technology of the sort which define the Green Revolution might be expected to create a dangerous situation in very poor countries where the great bulk of the population lives off the land. Population growth increases the pressure on the land, the one resource which is now very difficult to expand in most poor countries, and better technologies make the land more valuable and hence more attractive to the rich and the powerful.<sup>3</sup> Will this combination lead to a situation of increasing landlessness in poor countries where the non-agricultural sector is too small to have much absorptive capacity, or has it already done so? With the international setting for LDC growth far less promising than it was during the first several decades after the War, will this situation provide the recipe for social strife which could not only have severe direct welfare costs but also lead to lack of economic policy coherence and slower growth in the future?

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2 Pfefferman and Webb, 1983.

3 Kanel, 1972.

This worry, for me the new great fear which replaces the earlier concern that perhaps even fast LDC growth under market systems could not achieve wide distribution of benefits, implies a need for a serious research effort to provide us with a better understanding in this area. The narrower, and I believe the more important, research focus would be on trends in the structure of the agrarian and rural sectors of the poorer LDCs. Its objective would be at least as much related to the "monitoring function" discussed above as to any direct implications it might have for policy making, though clearly, if things are going badly enough in the rural sectors of poor struggling economies, something might have to be done about the system of land tenure.

The particular urgency for undertaking work in this area may not at first glance seem obvious since there has been much discussion of trends in the agrarian structures of countries undergoing development, and lots of people are aware of the danger that the trends may be negative. That need and urgency relates to several problems somewhat specific to research in this area, problems which make it very hard to be up to date on what is happening to a country's agrarian structure. The central difficulty, perhaps, is that the only reliable data on agrarian structure and its trends in most countries come from the agricultural and population censuses taken usually only every ten years (and sometimes even less frequently), and that those data come typically with a substantial time lag. We are only now moving into a position to be able to learn something about what was happening in the 1970s, based on comparison between the data from the 1970 and the 1980 (or thereabouts) censuses.

While surveys and case studies are undertaken periodically in many countries, the evidence gathered in this way does not usually prove adequate to the task of providing a solid picture of what is happening at an aggregate level. The trends in different regions are sometimes quite different from each other, the data not comparable, and so on. The analysis is further complicated by the fact that in most cases neither the agricultural census nor the population census by itself can provide an adequate picture of what is happening. The two must be used in a complementary fashion to draw out a persuasive story, and they usually also require that one have some evidence on income trends (e.g., wage rates) in order to distinguish among competing interpretations, all of which are consistent with the data from the censuses. The data-using skills required to do this sort of analysis well are not very common. This, combined with the long lag in the availability of data itself, has produced a situation in which, at least in my view, little is known about what has been happening to important aspects of agrarian structure in either the 1970s or the 1980s. In particular, we do not have the evidence needed to assess the extent to which increasing landlessness is causing, or is creating, a setting which in the future may cause an increase in poverty.

In a case like Brazil, whose 1980 agricultural and population censuses were both well taken and published relatively quickly, it is evident that the fast growth of the 1970s was showing up in the form of

higher income levels for agricultural workers and for small farmers, just as for all other major groups in the society,<sup>4</sup> but it will require more in-depth analysis to ascertain whether trends in land ownership and access structure have nonetheless evolved in a way which may make it harder for the poorer members of the rural economy to survive the sort of economic turndown which the country suffered in the early years of this decade and which could of course return in the future. The need for this sort of study, designed more to detect the warning signals that the overall growth process of the country is creating dangerous situations than to provide direct inputs to any specific policy decisions, is particularly acute in the poorer more agricultural economies, where a long time may have to pass before the non-agricultural sector will be able comfortably to offer employment for enough people to permit the agricultural labor force to start to fall. Precisely because rural poverty and rural problems often go so long unperceived and unappreciated, it is crucial to move as fast as possible in this area so that the seeds of crisis not be given a chance to grow too much before any corrective steps are taken.<sup>5</sup>

In poorer, mainly agrarian economies, the main device for detecting storm clouds on the economic horizon would seem to be the sort of studies of agrarian structure and trends just outlined. More generally, and more relevant in the not-so-poor LDC's, the counterpart to that sort of study is the analysis of how income distribution is changing over time. Evidence of this sort allows one to measure the final net effect of all those characteristics and biases in the growth process which may be harmful and helpful to the groups towards the bottom of the income distribution. If distribution is not worsening (however one defines the latter term), one can breathe a sigh of relief; and, even if one does not understand the role of various factors in determining its trends, one can conclude that the combination of contextual and policy elements which are impinging on those trends is not a disastrous one.

Since poorer people earn their living mainly from their employment, analysis of employment opportunities and analysis of trends in the incomes of the poorer groups, usually coming from income distribution figures, are very closely related to, or overlapping with, each other. While quite important, this sort of work is a little less urgent than that which focuses on agrarian trends, partly because it

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4 Berry, 1986.

5 So as not to exaggerate the empirical difficulty of achieving very revealing studies of agrarian trends, I note that the recent analysis of post-independence patterns of change in Malawi by Kydd and Christiansen (World Development, May 1982) was able, without census data, to paint a quite convincing case that the exclusive focus on large farms by public policy was creating an outcome which was very inefficient from the point of view of resource utilization and potentially disastrous from an income distribution point of view.

takes on its main independent importance in those countries somewhat farther along the development path than those discussed in the previous context, and partly because it is, if anything, even harder to do well enough to assure useful results. I suspect that only in two or three countries in the developing world have we witnessed the combination of researchers' expertise and adequacy of data to produce solid conclusions on how income distribution is moving. In all the other cases, one or the other of the needed ingredients is missing; and, while the research carried out has often been useful in narrowing the degree of uncertainty with respect to trends, it is not solid enough to permit confident conclusions as to what the existing development strategy means for income distribution.

B. Learning About Employment Potential by Studying Characteristic Differences in Labor Intensity by Type of Economic Unit

Most employment research priorities to be discussed here are viewed as priorities because it is anticipated that they can throw some light on policy choice. Broadly speaking, there are two ways to go about the search for policies which could raise the employment potential of an economy. The first is to look for features in the economy (perhaps duly described as "distortions" though also perhaps not) which constitute barriers to the realization of the system's potential for employment creation; the second is to start from observation of which types of economic units or actors demonstrate a good employment creation performance and then to work back from those observations to try to ascertain what it is about those units which accounts for the good performance and the extent to which it may be replicable elsewhere in the economy if appropriately induced by policy.

The second approach seems to have a lot of potential and the great merit of starting from a base of facts about which there cannot be much dispute. It has, on the other hand, the complexity that any number of considerations may have gone into the creation of an observed differential in factor proportions, so it may require a detailed understanding of a number of markets or types of actors to get to the bottom of the differences. Taking as an example the usually large, sometimes dramatic, differences in the capital/labor ratio across firms or plants of different sizes in the manufacturing sector, one is immediately required to consider the possible roles of imperfections in the labor market, imperfections in the capital market, differences in availability of technology, differences in preferences of the entrepreneurs, differential risk considerations, and economies of scale. To the extent that one can sort out the roles of each of these possible factors, and any others, one learns something of policy relevance, since some of the factors and their effects would be amenable to manipulation by policy, whereas others would not.

The stylized knowledge with respect to factor proportions differences boils down to our knowing that factor proportions vary by the sector or product and by size of producing unit. Traditionally we

have assumed that the former type of difference reflects differences in the production function across products and the latter type some combination of factor and product market distortions and economies of scale. The differences across size are generally assumed to be of greater interest since there are narrow limits to the extent that an economy can attempt to affect the relative overall demand for different factors by changing its product mix, whereas it would appear at least at first glance that size structure might be more amenable to alteration. Differences in factor proportions and, underlying those differences, in technology across size of establishment are often quite large (though some of the large difference in aggregate data simply reflects differences in the size composition of the producing units in different industries) and raise the related question of whether there are also significant differences in total factor productivity.

Undoubtedly, the analysis of differences in the economic characteristics of producing units of differing sizes and the related analysis of the determinants of the size structure in the major sectors of an economy remain major areas of priority. Since it is the smaller size units which are characterized by high levels of labor intensity, employment-oriented research includes as a major category work on small enterprise, its characteristics and potential. When optimally conceived from our present perspective, the study of small enterprise is best viewed as part of the analysis of differences across units of differing size. It is as interesting in some ways to understand why large and modern units create little employment as to understand why smaller ones create a lot of it. In any case, the study is in essence comparative.

The relationship between factor intensity and tradeability, while not likely to be so dramatic as that with size of establishment, is also of much importance given the centrality of trade policy in present discussions of overall development strategy. Among what may broadly be construed as sectoral differences in factor intensity, particular interest now attaches to the public/private sector distinction. Since the product of the two sectors is not normally so comparable as that, say, between small and large plants producing shoes, and since the output of the public sector is not easily measurable in any case, there is not an extensive empirical base giving rise to the belief that the public sector differs importantly per se from the private sector in terms of its employment creation capacity. But the differences in the modus operandi of the two sectors make it clear that this is a potentially important one. The rapid increase in the relative size of the government and para-statal sectors in many countries over the last few decades has made public sector employment an important component in the overall employment picture and often a large share of modern sector employment.

The need to understand the employment practices of the public sector is an obvious priority in employment research at this time for three reasons: First, we have no very clear ideas as to how to model this (in contrast to the private sector where we start with certain

strong presumptions as to how things happen); second, because it is an important sector in terms of employment and size of the wage bill; and third, because there is obvious reason to worry that a lot of money and employment opportunity is lost through certain problematic characteristics of the public sector.

The most obvious difference with much of the private sector is that some part, sometimes much, of public sector employment is based less on the productive potential of the individuals than on their connection with the people with influence in the government. Depending on the relationship between potential productivity and connections, this may or may not lead to a high level of inefficiency in the provision of government services and other activities of the government. The prevalence of "pull" in the dispensation of public sector jobs is also likely though not certain to contribute to above-equilibrium wages, since it tends to imply a lack of concern with efficiency. Another factor tending to produce high wages is a concern with being perceived both by employees and in general as a good employer. Finally, the monopoly position of the government in the provision of nearly all of the goods and services that it has anything to do with means that it can be vulnerable to pressure from a union if such exists and/or can pass along its high costs to someone else, in this case the taxpayer.

The above factors are likely to promote high wages. Additionally, the sector often has the function of deliberately creating employment for certain politically influential or dangerous groups (components of the middle classes), an aspect of the situation which is likely to imply that much of the employment may have a low, zero or even negative payoff in terms of output. It could have the effect of keeping wages below what they might be if the government did not have this goal of job creation, but since it is mainly middle class people who are the candidates for these jobs, the absolute wage level is not low.

In the case of the public sector itself, leaving aside, for the moment, the para-statal sector, work is clearly needed that is designed to develop a model or models of how employment and wages get determined under various circumstances. Such models need to take account not only of factors internal to the sector but also of the relationship between it and the private sector. In some economies wage level in the public sector appear to have a lot to do with the determination of those in the private modern sector, while in other cases the private sector is much the larger of the two and probably plays the dominant role in wage determination. In the public sector it often appears that the objective of employment creation for its own sake, i.e., without concern for any output resulting, makes this into a partly residual objective, in the sense that if there is enough easy money in the budget there may appear to be almost no limits to the amount of job creation of this sort which a government is willing to do. In any case, since the fiscal situation of most countries is highly variable over time, any model of public sector employment and wages in a developing country would have to take that fact into account. During

periods of fiscal ease, employment and wages rise quickly, perhaps; then when the financial crunch is on, one or both of those variables, but perhaps especially the employment, will turn out not to have the same downward flexibility as they had upward flexibility. Such irreversibilities may have many other important effects besides those on the levels of employment and of remunerations, e.g., on the allocation of labor among government services or outputs.

The attempt to understand the hiring and wage-setting behavior of the para-statal and the private sectors gets us into the much studied question of how responsive factor proportions in various industries are to factor prices, and in particular to the wage rate and the price of capital. Because of the great econometric difficulties of assessing factor substitutability, this remains an area in which we need to know a lot more than we do, but for the same reason one cannot have unbridled optimism as to how much more can be learned. At the very least, it is an area which should be carefully assessed with respect to the potential it offers for productive new research. It is possible, for example, that some combination of methodologies, including the standard econometric work as well as interviews with employers to directly assess the criteria they use in reaching their decisions on factor proportions, would pay off better than have the approaches taken thus far.

### C. Studying Small Enterprise

The comparison of factor intensities of different types of economic units leads to a focus on the small-scale sector since it has such a marked capacity to create jobs. The first thing to understand is why it does so much better than the larger, more modern sector in this regard--the subject of the discussion in the previous section. But this sector also deserves much more study in general, with the objective of understanding its dynamics as well as its statistics and of distinguishing in some detail its various component parts.

In order for policy makers to effectively address the problems of "dualism," we need to know much more about this broadly defined sector and about how it responds or does not respond to various types of public policy. Research is proceeding on quite a few aspects of the small enterprise sector (for example, the recent World Bank project focusing on India, Colombia and the Philippines; the earlier PISCES studies; the work at Michigan State; and the current EEPA project of the Harvard Institute, Michigan State and DAI). Most of what has been done however, is recent, and the bulk of the effort clearly lies still in the future. As well as having started later than the work on the modern sector, the attempt to understand small enterprise is hampered by the relative dearth of data vis-à-vis the large-scale sector, by the fact that most researchers have no direct feel for it based on having lived and worked in it, and by the fact that it appears in some ways to be inherently more complicated than the modern sector.

The range of what we have learned includes both some facts and some interpretations with possible policy implications. Most obvious, and requiring little research to nail it down, is the fact that, in the great majority of LDCs, the small-scale (or informal) sector is quantitatively of great importance, especially in terms of the employment located there, but also, in lesser degree, to the output generated there. When it soon became clear that the modern sector was unable in most countries to generate enough jobs for the bulk of the labor force in the foreseeable future, the nature of this small-scale sector became interesting even to those who still saw the development process essentially as one in which the expansion of the modern sector is the key.

The small-scale sector cannot simply be viewed as a continuing waiting area for people not yet usable in the modern sector when, as soon became evident, their wait might have to be measured more in half-centuries than in decades. Making the sector more dynamic and more productive has gradually come to be viewed as a priority. The productive potential of at least some parts of the sector have been established by research which has shown, or purports to have shown, that total factor productivity, correctly measured, is frequently as high or higher in this sector than in the modern sector.<sup>6</sup> But apart from this important result, our understanding of the economic potential of the small-scale sector and of the public policies which may improve that potential remains disturbingly partial.

One background "problem" lies in the complexity of the sector, which involves not only different branches of production but also different size groups whose characteristics and behavior patterns may differ considerably. Within that very broad range of economic producers which have, say, a labor/capital ratio below the average for the economy as a whole, and which as a result have interest in that they offer ways of producing things which could imply more employment for the same amount of capital as now characterizes the economy as a whole, we have everything from the very small micro-enterprises through the medium-sized, and usually clearly modern (measured by some non-size indicators), units. All of these warrant consideration, but they differ greatly among themselves.

The understanding of the potential role of small and medium enterprise in a developing economy can be advanced both from a macro-oriented approach and from a micro-oriented one. In the former category, we need cross-country studies designed to provide evidence on both how the dimensions and the characteristics of the small-scale sector tend to be related to the stage of development and the pattern of development, and on how much variance there is in that relationship. The degree of variance is likely to provide hints as to how, and how much, economic policy can affect the structure of small enterprise.

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<sup>6</sup> Todd, 1983.

To date, several authors have organized data on the size and structure of employment in the manufacturing sectors of various countries, and have shown the ways in which this tends to be related to the level of development.<sup>7</sup> Little has been done along these lines for other sectors of the economy. Nor has information been organized on how factor productivity, and especially labor productivity in small enterprise, varies with the level of development or with other relevant economic variables. We do not know, for example, whether, in those countries where small enterprise seems to have performed effectively in terms of creating jobs, this is more a reflection of the lack of opportunities elsewhere than of anything particularly positive about the sector and is accordingly reflected in a quite low labor productivity and perhaps even a low capital productivity as well. In short, we still lack a good feel for the patterns of small-scale employment in the non-manufacturing sectors as development proceeds along the various distinguishable routes; and we lack a feel for how factor productivities vary and move in all sectors, including manufacturing, and for the relationships between the employment and the productivity patterns.

It may be important to know how much variance there is across countries in these dimensions of small enterprise structure, as it may be crucial to answering the question of whether various types of small enterprise are in fact so complementary with other enterprises that the sector cannot be expanded much even with the most apt policy. This body of research would require both many-country cross-section work to try to establish some quite general elements of the patterns, and also, probably as a second stage, cross-section work involving a smaller number of countries aimed at testing for the roles of some of the possible determinants of the differences observed across these countries. The importance of this sort of work is the result of the fact that, while micro-oriented research is also of great value and importance, we can have no guarantee that its results can be "added up." Thus, while we may learn a lot about what makes individual small firms more competitive, this does not imply that we know how to make the sector as a whole both larger and more efficient. It remains possible that the total economic space for these firms is severely constrained; and as they become more efficient they simply compete more vigorously among themselves.

On the micro side, it is clear that we need much more research to give us a better feel for how enterprises differ by size and by sector within the broad category which includes everything but the large-scale firms. We need more information on their behavior patterns, their dynamics, how their performance varies with the macro-economic state of the economy, and, ultimately of course, how various types of public policy may impinge on their performance. This latter question must be approached both from a micro-economic side, in which one tries to understand the workings of these firms well enough to deduce something

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<sup>7</sup> Anderson, 1982; Cortes and Berry, 1987.

about the effects of policies, and from a comparative and time-series side, in which one tries to identify the effects of policies on small enterprise performance by comparing countries, or points of time within the same country, which differ with respect to the policy.

A key aspect of what we still need to learn a lot more about is the relationships among different small establishments, their links (both competitive and complementary) with larger establishments, and their links with the government. In short, we need to know much more about the economic context in which they operate. In the case of large firms, self-sufficiency is sometimes relatively great; and generally many elements of the context in which they operate are fairly apparent. Small firms can be highly dependent on their environment, both in the sense of having a lower degree of self-sufficiency or vertical integration than might a larger firm, and in the sense that, their political and economic power being very limited, they may be done in by other economic actors with whom they come into conflict. Thus, the nature of the interactions with other firms can be extremely important in determining the economic success of such firms. Such interconnections are much less noticeable in the case of some of the more traditional products and services found in the small-scale sector; as an outgrowth of their history as traditional products, such branches as shoe making, clothing and carpentry often do not involve much input-output complexity. But these are also not among the more dynamic branches of the small enterprise sector. In the newer areas which are more likely to be central to the longer run contribution that small enterprise can make to the economy, such economic isolation is less common, and the considerations just noted come into their own.

There is now as a result of recent work a great deal of research on small enterprises. This research has encompassed a variety of approaches. Most of it is carried out by individuals or in the context of relatively small projects. Among still ongoing larger scale studies, that involving HHD, Michigan State and DAI hopefully will make significant contributions in the various priority areas cited above. At this moment it is too early to say how great these will be and how they will affect the picture in terms of what the biggest lacunae will be when the project is completed. It is clear that some important new case studies will be added to our list of source materials for useful generalizations, and some relevant hypotheses subjected to testing. But the vastness of the still-to-be-explored terrain suggests that this general area will remain one of the major priorities for future work.

#### D. Capital Market Analysis

Research on how capital markets and labor markets function represents the other way of going at employment issues from that discussed in the previous section. Instead of starting from identifiable differences in the employment-creating characteristics of different sectors, it starts with the search for the main features of the functioning of these markets and attempts to draw some conclusions

of policy relevance. Labor markets have received much more detailed analysis than have capital markets, probably partly because it was early felt that they harbored serious imperfections, and partly because they were assumed to be more relevant to the determination of the level of employment and the wage rate, since they are the immediate context in which those outcomes are manifested. After a couple of decades of serious research in this area, it seems that we are in the process of concluding that the identifiable imperfections in this market are considerably less striking than many theories have proposed, and especially that feasible remedies for some of the undesirable effects of certain features of this market may be very hard to find. Certainly, there are topics warranting additional research, but they must be selected with careful attention to what is already reasonably well understood and to whether they stand some chance of being policy relevant. The capital market is a different story, however. Little employment-related research has been directed this way, yet it is immediately apparent that this market operates in ways very far removed indeed from the perfectly competitive paradigm. Whether policy could effect improvements which would have significant benefits is a matter still to be assessed.

Capital markets, it may be argued, are inherently less efficient than most other markets (probably including the labor market), because the basic transaction, in which one party makes capital available over a certain period of time in exchange for an interest payment, is risky for the lender because of the possibility not only of not receiving the interest payment but also of not getting the capital back. Lenders are always out on limbs which do not have counterparts in most "spot" markets. One sort of lender, the saver who puts money in the bank, is also inherently in this risk-laden situation, as a result of which a considerable amount of legislation and institutional development has been created in order to act as a safeguard against this danger. Individual borrowers may be either dishonest or incompetent as investors, and in either case the lender can wind up with a great loss; the same goes for the institutional borrower, the bank, the trust company, and so on. Very high levels of information about the future economic performance of the borrower and of trust in his/its integrity are necessary conditions for the capital market to function in a way which approximates the perfectly competitive model. The result normally is that it is a far cry indeed from this. Interest rates vary extremely widely, sometimes from quite negative ones to highly positive ones according to the submarket involved and the client; access is highly uneven; costs are often high. The result is that the allocation of capital among competing possible uses may be very far from the optimal one.

The cost of capital for various firms depends partly on how the capital market works and partly on the price of capital goods; this latter price usually depends importantly on how foreign trade is managed since most capital goods (at least most machinery) is imported in many LDCs. The exchange rate, import duties and quotas imposed or not imposed on such imports affect the price of capital goods, often

differently for different categories of firms, e.g. the small vs. the large.

It has long been a major argument among persons concerned with employment that below-equilibrium prices of capital help to explain the unduly high capital intensity of many firms with good access to capital markets. We have not yet advanced too far, though, towards the goal of assessing the potential of various policy changes or interventions in improving this situation and in creating more equal access among firms. "High interest rates" (i.e., non-negative real rates) have been a continuing recommendation of the IMF and other organizations for some time now. Specially designed institutions, usually public, to try to provide credit to smaller establishments and thereby to partially equalize the availability of credit to different types of firms, now exist in quite a few countries. In other cases attempts have been made to induce or to force the already existing institutions to provide more equal access to previously excluded groups.

In some countries the belief that a general freeing of capital markets would improve their performance in a number of dimensions, including that of equalizing access by lowering the variance of interest rates (a variance which can be interpreted as being the result of interventions and constraining legislation) has led to such steps being taken, and usually thence to some degree of financial disaster, or at the least to some results quite unexpected by the proponents of these views. It is clear, both from experiences of such countries, and from common sense/observation, that we do not understand capital markets very well, certainly not well enough to predict accurately what will happen when a major alteration is introduced to a given market. (Perhaps there are experts who do have such knowledge, but economists do not know who they are or do not call upon them.)

Broad questions of the structure of capital markets involve, of course, many possible impacts, micro and macro, beyond our concerns here. But some of those impacts are or could be quite important, so the general question of capital market structure warrants a prominent place in the list of things we need to understand better for effective formulation of employment policy. There are also some narrower and probably more obvious ways in which capital markets are relevant. Some of these have already received a good deal of research attention. One is the sensitivity of the demand for labor to the cost of capital: economists have generally assumed that this cost plays a significant role, whereas some others have argued that the businessman responds much more to other variables. In the case of small-scale businesses there is also the question of how the firm responds to access. Provision of credit to small firms should increase their ability to compete, but one must also countenance the possibility that in some cases it may increase their capital intensity in socially undesirable ways. Analysis of the impact of credit on small firms thus tends to be inherently more complicated than analysis of its effects on larger firms.

To summarize, it is clear that in this area we need both more accurate models of how financial institutions behave and of how the financial system as a whole behaves on the one hand, and on the other hand a better feel for the role and effects of access to credit and the terms of credit for various types of firms, perhaps especially for small-scale firms. The importance of the capital market relative to the labor market is suggested by the fact that for more establishments in manufacturing, for example, the capital share of value added is greater than the labor share; the price of capital is accordingly likely to be more important than that of labor, and some of the issues (such as minimum wage laws, unionization, etc.) on which considerable focus has been placed may, as Kannappan (1983) has suggested, have been somewhat overblown.

Proper modelling of the capital market is complicated by the fact that, with institutional aspects necessarily important, the politics of the market thereby takes on importance as well. The fact that much capital is internally generated, with the result that at least two prices of capital are likely to be relevant in the decision-making of most firms (the price at which the firm can lend out and the price at which it can borrow), has also not been well integrated into the analysis of capital markets. Work like that of Bates (1981), which draws attention to the politics surrounding agricultural credit systems, of Adams et al. (1984), which throws doubts on the value of cheap rural credit and that of Scitovsky (1985), which attempts to link the different experiences of Taiwan and Korea to differences in their interest rate policies, especially as they bore on small-scale industry, are valuable contributions to the discussion in these areas. Not much of this more impressive work on the functioning and role of capital markets has focused, except rather indirectly, on the effects of different systems on employment. Such analysis needs always to deal with the employment implications of who gets the credit, and also on the implications of credit for technical change and the resulting effects on employment.

As with the labor market, I believe it is essential to come at questions of how the structure and functioning of the capital market affects employment both through studies of how the capital market works, in which one deduces some of its effects (e.g., on small enterprises) with the assistance of some necessarily incomplete "model" of how such small enterprises behave, and through studies of how small enterprise works, in which the interface with the capital market is just one of the many aspects of such firms which comes under the microscope. At the present stage of our ignorance, such studies must be viewed as highly complementary to each other, rather than substitutes.

Given the incipient state of our understanding of capital markets, and certainly of the relationship between how they function and the level of employment, and given the inherent complexities of those markets, one must bear very much in mind the second-best nature of any probable functioning of that market, even after the best possible

structure has been designed and implemented. There is no chance that the perfectly competitive model will be approached in this particular market, so the appropriate caution is very much in order as to what that paradigm can teach us.

E. Labor Market Analysis

Though labor markets in most LDCs appear also to operate in ways which are fairly far from "perfect," it is not clear how large are the efficiency losses or the redistribution of income among groups which results from this, or more relevant, which results from those imperfections which there is in fact any hope of doing anything about.<sup>8</sup> Past research has, I believe, not been kind to the idea that the effective mobilization of a labor surplus (a reservoir of workers with very low or zero marginal productivity) can become a major source of economic growth. It is not so much that research has disproved the existence of a significant reserve army of this sort, though it is true that the evidence gives little support to the very high estimates which have been thrown around at various times,<sup>9</sup> as that it appears to be difficult to mobilize such reserve as exists in order to make it productive enough to make a big difference to a country's growth prospects.

As for the more recent Harris-Todaro model,<sup>10</sup> with its implication that rural-to-urban migration tends to be excessive from a social point of view, or more generally that output loss is associated with the attempt to get protected sector jobs (which leads to open unemployment or to employment in activities with lower current productivities than characterize other options) rather than accepting available but less remunerative ones, I think that here too the burden is on those who argue that the imperfections identified really make a significant difference. I believe the theory has not yet been seriously tested<sup>11</sup> but my feeling is that, when it is well and properly tested the results will confirm the doubts just enunciated. One reason, I imagine, for the great popularity of the Harris-Todaro model over the last 15 years or so is that it accords with the intuition of many people that rural-to-urban migration is indeed excessive and that there must be some market imperfection to blame for that outcome. But in this case I think that the intuition may be seriously flawed, and that there is at this time no serious argument to be made that this form of migration

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<sup>8</sup> See Fei, Ranis and Kuo, 1979, and Kuo, 1983 on Taiwan; Pfefferman and Webb, 1983, on Brazil; Gregory, 1985, on Mexico; and others.

<sup>9</sup> Berry and Sabor, 1978.

<sup>10</sup> Harris and Todaro, 1970.

<sup>11</sup> Berry, 1986.

has indeed gone beyond what would be socially optimal.<sup>12</sup> But the issue is an important one which does deserve careful research.

The research now needed is different from most of what we have thus far seen, with its focus on the migrant decision-making process and on whether the move redounded to the subsequent benefit of the migrant or not. We can now, I think, take it as established that migrants make the decision to move in a pretty reasonable way, and generally wind up better for having made it. But this does not by any means prove that the whole process is proceeding efficiently from a social point of view; the research we need should focus on dealing with the missing pieces of the puzzle, and in particular with whether the nature and degree of the different sorts of subsidies which are provided to urban and to rural families imply that urbanization is so expensive that one can argue that it is proceeding at a faster than socially optimal rate.<sup>13</sup>

The Harris-Todaro model hypothesizes a particular type of labor market segmentation, with a particular type of economic cost attached to it. Segmentation theories posit a variety of cases, though, so the same question must be asked with respect to them as a group: Is there reason to believe that the efficiency or other costs of the segmentation which is posited are of significant magnitude? Once again it seems that research to date has taught us something, but that there remain important gaps in our understanding.<sup>14</sup> With respect to the former, it appears generally true that the simple static loss, of the sort which is measured by a "loss triangle" which results from the misallocation due to labor market segmentation, is relatively small. Perhaps this loss has been underestimated in the few attempts to gauge its possible magnitude, but it would be hard to believe that by itself it would amount to more than, say, six to eight percent of GDP. If this segmentation does lead to major losses, it is probably via other avenues than the static misallocation loss of simple micro theory. For example, perverse effects on technology choice and on risk-adverse behavior by businessmen could result from above-equilibrium wages in a high wage sector; inappropriate signals could be sent to the participants in the educational system; and many indirect effects could follow. Many of these effects must be mainly evaluated through analysis which does not focus directly on how the labor market functions but on something else, such as how entrepreneurs make their choice of technology.

One of the complications in the way of getting a good reading on the cost of either labor or capital market imperfections is the coexistence of imperfections in both markets at the same time, not to

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12 Berry, 1985.

13 Linn, 1982.

14 Mazumdar, 1983.

mention others elsewhere in the system. The second-best character of any policy package which may be under consideration makes the evaluation of its effects difficult, since in principle it requires a general equilibrium analysis. Such analysis is technically more feasible than before, given the advances in computable general equilibrium modelling, but the major problem remains that of specifying the various sectors that one wants to include in such a model with sufficient precision that the results of the modelling exercise will in fact be useful. Whenever the causal chain necessary to analyze a given problem is anything but quite short, one must presume there is a high chance that the answer which emerges from the exercise in economic logic will be wrong.

In the context under discussion, it is frequent for labor and capital market imperfections to work against each other, raising the serious question of whether results will be improved when one imperfection is removed but another is not. Removal of the labor-cost-raising imperfections in the labor market (e.g., unions, minimum wage legislation) would redound to the benefit of a group of firms which is nearly conterminous in most countries with those which benefit from the existing capital market imperfections. In giving those firms a new competitive edge on their (usually smaller) competitors, the change might diminish the efficiency of the system as a whole if the benefitted firms had lower total factor productivity than their competitors. At the same time it would be likely to increase the social efficiency of those benefitted firms which perform less well than they might because both the labor and the capital market imperfections induce them to operate at a level of capital intensity which is above the socially optimal level.

#### 1. Minimum Wages and Unions

It is widely believed among some groups of economists that minimum wages and unions have a significantly negative effect on employment generation in some sectors, as well as raising costs and lowering economic efficiency. The simple micro-economic argument on which this expectation is based is known to all. Little empirical analysis has thus far been done to test the hypothesis in LDCs; both cross-country comparisons and in-depth analyses in specific countries are needed. Thus far they have tended to be more impressionistic (albeit useful and suggestive) than seriously analytical and empirical. Convincing studies will not come easily in this area, but the importance of the issue suggests that they do deserve high priority if and when the researchers demonstrate the requisite skills and objectivity. This is an area where preconceptions are frequent, so dispassion is likely to be a necessary condition for useful work.

Analysis of these "distortions," like most interesting and useful work on labor markets, calls for careful distinction among sectors, firm size categories, and so on. Ultimately, if policy conclusions are to be drawn, it most often calls for some general equilibrium analysis.

It would be important to address the effects of an above-equilibrium wage rate on employment and competitiveness, not only for the larger firms for which this is more or less automatically an issue, but also for medium- and small- scale firms. One current hypothesis is that, above some size of establishment, somewhat above-equilibrium wages have little in the way of negative effects (being, for example, preferred by the firm for any of a variety of reasons); however, below a certain size, where the more labor intensive firms are likely to be found and where uncertainties with respect to markets and other determinants of business success may be more severe, the effects can be serious.

Research and thought needs to be directed towards the question of how legislation should be designed so that the main perverse effects of the distortions are avoided while at the same time providing the sort of compromise which is likely to be politically necessary given the strength of the forces arguing in favor of above-equilibrium wages. There has, to my knowledge, been very little serious research which could contribute to such design. Work on profit-sharing certainly falls in this category.

## 2. Real Wage Flexibility

The question of how a system can achieve an appropriate degree of downward flexibility of real wages is related to the issue just discussed. It has often been assumed that such mobility is very limited, and there is no doubt some validity to this contention under some circumstances, though it is true that the economic crises which have afflicted so many developing countries in the last few years have demonstrated that modern sector wages can be pushed down quite dramatically. The fact that these wages do on occasion, and in some countries systematically, get to above-equilibrium levels raises the important policy question of whether and at what economic and political cost they can be lowered so as to avoid such long-run negative effects as their being too high may have. Virtually all cases in which real wages in the modern sector have fallen have involved high rates of inflation, and one must address the question of how high the costs of the inflation are; if they are not too high this may be an effective and appropriate means of bringing the relative price of labor into line. Otherwise other approaches may be worth some study.

One line of thinking which deserves much attention is that of the "share" system, whereby through one device or another the total payment to labor becomes flexible to reflect the economic state of the firm. One commonly discussed device to achieve this result is profit-sharing; others include varying some of the fringe benefit pools into which firms must pay on behalf of their workers according to how well the firm is doing. For medium and small firms the economic fluctuations which create the need for such flexibility are likely to be an almost permanent feature of the landscape; for larger firms they are more likely to be limited to times of macroeconomic problems for the economy. In any case they now seem to be very important in many countries. Smooth handling of how the losses which must be borne in an

economic turndown will be distributed is a matter of quite important implications.

F. Analysis of the Impact of Trade Policy on Employment

Several types of economic policy are for one reason or another of sufficient importance to warrant their receiving specific attention to better ascertain the employment and related income distribution implications; one is trade policy--at the center of so much current policy discussion--and another is educational expenditure policy (discussed in more detail in the next section).

Trade policy is of undeniable importance to the growth of a developing country. The present collective wisdom of economists is that outward orientation is a key to fast growth. The evidence, at least for middle income countries and over the fast growth period of the world economy extending over the 1950s through the 1970s, supports this position strongly. Given the growth argument for such a strategy, it becomes important to know what its employment/income distribution implications might be and what can be done, policy-wise, to make its effects in those dimensions more positive.

There is a reasonable presumption, based on Heckscher-Ohlin type ideas, that countries whose exports are labor-intensive manufacturing products (or, less frequently perhaps, labor-intensive primary products) will benefit also in terms of employment creation and associated positive effects on the distribution of income.<sup>15</sup> The empirical evidence from countries like Taiwan and Korea, while considerably less conclusive than that relating trade stance growth, is consistent with this expectation.<sup>16</sup> For countries whose major exports are not manufactured, there is neither theoretical nor empirical basis for optimism on this front. It is clear that the effects of outward orientation could vary a great deal by type of country, by composition of exports, by trading regime (degree of protection, etc.).

A little research has been undertaken but it does not permit any confident predictions.<sup>17</sup> Most of what is useful in this area seems to have been done by economists whose main expertise is in the trade area, but who have less feel for how to deal with the labor market and how to look for relevant possible effects of trade policy. A necessary condition for any analysis to be persuasive in most LDCs is for it to include a formal modelling or separate treatment of the small-scale sector, in which most people are employed. Without a treatment of that sector, it would be hard to have any confidence in any claimed results.

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15 Krueger et al., 1981.

16 Fields, 1984.

17 Fei, Ranis, and Kuo, 1979.

G. Analysis of Labor Market Characteristics Relevant to the Estimation of the Rate of Return to Investment in Education and Training

A major government budgetary item in nearly all developing countries and a major component of total investment in most are expenditures on education and training. The dominant, and for the time being the only very feasible, way to get a decent reading on the economic payoff to that expenditure is to estimate the rate of return through the "human capital model," hopefully complicated beyond its highly oversimplified basic version, but nonetheless relying on the framework of that model. The "heroic" assumptions which are necessary to implement that model have been the subject of a good deal of debate. A strong argument can be made that most such calculations have a very wide margin of potential error since the assumptions fed into the methodology are so unsolid.<sup>18</sup> It is therefore very important to narrow the margin of potential error, so that this tool of analysis of such a major investment item can be used with more confidence. In many other respects it may not be all that important for us to know how to interpret wage structures, education-related differences in income, and so on, but the rate of return calculations are often quite sensitive to these issues.

At the heart of the human capital methodology for calculating the rate of return is the assumption that an individual's earnings reflect his/her marginal social productivity and can hence be used as a proxy for that variable. Probably no one would argue that earnings are unrelated to marginal social productivity, nor would anyone argue that the two are perfectly correlated. The issue revolves around how accurate a measure the one is of the other. Even a modest amount of slippage between them may be seriously damaging to the value of the human capital estimation procedures which have been in vogue during the last couple of decades. Only with more precise understanding of the determinants of labor earnings will it be possible either to have confidence in that methodology (if the results are favorable to it) or to know how it must be modified to make it an adequate tool of analysis.

The features of labor market functioning which must be better understood if this methodology is to become persuasive include, among others: how wage structures are set by employers--how sensitive those structures are to labor market conditions, and whether they reflect the firm's expectations on productivity not only in the longer run but in the short run as well; what determines labor mobility among types of jobs, with associated earnings levels changes; how the presence of open unemployment should be interpreted in terms of its implications for the marginal social productivity of persons with a particular level of skill or training; how the existence of considerable variance in the earning levels of people with the same levels of education and

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<sup>18</sup> Berry, 1980.

experience should be interpreted (i.e., is the marginal productivity of one more person with this combination of education and experience better approximated by the average value of this group's earnings, by a value towards the lower part of the range of values observed, or by something else)?

On the question of how wage structures are set, there is of course the neo-classical interpretation that they are designed to produce a situation in which, when the firm hires each type of worker up to the point where his/her marginal productivity equals the wage rate corresponding to that category of worker, then total costs will be minimized; a competing interpretation is that often wages are a reflection of the job (some jobs being more important than others), and the correlation between education and earnings is due mainly to the fact that more educated people are chosen for those jobs and hence wind up with higher incomes, with the implication that all sorts of reasons apart from their higher productivity (e.g., their being of the same socio-economic class as the people they will be working with) explain who gets chosen for these desirable jobs.

The economic and social payoffs to education and training of different levels and types vary, according to whom one listens, from one of the better investments LDCs have been making in the last few decades, to a substantially counterproductive effort whose main effects include an unending competition among job seekers to beat each other out through the education route and an inevitably high level of frustration among the young who are not able to get the jobs which they believe their education/training was preparing them for. This tremendous lack of consensus on the net benefits from expenditures on education and training, together with the size of public expenditures in this rubric, make it important that research contribute to the resolution of the points at issue.

#### II. Labor and Capital Market Features Which Bear on the Efficacy of an Economy in Adjusting to a Negative Shift in Macroeconomic Circumstances

Adjustment of economies to large macroeconomic disequilibria (of which a balance of payments disequilibrium is usually a major element) has in recent years become an all too common feature of the landscape in LDCs. The IMF has its relatively simple and general set of remedies for this situation, but opinions differ widely as to how appropriate that package typically is, and more generally to what the appropriate response to this situation would be in different types of countries. The answer to this question involves macroeconomic questions of the extent to which the degree of economic activity reflects aggregate demand, the degree to which it may be curtailed directly by the lack of foreign exchange, à la the two gap model, and so on. It also, however, involves questions which relate to how the factor markets function, and how the functional distribution of income affects the outcome.

The rigidity of real wages may aggravate the recession, and the loss of the sort of purchasing power that is channeled to the markets for consumer goods produced in the country may contribute from the demand side to that same result. Our fragmented understanding of capital market functioning is also put to the test by the abrupt change in context which results from the shocks to which so many LDCs have recently been subjected. The savings which are or could be undertaken in those subsectors of the capital market which are closest to the investors whose potential investment would have the greatest impact on employment (e.g., smaller establishments, export-oriented ones, and so on) are of particular importance and hence worthy of particular study. Similarly, the investment behavior of the more labor-intensive and less import-intensive establishments needs to be looked at with particular care in this context. One of the dangers of macro crises is that with all actors struggling to retain their access to increasingly scarce resources like imports and credit, rules of thumb or political factors will lead to a less efficient distribution of resources than normal.<sup>19</sup> The bailing out of a few large "white elephant" firms at the expense of support for a large number of smaller establishments with greater total potential seems to occur with disconcerting frequency at such junctures.

#### I. Analysis of Female Labor Market Participation and It's Implications

Thirty years ago there were still many LDCs in which the urban female participation rate was low. (The rural rates are of less interest since they do not tell much about the extent and nature of women's work.) This has changed considerable since then; although the rates have stayed quite low in a few countries, in many others they have risen markedly.<sup>20</sup> In some cases this has been associated with other modernizing trends (for better or for worse) in the style of life, e.g., a more nuclear family, more divorce, more households with females heads, etc. Most societies remain heavily male dominated, and discrimination against women, including discrimination which takes place in the labor market, appears still to be quite relevant although probably on the decline in at least some cases.

The detailed evolution of female involvement in the labor market may have great importance for how the fate of women changes in many developing countries. Accordingly it deserves a high research priority. In part, what we need are attempts to monitor that evolution, of the type referred to above in the context of trends in the agrarian structures of poorer developing countries. A reasonable amount of this sort of research is going on, though it is sometimes plagued by the same data constraints as the agrarian trends work, i.e., dependence for secure results on population censuses which are

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19 Sarmiento, 1985.

20 Standing, 1978.

infrequent and delayed in their publication. Fortunately urban household surveys are available and useful.

At least two other types of research are important in this area. One involves the analysis of the determinants of the nature and the remuneration of women's work: which sectors can or could provide the best channels for women's involvement, which types of firms, and so on. Again, a fair amount is being done here though to my knowledge it has not been pulled together as well as might be hoped.

Considerably less progress has been made on the other topic which comes to mind--the effects of increasing female participation on family incomes, on their distribution, and on the distribution of income between men and women within the family and more generally on the economic success and independence of women. These issues are more complex than might at first glance appear, due to a variety of possible indirect effects of the increase in participation and to the possible joint-causation between that increase and other changes bearing on the nature and the economic characteristics of the family.

A first step in assessing the overall impact of increasing female participation is to analyze its macro-level impacts on various wage rates and on the functional distribution of income. In some countries the increase in participation has been fast enough to raise the growth rate of the overall labor force to very high levels, even higher in those specific occupational categories where women are concentrated. Has this constituted a significant drag on the wage rates, and possibly cancelled out the otherwise positive effect of that participation on family incomes? By raising the capital share of income it may, of course, have raised savings rates and growth rates.

While increasing female participation may have raised family incomes less than might have been expected, due to its downward pressure on wage rates, its impact on the economic status of women may reasonably be assumed to be positive. But we know too little about the determinants of intra-family income or welfare distribution and about the determinants of family formation and structure to have much feel as to whether and how socio-economic policy might be used to encourage the more positive of the possible effects of this long-run process. Absence of such understanding is, in fact, a serious obstacle to other types of research, such as work on the trends of income distribution over time in LDCs. As family composition changes and the intra-family distribution of income may be changing, the data on distribution of income among families over time becomes hard to interpret.

### III. CONCLUDING OBSERVATIONS

Like the list itself, one's own ranking among the priorities cited reflects personal idiosyncracies and specializations. Trying, however, to allow for these actors, I would give the "highest marks" of importance to the following:

- o Monitoring trends in rural agrarian and labor force structure and outcomes in the poorer LDCs;
- o Further analysis of small-scale enterprise, both rural and urban;
- o Analysis of those labor market features which are central to the use of the "human capital" model for estimation of the rate of return to education and training;
- o Analysis of the impact of capital market functioning on employment; and
- o Analysis of the determinants of public sector wages, employment and labor efficiency.

All the priorities discussed in the previous section are of course important, but ceteris paribus I would argue that these are probably the most important, in the light of the criteria discussed in Section I. It might be that some of them would turn out to be too expensive in terms of resources needed to significantly improve our understanding. This ranking among the priorities is thus not my ranking of benefit-cost ratios from further research but simply of the absolute value of the research results which might, with good luck and good management, be forthcoming.

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"Are Wages Too High?"

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## EXECUTIVE SUMMARY

There is a long standing tradition in the development field of concern over "high" wages in the modern sectors of developing economies. The existence of "high" wages, or, more broadly, of not "getting the prices right" in the labor market, can impair employment income and, in general, retard development efforts. Often the source of wage distortions is identified as government wage policies which interfere with the market's determination of wage and employment levels. This position has received particular attention in the African context.

This paper takes exception with the conventional wisdom that government wage policies, especially a government's own pay and employment practices, are generating "high" wages in Africa today. Both on empirical and theoretical grounds, there is a need to reassess the impact of government wage and employment policies on labor market outcomes. Existing analytical frameworks fail to take account of public and private sector interactions in the labor market, and of the relationship between external economic events and the constraints imposed by alternative wage and employment policies. By improving upon existing frameworks, a better understanding of the relationship between government policies, the labor market, and employment generation may be achieved.

The notion of "high" government wages in Africa can also be challenged on empirical grounds. The severe macroeconomic constraints which have faced most African economies over the past decade have often resulted in significant real wage adjustments on the part of government workers. In some cases, and for some occupations, government wages may now be too "low". These wage adjustments take on special importance in those cases where a deterioration in public sector production has significantly contributed to poor economic performance. Government pay and employment practices are, therefore, a research priority in terms of their direct spill-over effects onto the private sector, and in terms of their effect on the performance of the government and public enterprise sectors themselves.

## I. INTRODUCTION: WAGE POLICY AND EMPLOYMENT OUTCOMES

The intent of this paper is to review some recent evidence on wage and employment outcomes in the formal sector of African economies, and to draw implications from these findings for directions in employment research in developing nations. The emphasis of the paper is on the impact of government wage and employment policies, especially public sector pay and employment practices, on the labor market. This focus is directly linked to frequent debates over "getting the prices right" in developing economies.

From the outset it should be emphasized that "getting the prices right" is only one margin along which developing nation employment problems must be solved. In fact, the quantitative significance for employment generation of correcting for wage distortions may be lower than the benefits received from, say, improved allocation of foreign exchange or relaxation of domestic savings constraints. Nonetheless, what is appealing about examination of wage distortions is that such problems may be amenable to policy reform. Furthermore, close inspection of labor market outcomes helps identify other economic issues which go beyond the relatively narrow concern of "getting the prices right".

This paper emphasizes the need to reevaluate wage distortions in developing economies, especially in Africa. The traditional view is that government wage and employment policies lead to "high" private sector wages and in so doing limit the expansion of employment in the private sector. While such outcomes may occur, other issues may be of even greater importance. For one, government pay and employment practices within the public sector, may significantly impair the performance of the public sector itself. Such an outcome may increase the inefficient use of public resources, which in turn may have a greater impact on private sector employment growth than do policies which more directly influence private wages. Given the dominant position of the public sector in the modern sector in most African economies, we need to know more about the determinants of public sector performance. The role of wage and employment policies in improving the efficient use of labor and other resources in government and public enterprises, therefore, stands as a research priority.

Given that this paper has been written for a Workshop on employment research, the pronounced public sector orientation of the paper requires some further explanation (if not defense). On empirical grounds, wage employment in African economies is going to continue to be dominated by public employment for at least the medium term. This will be true since the government service is not likely to shrink, and the privatization of parastatals is not likely to proceed rapidly. Even if future incremental employment growth occurs in wage and non-wage paying private establishments, the public sector will continue to be a key player in determining labor demand. If this position is accepted then the critical question becomes, what labor market policies

and/or actions by the public sector appear to be most significant in terms of influencing overall economic performance and, hence, employment growth? This paper argues that traditional ways of relating government policies to wage distortions may be both inappropriate and in need of empirical and theoretical revisions.

Before proceeding, it should be noted that the regional focus of this paper is based on the degree to which wage distortions, and the policies which give rise to them, are cited as policy areas in need of reform in Africa. The structure of most African labor markets, characterized by relatively small wage sectors dominated by public employment, also differentiates African circumstance from those in Asia and Latin America. However, those familiar with Latin American economies are likely to see significant parallels with African experience. The claim of "high" wages maintained by institutional forces, especially by government policies, may be as common in Latin America as it is in Africa.<sup>1</sup> Such concerns are less frequently voiced in the Asian context. Nonetheless, even South Korea raised alarm over "high" wages in 1979 to 1981 as price inflation rose substantially and export competitiveness was in doubt. While much of the attention of the remainder of this paper is on Africa, it is likely that the issues raised have relevance to other regions.

The paper is organized as follows: Section II evaluates the conventional wisdom on "high" wages in Africa and finds that prevailing opinions lack a consistent framework in which to interpret information on wages and employment. Section III offers suggestions on the type of analytical frameworks needed to properly assess the impact of government wage and employment policies. In particular, there is a need to gain a better understanding of the interactions between external events and domestic wage and employment policies and institutions. In addition, domestic frameworks, which account for the interactions between public and private sectors, are needed to evaluate the consequences of government interventions. Section IV challenges the empirical claim of "high" African wages by documenting the real pay adjustments of government workers over the past decade. A set of "new" stylized facts is presented which raises the issue of how government pay and employment practices may contribute to poor government performance in Africa. Section V concludes the paper by summarizing research priorities.

## II. "ARE WAGES IN AFRICA TOO HIGH?": THE CONVENTIONAL WISDOM

The problem with conventional wisdoms is not only are they usually wrong, but it is often difficult to prove that a particular position is, in fact, the conventional wisdom. Therefore, at the risk of creating a straw man in the name of a conventional wisdom, consider the following representative quotation on prevailing wages in Africa.<sup>2</sup>

African wages are high compared with those of Asia. An ILO survey in 1979 showed that the median wage for textile workers in 10 African countries was 50 percent higher than in Pakistan and more than twice as high as in Bangladesh. Higher African wages reflect both government wage policy, which in many countries sets industrial wages above the level they would otherwise be, and better opportunities for agricultural employment.

- World Bank (1981)

If this quotation captures the conventional wisdom about wages in the modern sector in Africa, then the prevailing opinion is that wages are too "high". But too "high" relative to what?

First, government interference is said to generate wages that are too "high" relative to some international standard. The claim, presumably at prevailing exchange rates and for similar labor skills, is that African wages exceed Asian wages. Second, the mechanism which produces the loss in international competitiveness is government wage and employment policy which creates a wedge between wage rates and the opportunity cost of labor. Analogous to the standard treatment of minimum wages, what seems to be the issue is that firms hire according to value of marginal product criteria, but pay more and employ fewer than would be the case if interventions did not constrain the labor market from clearing. Hence, employment growth is impaired and resources misallocated.

These interpretations do not exhaust the list of possible, and sometimes voiced, accounts of "high" wages in Africa. Wages may also be considered "high" with regard to prevailing wage/rental ratios, where the source of the factor price distortion lies in capital not labor pricing. Or, "high" wages may refer to a particular disaggregation of the wage structure, including the common rural/urban distinction, but also including formal/informal, public/private, big firm/little firm, and unskilled/skilled worker differentials. Lastly, some critics claim that public sector wages may exceed worker productivity, that is, wages in excess of marginal if not average products. Such an outcome implies a component of compensation is either a transfer payment or economic rent which is earned by public

workers, perhaps, as some sort of political payoff. This view is consistent with another conventional wisdom, namely, that government employees are "not worth what they are paid".

What seems common to all these interpretations of "high" African wages is the presence of distortionary government policies. What these analyses lack, however, is a clearer statement of what these policies might be and, more importantly, how the market responds to these interventions. What is, therefore, troubling about the conventional wisdom is not only that available evidence may not support its contentions, but that the lack of a coherent framework limits meaningful interpretation of available wage and employment information. Research which helps provide such a framework for evaluating labor market outcomes in African economies is clearly needed, as is more effort to secure better evidence on wage and employment developments. The combination of a meaningful framework for analysis and better information should contribute to improved policy guidance in getting labor market prices right and subsequently improving employment outcomes.

### III. FRAMEWORKS OF ANALYSIS

#### A. An International Framework

Part of the conventional wisdom on wages in Africa is that they are "high" relative to Asian wages. While the evidence is more anecdotal than systematic, it nonetheless captures a frequently voiced concern linking domestic labor costs with external performance. What can we conclude from a comparison of African and Asian wages? It is correct to infer that this international wage ratio is both bad for African economies and the result of inappropriate government wage and employment policies?

Simply because African economies tend to be as poor or poorer than the Asian economies they are compared to, need not imply that African wages should be relatively lower. International trade theory suggests a factor endowments approach to thinking about relative factor prices and international competitiveness. Such a framework, in the absence of theoretical factor price equalization, would predict that relatively labor abundant Asia would exhibit, relative to land abundant Africa, lower not higher Asian wages, ceteris paribus!

The point of this criticism of conventional international wage comparisons is that we do not know what the "true" relationship between African and Asian wages should be. We do not have a well articulated theory of international wage determination, and therefore, cannot predict the impact of domestic wage and employment policies on international competitiveness.

In linking labor market policies, institutions and outcomes with external performance, we must be clear on our objectives. We should not be trying to make international wage comparisons for the purpose of identifying undertakings in which particular economies have a comparative advantage. Our predictive tools are not up to resolving such micro-level questions of industrial policy.

A more promising direction of research might consider how national labor markets respond to external shocks. For example, how do labor market policies and institutions constrain internal adjustments in response to stabilization programs? Is it the case that real wages and employment levels easily adjust to, for example, devaluations, or do indexation systems, either implicit or explicit, "sterilize" adjustments in parts of the labor market? Answers to such questions could improve the use of wage and employment policies as part of the policy package to achieve structural adjustment.

In order to address such questions, research could proceed along a number of lines. Open economy macroeconomic models might be employed, however, to date, such models have not sufficiently developed their labor market components. Existing models do not offer much insight into how wages and employment adjust to external events, nor do they

accommodate the disaggregation which is needed in studying the labor market. In terms of empirical research, comparative studies of recent country experience could be undertaken. Since much of the developing world has faced similar external shocks over the past decade, information could be gathered on how labor markets and labor market policies contributed to the adjustment process in different settings.

#### B. A Domestic Framework<sup>3</sup>

We have already seen that there is widespread belief that government wage and employment policies contribute to wage distortions in African economies. This belief has a long tradition in the development field. Todaro type models of migration rest on assumptions of "high," rigid and institutionally determined wages in the modern sector.<sup>4</sup>

Something that is troubling about this approach is that government actions are assumed not analyzed. While it is undoubtedly true that government wage and employment policies contribute to distortions in the labor market, alternative forms of government intervention need to be more systematically analyzed. Two-sector models of the labor market, which have a long history of application in both development and labor economics, can be further developed. Depending on purpose, different "cuts" of the labor market can be considered: urban/rural; and within the urban sector, formal/informal; and within the formal, public/private. By way of example, let us consider a further examination of the labor market interactions between the public and private sectors in the formal economy.

Government wage and employment policies directed at workers in the formal sector can be divided into two categories. The first set of policy actions can be thought of as attempts to "fix" wages in private, wage-paying establishments. Such policies include minimum wage orders, mandatory pension laws, severance pay obligations, etc. The power of industrial courts in settling wage disputes, or government restrictions on terminating workers are additional examples of policies which may raise the effective wage private employers must pay. Concern over wage "fixing" policies stems from a belief that government will use such policies to impose "high" wages on the private sector.

While provisions for wage "fixing" exist in African economies, for example, minimum wage regulations are common, attention is more often drawn to the second category of policies, namely a government's pay and employment practices toward the public sector's own work force, including civil servants, military personnel and employees of public enterprises. The relevant practices may include the setting of salary scales and structures; the use of permanent versus temporary staff; the composition of the compensation package, especially the provision of government housing; the degree of job security via tenure systems; and, the use of guaranteed employment schemes for graduates of particular types or levels of schooling. Especially in economies, common to Africa, where public employment dominates formal employment, decisions

regarding public sector pay and employment will significantly influence a range of labor market outcomes. The often voiced concern over wage distortions appears to be that the government will offer its own workers "high" wages, which then spill-over and distort wages in the non-public sectors of the economy.

But what distortions and resulting inefficiencies should we be concerned with and how do government pay and employment decisions determine these distortions? The view that private employers, since they represent a small share of all wage employment, simply follow government pay decisions and adopt rates set by the "wage leader" does not make sense unless wage "fixing" policies or particular labor supply responses are also assumed. Private agents, concerned with making profits, should seek to minimize labor costs regardless of the government pay offer.

If one adopts a market framework, the range of interactions between public decisions and private outcomes becomes clearer. As is suggested elsewhere (see Lindauer (forthcoming)), attention to public sector pay and employment practices should probably focus on:

- o potential "crowding-out" effects if the expansion of government employment draws scarce labor skills away from private employers; and,
- o the relationship between government wage and employment decisions and the efficient use of public funds.

With regard to the latter, examples of inefficient government pay and employment practices might include: trading off of lower wage offers in order to expand public employment opportunities; compressing the government salary structure leading to skill-mix imbalances; and, increasing the share of wage bill expenditures at the cost of complementary non-labor inputs. (Empirical evidence on these points is presented below.)

The deterioration in government performance in Africa raises the question of the relationship between government pay and employment practices and the provision of publicly produced good and services. Poor performance by the public sector may have as much to do with the inability of the private sector to expand output and employment, as do the more often assumed direct spill-over effects of government pay and employment levels on private sector wages.

#### IV. "ARE WAGES IN AFRICA TOO HIGH?"--NEW EVIDENCE

To this point, this paper's major challenge to the conventional wisdom has been the lack of an analytical framework which establishes the connections between policy actions and market outcomes. Another challenge is that its set of stylized facts are contestable on empirical grounds. In particular, the pay comparisons which support the view that wages in Africa, especially in the public sector, are too "high", need to be reassessed, especially in light of the harsh macroeconomic conditions most Sub-Saharan nations have faced over the past decade. This section reviews recent empirical evidence, and draws attention to the policy issues which follow from a proposed set of "new" stylized facts.

The notion that the public sector offers "high" wages in African economies can be traced to the immediate post-colonial period. It is believed that political expediency translated prevailing colonial/European pay structures, responsive to both expatriate reservation wages and rent-seeking behavior, into wage scales for newly independent, African nationals.<sup>5</sup> Whether such distortions in the relative wage structure have persisted for 20 years or more remains an open empirical question, greatly handicapped by a lack of micro-level data.

In order to understand what has been happening to the urban wage structure, especially the role played by government pay and employment policies, we turn to evidence from some recent country studies.<sup>6</sup>

The dominant position of public employment in the wage paying sectors of African economies is well established. As indicated in Table 1, public employment averages close to two-thirds of all jobs in the formal economy. Furthermore, this total tends to be evenly shared between employment in government and parastatals. Public enterprises are also the source of the fastest growth in wage employment for all nations for which we have information. The growing importance of parastatal employment signals a research priority on public enterprise wage and employment behavior, and, more generally, on issues of intra-public sector wage and employment determination.<sup>7</sup>

While the public/private structure of employment appears similar across many African nations, the same is probably not true of government wage policy. Based on admittedly weak data (see Table 2), the structure of public sector wages shows considerable cross-country variance. In terms of the internal government pay structure, the ratio of senior staff positions to unskilled workers is almost 25:1 in Malawi, while in Zambia this ratio falls to 7:1. Other countries lie in-between. As an index of the relative position of government pay in the economy, government messenger salaries can be compared to national per capita income. The "high" wage position of Liberia, 4.2:1, is in marked contrast to the Sudan, 0.6:1. Clearly these outcomes are the result of differences in labor endowments as well as government policies. But the extent of variance suggests that the presumption

Table 1. Trends in Parastatal Employment

Country	Employment		Growth Rate (percent/year)
	('000)	(%)	
<u>Ghana</u>		1970 <sup>a/</sup>	1970-79
PARASTATALS	134.2	(33.7)	} 2.49
Government	153.8	(38.6)	
Private	110.0	(27.7)	
Total	398.0	(100.0)	2.15
<u>Kenya</u>		1983	1970-83
PARASTATALS	256.2	(23.4)	6.56
Government	271.6	(24.9)	5.51
Private	565.5	(51.7)	2.75
Total	1,093.3	(100.0)	4.15
<u>Malawi</u>		1980	1970-80
PARASTATALS	41.2	(11.2)	11.24
Government	76.4	(20.8)	4.50
Private	249.7	(68.0)	10.04
Total	367.3	(100.0)	8.71
<u>Nigeria</u>		1981	1977-84
PARASTATALS	550.9	[23.9] <sup>b/</sup>	13.96
Government	949.0	[41.1] <sup>b/</sup>	13.77
Private	n.a.	[35.0] <sup>b/</sup>	n.a.
Total	n.a.	(100.0)	n.a.
<u>Tanzania</u>		1978	1970-78
PARASTATALS	177.5	(33.1)	13.47
Government	208.4	(38.9)	3.75
Private	150.0	(28.0)	-0.50
Total	535.9	(100.0)	4.53
<u>Zambia</u>		1980	1975-80
PARASTATALS	136.4	(37.9)	3.26
Government	135.8	(37.8)	1.70
Private	87.3	(24.3)	-6.21
Total	359.5	(100.0)	-0.09

Notes

a. A recent study, World Bank (1985), suggests that the parastatal employment share for 1970 is likely to be an underestimate of the situation in 1979.

b. Based on independent estimates of private wage employment. See Suebsaeng (1984).

Source: Ghana: Labour Statistics, Statistical Reports Series III; Kenya: Statistical Abstract; Malawi: Reported Employment and Earnings Annual Report; Nigeria: Suebsaeng (1984); Tanzania: Survey of Employment and Earnings; Zambia: Monthly Digest of Statistics.

Table 2: Cross-Country Comparisons of Government Pay and Employment Policy Outcomes

Country	GNP per capita (US\$, 1983)	Government Salary Structure			Government Employment per 1,000 inhabitants	
		$S^{Sr}/S^{Unsk}$	$S^{Univ}/S^{Unsk}$	$S^{Unsk}/(GNP/N)$	Established Posts	Total Budgeted Positions
	(1)	(2)	(3)	(4)	(5)	(6)
Liberia	480	n.a.	2.8 (1983)	4.2 (1983)	19.1 (1981)	19.8 (1981)
Malawi	210	24.9 (1984)	9.2 (1984)	1.2 (1982)	6.8 (1983)	n.a.
Nigeria	770	9.2 (1982)	2.6 (1982)	2.6 (1982)	10.8 (1981)	n.a.
Senegal	440	n.a.	3.1 (1980)	2.4 (1982)	7.0 (1984)	9.5 (1984)
Sierra Leone	330	11.3 (1980)	n.a.	1.8 (1980)	n.a.	n.a.
Sudan	400	9.3 (1984)	2.6 (1984)	0.6 (1983)	7.8 (1983)	13.6 (1983)
Zambia	580	6.9 (1983)	2.7 (1983)	2.0 (1983)	13.2 (1983)	21.2 (1983)

Source: Lindauer, Meesook and Suebsaeng(1986)

Notes:

Definitions

A. Government Salary Structure

1.  $S^{Sr}/S^{Unsk}$ : The ratio of starting basic salaries of senior government officials to the starting basic salaries of the lowest-paid regular government employees. Given different bureaucratic organizational forms, these occupational categories are not identical across countries. An attempt was made to keep categories as uniform as was possible. Senior officials referred to the following: Malawi - Undersecretary; Nigeria - Permanent Secretary; Sierra Leone - Deputy Secretary; Sudan - Deputy Undersecretary; Zambia - Undersecretary. Unskilled categories referred to the lowest-paid regular government employee, usually associated with the occupation messenger.
2.  $S^{Univ}/S^{Unsk}$ : The ratio of starting basic salaries of university graduates to the starting basic salaries of the lowest-paid regular government employees. For Malawi, Nigeria, the Sudan and Zambia the entry position for university graduates refers to administrative positions; for Liberia it refers to starting salaries for those with a B.A./B.S. in Education; for Senegal it refers to the lowest salary a university graduate receives upon entering government service.

B. Government Employment

3. Established Posts: Unless otherwise noted, refers to budgeted posts for regular civilian employees. Note that this is a crude index of actual employment since budgeted positions often remain unfilled. For Senegal, Nigeria and Liberia, however, the numbers refer to actual, not budgeted, positions. In Nigeria employment includes all levels of government.
4. Total Budgeted Positions: Differs from established posts in that nonregular, usually casual, employees are also included. Casual employees are included in terms of full-time equivalents. For Liberia and Senegal numbers refer to actual employment; for other countries the data refer to budgeted positions. In the Sudan the distinction between established posts and total budgeted positions is more complex involving distinct treatment of casual labor and of regional as opposed to central government employees. (See Background Paper No. 5 for details.)

Sources:

- A. GDP per capita: World Development Report 1985, Table 1. In order to compute the ratio in column (4), GDP per capita figures expressed in U.S. dollars were converted to local currencies using the annual average official market rate as reported in International Financial Statistics, various years.
- B. Population: World Development Report, various years.
- C. Government Salary and Employment Data: Sierra Leone - "Sierra Leone: Prospects for Growth and Equity," World Bank Report No. 3375-SI; for all other countries, see Tables 1 and 3.

that all of Africa pursues the same set of distortionary government wage and employment policies is not well founded. Sensitivity to these cross-national differences will be required for informed policy advice.

These differences aside, the economic contraction being experienced by most African countries has been associated with a general decline in real incomes, reflected in negative rates of growth in real GDP/capita since the late 1970's (see Table 3). The government sector has not been spared. In fact, government workers have probably absorbed a disproportionate share of the adjustment to lower national incomes. This is demonstrated in Table 3, which records the rates of growth in basic starting salaries for government workers in a cross-section of African economies. In many countries and for most levels of civil servants, salary declines in real terms have been significantly greater than the fall in the countries' real per capita income. The most extreme cases of eroding public sector compensation are Uganda and Ghana, where real basic starting salaries had virtually disappeared by 1983 compared with what they were in 1976, and Sudan where by 1983 real basic starting salaries had fallen to around one-third of their 1975 level.<sup>8</sup>

Without implying that the earlier salary levels of any nation were at the "correct" level, it is worth emphasizing that very significant adjustments in the real wages of government workers have taken place. Furthermore, these adjustments are probably greater than those experienced in the rest of the wage-paying formal economy. In light of these trends, the depiction of government pay practices prolonging "high" wages in the modern sector stands in need of revision in a number of nations.

There are also some troubling consequences of the wage adjustment process which has taken place. Especially, in its extreme form (e.g. Ghana, Sudan, Uganda) real wage erosion has contributed to a major deterioration in government performance. This is occurring at a time when governments are being required to engineer large-scale programs of structural adjustment, but find themselves unable to finance the public administration needed to perform the task. The issue should no longer only be on whether government wage and employment policies are responsible for "high" wages. Instead, attention should be drawn to how such policies inhibit the performance of the government sector itself.

The relationship between government pay and employment practices, and economic performance can be further appreciated by considering some additional evidence. The pattern of real wage erosion in many countries has been accompanied by large scale compression in the public sector's wage structure. Administrative and professional workers have tended to absorb more of the adjustment to lower government resources. For example, in Zambia between 1975 to 1983, the ratio of undersecretary to laborer earnings in Zambia fell in half. These rapid changes have contributed to a reallocation of labor skills throughout

Table 3. Trends in Real Basic Starting Salaries in the Public Sector in Selected African Countries

<u>Country/Level</u>	<u>Years</u>	<u>Annual Rate of Growth (%)</u>	
		<u>Salary</u>	<u>Real GDP/Capita</u>
<u>Ghana</u>	1977-83		-4.8
Principal Secretary		-30.8	
Messenger/Laborer		-14.3	
<u>Malawi</u>	1975-83		1.2
Undersecretary		- 5.3	
Messenger		- 2.0	
<u>Nigeria</u>	1975-83		-2.1
Permanent Secretary		-13.9	
Laborer		- 5.5	
<u>Senegal</u>	1976-84		-2.6
With University Degree		- 3.7	
No Diploma		1.5	
<u>Sierra Leone</u>	1975-80		0.2
Deputy Secretary		- 9.1	
Messenger		0.7	
<u>Sudan</u>	1975-83		-5.2
Deputy Undersecretary		-14.4	
Unskilled Workers		-12.3	
<u>Uganda</u>	1976-83		-3.2
Permanent Secretary		-34.8	
Group Employee		-23.5	
<u>Zambia</u>	1975-83		-2.4
Undersecretary		- 9.5	
Laborer		- 1.6	

Source: Lindauer, Meesook and Suebsaeng (1986)

the urban sector, generally away from government toward public enterprises and the private sector. Whether this is a desirable reallocation remains unclear.

At issue is not the direction, but the extent of wage compression. It is possible that in many countries skill, education, and occupation differentials in the 1960's and 1970's were too wide. Certainly, the rapid growth in education throughout Africa suggests that the variance in modern sector wages should have fallen over time. But the degree of wage compression in specific countries may be contributing to declining economic performance by changing the skill mix in the public sector, encouraging "brain drain", and generally decreasing incentives to acquire human capital.

Government employment and expenditure policy has also exacerbated problems of public sector performance. In many countries, government employment has expanded rapidly (e.g. Ghana, 1975 to 1982, a 15%/annum increase in budgeted positions; Nigeria a 8.6% annum increase over the same period.) Such expansion, in part, represents a trade-off of jobs for wages. In other cases, it has meant a trade-off of labor for non-labor inputs (e.g. in Liberia the share of public revenues devoted to wage and salary payments increased from 36% to 66% in four years!).

The "new" stylized facts about government wage and employment challenge some of the conclusions of the conventional wisdom. Certainly major wage adjustments have taken place since the immediate post-Independence era. "High" wages do not appear to accurately portray government pay at many occupational levels, in fact, for various occupations government pay may now be too "low". Government practices have often substantially altered the skill and input mix of public production. Increasing inefficiency in the use of scarce resources with the public sector has probably been the result.

## V. RESEARCH SUGGESTIONS

Throughout this paper, issues in need of further research have been identified. In this section some of these points are summarized and some additional topics proposed.

### A. Frameworks of Analysis

Government interventions in the labor market, including policies designed to "fix" private wages and the pay and employment practices of the public sector itself, are often cited as responsible for wage distortions in the labor market. In order to better understand the impact of such policies requires improved frameworks of analysis. The list of needed improvements includes more explicit account of the interactions between public and private sectors in the labor market, especially in those situations where the government is a "large" employer; and greater disaggregation to account for differential behavior across skill classes. Similarly, the development of analytical frameworks which examine the interactions between external shocks and wage and employment policies are needed. Such models may facilitate our understanding of the process of structural adjustment in light of the constraints imposed by prevailing labor market policies and institutions.

### B. Government Performance

The continuing failures of the public sector throughout the developing world, especially in Africa, suggests a need to examine the determinants of government performance. Given recent trends in public sector pay and employment, the linkages between compensation practices and performance should be investigated. While sound public administration involves far more than appropriate compensation policies, governments need to take account of the responsiveness of work effort to wage changes, and the varying market conditions of different types of labor skills. At issue is not only the efficient use of scarce resources under government control, but the ability of government to provide public goods and services to improve performance in the private sectors of the economy.

Some specific research suggestions include the following:

- o The impact of wage compression in the government sector on the resulting skill mix in government production;
- o A review of alternative programs to facilitate reductions in the size of government employment;
- o An examination of the composition of compensation packages, especially such non-wage benefits as government provided housing, and its implications for individual performance;

- o The development of financial analyses which will permit governments and external agencies to monitor the growth of total wage bill expenditures;
  - o A review of existing public sector pension systems, many of which are not fully funded and may significantly add to public expenditure liabilities in the near future.
- C. Pay and Employment in Public Enterprises

Public enterprises have grown to represent a major feature of the Third World economic landscape, especially in Africa. The improved performance of these enterprises is key to the revival of the modern sector. Little, however, is known about the relationship between the wage and employment practices and subsequent inefficiencies of these enterprises. In some cases widespread "featherbedding" and redundancy coexist with shortages of critical labor skills. Significant pay advantages for enterprise workers over government and private sector counterparts may be earned regardless of enterprise performance. Whether or not public enterprises are privatized in the medium term, the wage and employment behavior of these institutions warrants research attention.

## Notes

1. Some very recent studies of Chile and Mexico by Edwards (1986) and Gregory (1986) share much in common with the issues raised below.
2. From World Bank (1981), page 92. Other quotations which echo the conventional wisdom follow:

The reasons for the existence of wage levels, especially for unskilled labor, which are too "high" are mainly institutional. In some countries, and at certain periods, trade unions play some role. But the major factor is government policy, and the ideological or political ideas which guide it. Government is a major influence on wage levels and structure in most LDCs, by its wage decision with respect to government employees, and in its role as regulator through minimum wage policies, wage boards, Industrial Courts, etc.

- Elliot Berg (1970)

Price adjustments and market deregulation can go only part of the way to correct the urban bias [in African economies]. Personnel policies in the public sector must also change: they influence urban earnings because the government and public enterprises are the largest employers in most countries. Public sector hiring and wage policies have inflated wages in many cases and left them out of line with productivity and labor costs in other developing countries. Although earnings data are poor and difficult to compare between countries, indicators for selected African and Asian countries, reveal that government and urban wages in low-income Africa are relatively high. This salary structure was adopted at the time of independence and then maintained in many African countries through most of the 1970s; it must be adjusted to reflect current budgetary realities.

- World Bank (1986)

Similar views are expressed in Frank (1968). Further discussions of government wage policy and urban wage determination can be found in Bruton (1974), Gregory (1975) and Webb (1977).

3. This section is drawn primarily from Lindauer (forthcoming). This work was undertaken as part of a World Bank research program, under the direction of the Country Policy Department, on government wage and employment policy in Africa. The views expressed, however, should not be attributed to the World Bank or its affiliated organizations.
4. See Todaro (1971). See also the discussion by Kannappan (1983), Chapters 1 and 4.

5. See Weeks (1971) and Abdin et al. (1983).
6. Most of the empirical results which follow are based on time series evidence drawn from a number of country studies as reported in Lindauer, Meesook and Suebsaeng (1986). (The statements of note 3 apply to this work as well.) Lindauer (1981) presents some additional background evidence. Empirical studies which focus primarily on cross-section comparisons of individual public/private pay differentials in Africa include Johnson (1971) on Kenya, Lindauer and Sabot (1983) on Tanzania, and Knight and Sabot (forthcoming) on Kenya and Tanzania. Lindauer (1986) summarizes recent evidence for a number of countries.
7. The specific issue of parastatal compensation policy is taken up in Lindauer (1986). This paper contains a bibliography of the limited literature on this subject.
8. It could be argued that basic starting salaries are a poor index of total government worker compensation. However, a more complete accounting of official total compensation; including basic wages, fringe benefits (including housing), progression up existing salary scales, and expected tax payments; shows that the results on declining real salaries are robust. See Lindauer et al. (1986) for further discussion.

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EMPLOYMENT RESEARCH PRIORITIES

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## INTRODUCTION

At the aggregate level employment policies are often by-products of general policies affecting economic growth. We can expect the rate of growth of employment to be positively related to the rate of growth of output, but the qualitative value of the relationship, called the employment elasticity, will depend on the development strategy. In general the objective of development strategy is to maximize the value of the employment elasticity without depressing the potential growth rate of output. In practice a trade-off between the two objective may exist. The economist's role is then to identify key elements in the strategy when the potential conflict is very small. This is the importance of studying the pattern of absorption of labor with economic growth for a group of economies showing some common characteristics. Analysis of recent trends in the structure of employment will reveal which sectors have been particularly successful in increasing employment with rising incomes, and what development policies have been particularly successful in this respect.

The observed pattern of labor absorption is the joint outcome of demand and supply factors in the labor market. Aggregated demand for labor must equal aggregate supply in the labor market over any period of time. But the way the market clears - at what pattern of wage rates and at what levels of unemployment - depends on the structure and functioning of labor markets. This is where specific government labor market policies are relevant - as they relate to economic as well as other institutional factors affecting the market. In this paper we concentrate attention on these issues of the structure and operation of labor markets. The problems of aggregate demand and supply of labor are discussed in Part III briefly in the light of recent experience and the major points emerging from the analysis of labor markets in Parts I and II.

Parts I and II analyze the salient features of the working of rural and urban labor markets in turn, and also discuss the more important government policies which affect the working of these markets. A basic difference between the rural and urban labor markets might be noted at this stage. The rural sector uses self-employed labor to a much larger extent. Secondly, the greater importance of agriculture in this sector implies that land is a more important cooperant factor used with labor, and thus the operation of the leasing market in land profoundly affects the way the rural labor market works. The importance of interlinked factor markets is, therefore, much more pronounced in the rural sector. Also much of income generated in this sector is in the nature of mixed income - a joint return to a number of factors of production. For this reason, and because of the dispersed nature of numerous economic units, specific labor market policies per se are of less importance in the rural economy than in the urban sector. But price policies affecting outputs and inputs have profound impact on rural labor markets.

The last point brings us to a wider issue which has implications for the analysis of both rural and urban labor markets. We have seen that long-run development strategies chalk out the trend in aggregate labor demand over a number of years. Over a shorter time horizon these

macro economic policies have an impact on labor markets which may be as important in determining the course of employment and wages in the future. The package of government policies as they affect the labor market is considerably wider than direct interventions in labor and related factor markets. But not much is said on these macro issues in this paper.

PART I

The Rural Labor Market and Policy Intervention

### A. Introduction

This part analyzes the salient features of the working of rural labor markets. The treatment is highly selective, concentrating on the most important outcomes which have suggested the need for policy intervention. Two issues are of primary importance: that of disguised unemployment which is associated with the alleged phenomenon of underutilization of labor; and that of "dualism" which apparently leads to the underutilization of land in the rural economy. Both problems arise from market failure (i.e. the inability of factor markets to function in a way which allows freely fluctuating factor prices to equate supply with demand). But the types of market failure involved here do not arise from institutional intervention. Rather they are the outcome of certain basic features of the rural economies of LDC's. Accordingly there is a prima facie case for policy intervention for correcting the deficiencies in the working of factor markets.

We should also note that direct intervention in the labor market in rural economies is of limited interest. The market for hired labor is highly dispersed, and except for the large scale sector, is casual in nature involving many employers per worker. Wage regulations are impossible to enforce in such markets. Even if it might be theoretically possible for the state to influence wage contracts in the large scale sector (where a limited number of employers deal with a large body of workers) the legal and administrative organization is generally much weaker in rural areas making it difficult to enforce wage legislation. Finally, in many economies hired labor is of limited significance, a majority of the agricultural workers are self-employed. Direct state intervention in rural employment is possible. Experiments with rural public work schemes have been carried out in some countries.

Intervention in the markets for other agricultural inputs - seeds, fertilizer, credit or agricultural machinery - is, however, quite common. Policies which influence the prices of these inputs, either directly or through taxes and subsidies, have substantial impact on labor markets in the rural areas. This is particularly true in LDC's because of the importance in the rural sector of such economies of inter-linked factor markets (see below).

Lastly, we should note that governments influence prices of agricultural outputs directly through marketing boards or taxes and subsidies. Macro-economic policy, particularly with respect to the exchange rate and budgetary balances, also affect the relative prices of rural products, sometimes profoundly. These effects on the rural terms of trade induce changes in total income as well as its distribution in the rural sector.

### B. Disguised Unemployment

The hypothesis of disguised unemployment has been presented in the context of a family farm in which there is income as well as work sharing among the members of the family. "Excess" labor may be supported in a farm with every member sharing in the total family pot. The opportunity cost of some workers may be close to zero, because their transfer to work

outside the farm will lead to other underemployed family workers compensating for the lost labor time, and the loss in output will be minimal.

Quite apart from theoretical questions about the objective function of such a model farm, the problem cannot be analyzed without reference to wage labor. A large number of family farms make use of hired labor. It is important to note that the use of wage labor is not confined to large farms. Many small family farms supplement their own labor input with casual daily workers during the busy season. Furthermore, a large proportion of farm workers offer themselves for work in the hired labor market, and augment the supply of labor offered by landless workers. In this scenario with family farms appearing as both demanders and suppliers of wage labor, it would seem that the going wage rate in the casual labor market would provide a floor to the marginal product of a day's work as far as farm family workers are concerned. No small farmer, with income not very much above subsistence, would surely pay a positive wage to a hired worker unless the latter's contribution to output is at least as much as the wage!

This consideration forces our attention to shift to the question: what determines the wage rate in the rural sector? Two alternative views of the market are possible.

- (a) If the wage is determined largely by the forces of supply and demand then the major proportions of the disguised unemployment hypothesis cannot be sustained. Even if the utilization of labor per worker appears to be low, (most of them working only a limited number of hours per week) the wage rate is established at a point where workers are willing to supply just as much work hours as they in fact, supply. The observed underutilization of labor is in the nature of voluntary unemployment. The withdrawal of some workers from the sector will cause the wage rate to increase, and other things remaining equal there will be a fall in output, and possibly an increase in consumption (or wage bill) in the rural sector.
- (b) Alternatively the wage rate in the areas with plentiful supply of labor may be determined by subtle social and economic forces which keep it at a level at which workers are willing to supply more work hours than is in fact demanded. The available demand is rationed among the job seekers (on a random or purposive basis) so that there is some involuntary unemployment at the going wage. Withdrawal of workers from the rural sector up to a point will not have any effect on the wage rate. Output will not fall and each remaining worker will get a larger number of hours of work at the unchanged wage rate. Thus at least part of the disguised unemployment hypothesis (relating to output) is sustained, though the wage bill remains constant and there is no automatic increase in marketable surplus.

The choice between the two models of wage determination in agriculture is a matter of empirical research. We shall now briefly summarize the results from some of the studies on this problem.

Some detailed work on the determination of wage rates in India, and particularly in West Bengal, has been done by Bardhan (1984). In all the

samples studied by him the intervillage variations in wage rates even within a small region were very wide. For example, in the large scale survey of 500 villages in West Bengal, even when the sample was subdivided into four regions around 30 per cent of the villages in each region had a mean average wage for male casual workers which was 25 per cent above or below the over-all mean wage for the region in question.<sup>1</sup> Bardhan tried to analyze the factors determining the variations in wage rates both across villages and across individuals. In both sets of analysis the factors influencing the strength of demand for labor relative to its supply in the particular village were found to have significant effect on the wage rate. Thus the wage rate was "positively associated with productivity increasing factors such as normal rainfall, lower deficit in actual rainfall, use of nitrogenous fertilizers, and the relatively busy season of October-December, and negatively with the village unemployment rate".<sup>2</sup> The proportion of non-agricultural male workers in the village, used as a proxy variable for the importance of non-agricultural activities in the village, also had a significant positive effect on the wage rate, suggesting that in villages where non-farm work opportunities were important, farm wages were relatively higher, holding other factors constant. In the regression models fitted to the wage data for individual workers, age and education had significant positive effects as in the general human capital models. At the same time demand variables relating to the village characteristics were significant in the individual wage functions.<sup>3</sup> The dependent variable to be explained in these regression equations was the money wage rate. However, Bardhan tried to capture the effect on variations in the real wage rate by including an additional explanatory variable - the food cost of living index in the district (1977 value with base 1960). This variable had a significant negative effect on money wages, i.e., in areas of low food cost increases, money wages were relatively higher, after allowing for the influence of other variables. This suggests that inter-village differences in real wages tend to be larger than differences in money wages.<sup>4</sup>

The importance of the demand and supply variables in the explanation

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- 1 Bardhan (1984). Table 4.1, pp. 48-50. The sample was from the 27th Round of the National Sample Survey, covering 8,500 rural workers.
  - 2 Bardhan, Op. Cit., p. 53. The results of the regression model are given in Table 4.4, p. 52.
  - 3 Examples are normal rainfall per year in the village, (positive) percentage deficit in actual rainfall per normal in the year in question, amount of fertilizer used per unit of cultivated land etc. See Bardhan, Op. Cit., Table 4.3., p. 51.
  - 4 Bardhan ascribes this effect to a demand-based factor since the food cost-index is generally higher in areas of low productivity, and the latter in turn is associated with low wage rate. (Op. Cit., p. 52).

of wage variations support the view that the competitive model of wages is clearly relevant in Indian agriculture as it was seen to have been in an earlier study in Egypt.<sup>1</sup> But competitive forces provide only a part of the story. This is apparent from the set of considerations which follows.

- (i) We have seen that inter-village variations in money wages are large, and they are probably even larger in real terms. Even if the regression model is able to provide a satisfactory explanation of the inter-village variations in terms of demand-and-supply factor sit assumes that the village labor market is largely insulated. Migration from "tight" village labor markets to relatively "slack"<sup>2</sup> ones are not sufficient to iron out these large differentials.
- (ii) The explanatory power of the regressions, even when the supply-and-demand variables are significant with the expected sign, is generally quite low. The proportion of the variance explained (as given by the value of the  $R^2$ ) is generally of the order of 12 percent. Evidently many factors other than those included in the regression models enter into the determination of village level wages.
- (iii) Apart from the apparent segmentation of the labor market by village boundaries, a very important feature of the rural labor market scene in India is separation by sex. Female workers generally are paid at a substantially lower rate than males. This comes through in Bardhan's regression equation of wage rates per worker in which the effect of the sex dummy is strongly negative.<sup>3</sup> More detailed village field studies have documented the importance of this phenomenon. Rudra reports that in a typical village in West Bengal separate daily wage rates are attached to specific occupations and seasons.<sup>4</sup> These wage rates are sufficiently stable to be generally known in the market and accepted by most employers and workers. The occupation and task-specific wage rate generally refers to a particular sex. Thus, for example, there will be a specific wage rate for a male ploughman in the busy season or a female weeder in the slack season, and so on.
- (iv) There is some suggestion that there is an element of monopsony in the market for daily labor in agriculture. Although many small farmers make use of hired labor Bardhan reports that in the West Bengal Survey of 1977 (the Bardhan-Rudra survey) in

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1 Bent Hansen (1969).

2 See Bardhan, p. 55.

3 Op. Cit., Table 4.3, p. 51. The coefficient for the female dummy had a value of -0.51, where the mean daily wage for all workers was 4.05.

4 Rudra (1982), Ch. 15, p. 333.

about 21 percent of the sample villages four or fewer employers accounted for most of casual labor employment, and in about 45 percent of the sample villages seven or fewer employers<sup>1</sup> accounted for most of the employment of casual workers. Collusion and/or wage "leadership" on the part of a few big landlords may be an element in the remarkable non-variability in wage rates offered to casual workers of a particular sex in a particular occupation season, and village, although inter-village variations are large.

- (v) Lastly, we come to perhaps the most important point bearing on the issue of the rural wage rate being an equilibrium market clearing wage. It has been maintained that if in voluntary unemployment is properly measured, it will be found to be a significant feature of many rural labor markets. The existence of a substantial part of labor willing to work more hours than they actually get at the going wage, of course, destroys the notion of the established wage as being a purely competitive one.

Before proceeding further we must discuss briefly the problem of measurement of unemployment. In developed countries labor force surveys seek to obtain information on the hours of work performed during the reference period, usually the previous week. When this distribution of workers by hours employed is compared to standard (or normal) hours per week we get a complete picture of the overemployed, the underemployed as well as the wholly unemployed. This procedure is feasible because most market work is work as wage employment. But in peasant agriculture much work in gainful activity is in the nature of self-employment even among those who contribute substantially to the hired labor market. Respondents to questionnaires typically report long hours of work in a variety of self-employed activities, but the intensity of our<sup>2</sup> hours' work in these activities is neither known nor possible to measure.

Household surveys seek to get at a measure of unemployment by obtaining information on (a) the number of days the respondent was trying to get wage employment and (b) the number of days he was successful. The ratio of the latter to the former would give the possibility of employment in the market (PME) over a specified period, and involuntary unemployment in the labor market is then given by (1-PME). Employing this methodology Ryan and Ghodake<sup>3</sup> found that in six villages in Central India in 1975-6 the unemployment rate was 0.19 for males and 0.23 for females.

The competitive model of wages can be reconciled with this evidence of a large unemployment rate even in the busy season if we hypothesize

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1 Bardhan, Op. Cit., p. 60, footnote 7.

2 Bent Hansen (1966) found a situation of "full employment" in terms of hours worked in Egyptian agriculture with a large proportion of the time reportedly spent in animal husbandry.

3 Ryan and Ghodake in Binswanger and Rosensweig.

that the observed unemployment is voluntary. This, of course, goes against the declared position of respondents. When they answered the question about the number of additional hours (or days) of work they were willing to work it was presumed that the desire for more work was at the prevailing wage rate. Furthermore, Bardhan makes the point that a majority of the households with a more than average incidence of unemployment in his sample were below the poverty line, landless (or with very small farms), illiterate and low cost - having none of the aversion to wage work which are generally associated with high-caste families. "We can hardly expect that this unemployment be voluntary or that the prevailing wage rate be below the minimum reservation wage of these households."<sup>1</sup> Bardhan reports the curious result from his work that a substantial proportion of the sample villages with a relatively high (more than 5 percent) rate of unemployment also had a higher average wage rate than the mean for the whole sample. It is evident that the market clearing model of wages does not explain the facts in rural India.

### C. Economic Dualism in Agriculture

#### 1. Introduction

Disguised unemployment discussed in Section II is the case of market failure in peasant agriculture which leads to the underutilization of labor. We will now discuss another important phenomenon of market failure which leads to the underutilization of land. The distribution of ownership of land is highly skewed in all LDC's - a small proportion of the population owning a large proportion of the cultivable area. This is as true of a densely populated area of Asia where the average size of ownership holdings is quite small - perhaps as little as 2-5 acres - as it is of Latin America where the average size of holdings is very large running into several hundred hectares. While the unequal distribution of land creates problems of equity it need not by itself affect the efficiency of the agricultural sector. If, for example, the technology of agricultural production in LDC's shows evidence of strong economies of scale the existence of large land owners may be beneficial to productions. But there is little empirical evidence for the existence of economies of scale in the farm sector.<sup>2</sup> Even in the absence of scale economies a skewed distribution of owned land need not affect efficiency adversely either (a) if labor (and other co-operant factors) are hired in large farms sufficiently to achieve approximately the same labor-land ratio in cultivation as in the small farms; or (b) if the rental market in land works well so that landless workers and/or small landowners are able to lease in land from the larger landlords to achieve an optimum land-labor ratio in the operational holdings. We shall develop the argument in this section that neither the labor nor the land market works

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<sup>1</sup> Bardhan, Op. Cit., p. 60.

<sup>2</sup> See e.g. Berry and Cline, pp. 5-7, and the references cited there. Also Brewster (1950).

well enough in the agricultural sector of LDC's for the optimum factor ratio to be achieved in either of these ways. The result is what has been discussed in the literature as economic dualism within the agricultural sector. Small farms with a relatively high input of labor (and a correspondingly high yield) per unit of land co-exists with a sector of large farms in which intensity of cultivation and land productivity are low.

## 2. Labor Market Dualism

Let us start with a certain distribution of operational holdings by size, however determined (the working of the leasing market in land which, given the distribution of ownership holdings is crucial, is discussed in the next section). In the absence of economies of scale farms of all sizes are faced with more or less similar marginal productivity schedule of labor. Thus for economic efficiency labor input should be applied to the point at which the marginal product of labor is equalized in the different size groups of farms. This implies that, land being the most important factor of production other than labor, the labor land ratio will be equalized across farms. The empirical evidence surveyed below, however, show that the input of labor is typically restricted in large farms, so that the labor-land ratio and the yield per acre of land are higher on small farms. The factors responsible for this misallocation of labor have been discussed under the general rubric of labor market dualism.

- (i) Labor used in peasant agriculture is a mixture of family and hired labor. The incentive problems in ensuring efficient use of labor are markedly different for the two types. Family labor as the residual element of the net farm income has strong incentive to work land on its own. Hired labor, typically used on a daily basis needs substantial supervision.<sup>1</sup> Thus as the size of the labor force in the farm increases the proportion of hired labor used increases resulting in increase in supervision costs. This is sufficient to increase labor costs with farm size even if hired labor is available in perfectly elastic supply at the same wage to all farms.
- (ii) In some parts of the Third World, mostly in Latin America we encounter very large farms. Labor supply to such farms will not be perfectly elastic. When large landlords in a given region possess monopsony power over the local labor market, the wage is pushed up with increase in employment. Such landlords will thus hire fewer workers than would a group of smaller competitive farmers operating in the same area.

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1 Incentive problems are less with piece-rate work. But piece-rate is a viable system of payment only when productivity can be directly related to the individual worker's effort, and the output can be measured unambiguously.

- (iii) Small farms supply labor to the hired labor market and it might be expected that this phenomenon would ensure equality of the marginal product of labor on family farms and the going wage rate. But frictions in the labor market might prevent this equation, and that for at least three reasons. First, in so far as the individual worker shares in the total family income equally with other members the supply price of his labor outside the farm is given by his average, not his marginal product (as long, that is, he is interested in personal rather than family welfare maximization). Secondly, a family worker is not certain of getting wage work outside his farm on any particular day when he offers his labor to the market. Thus in equilibrium the marginal product of labor in the small farm will be equated to the going wage multiplied by the probability of getting a day's work (where the probability is always less than one, and increases with the rate of unemployment in the area). Thirdly, if the daily wage rate in the labor market is held above the market clearing level by social custom or economic forces as discussed in Section II, there is an additional factor causing a gap between the marginal product of labor in small farms and the wage rate.

To conclude: agricultural labor markets work in a way which do not ensure equality in the marginal product of labor across farms of different size groups. In particular, the marginal product of family labor will be low in small farms, while in large farms the marginal product will be equated to the much higher wage rate (or in the monopsony case, to the marginal cost of labor). Further, the cost of labor will probably increase with the size of the labor force in the farm, so that we will observe a continuously declining labor-land ratio with farm size.

### 3. Imperfect operation of the Rental Market in Land

Imperfect operation of the labor market in agriculture is not a sufficient explanation for the divergence in the labor-land ratio between farms of different size, and the consequent underutilization of land in large farms. It is possible for adjustments to take place through the land market if the labor market fails. Even if we rule out land sales being a significant part of the rural economic scene because of capital constraints facing small holders, there is always the possibility of the large land owner leasing part of his underutilized land to the small holder burdened with a high labor-land ratio. For widely different factor ratios to persist there must be imperfections in the functioning of both labor and land markets.

It is clearly profitable for the large landowner to lease his land on a fixed rent contract if he is able to charge the economic rent and has freedom to repossess his land. Institutional and legal factors protecting tenant's security discourage fixed rent leasing. It may also be difficult for small farmers to lease in land on a fixed rent. They may have a liquidity problem since the rental is generally paid at the beginning of the crop year. More important, under the fixed rent system

the risks of production (which are very high in peasant agriculture) is borne entirely by the smallholder leasing in the land. The system of leasing which has evolved to share the risks of farming between the landlord and the tenant is that of sharecropping. Unfortunately sharecropping poses an incentive problem since only a portion (typically one-half) of the output is retained by the tenant. The problem is not as acute as under wage contract, since the tenant is rewarded partly in terms of his productivity. But in the absence of other constraints the tenant will restrict the application of labor and other inputs per acre of land to a level much less than under fixed rent. The landlord seeks to get round this problem by exerting his presence both in terms of supervision, and the provision of non-labor inputs (the costs of which are also sometimes shared under the agreement). Sharecropping is a compromise between the incentive problems under wage contract and the risk bearing problems under fixed-rent leasing. Correspondingly supervision by the landlord is less than under wage contract but more so than under fixed rent. It follows that in regions where adequate supervision by landlords is not possible, e.g. where absentee ownership is important, the leasing market may not work much better than the labor market.

Supervision problems under sharecropping are not the only reason for the leasing market not being able to equalize factor proportions across size groups of farms. The lack of well defined property-rights have been noted as being a major cause of the inadequate development of the leasing market in parts of Africa. The individual household traditionally had usage rather than ownership rights to the land. In such a system tenancy contracts are invalid because, by definition, the landlord is not using his land, and therefore forfeits his rights over land. At the other extreme, researchers have observed that in Latin America, in particular, land is often owned only partly for productive reasons. In countries with chronic inflation, landowner may find it attractive to hold land for speculative gain, or only to accomplish the "store of value" objective. They may also hold large areas of land for social control or political power. Such non-economic holdings of land will lead to its underutilization.<sup>1</sup>

#### 4. The Linkage of Credit and Land Markets

We have so far been discussing only two factors of production, labor and land. In agriculture a third important factor is capital - fixed capital needed for machinery, but perhaps more importantly working capital needed to finance inputs, storage and marketing. It has been observed widely that credit markets operate imperfectly in the rural sector of LDC's - large farmers have better access to credit and often

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<sup>1</sup> The literature on labor and land imperfections, and the resultant underutilization of land in large farms is extensive. For useful summaries consult on India, Sen (1975), on Latin America, Berry and Cline (1979) and on Africa, Collier (1983).

enjoy better terms. This is not necessarily due to discrimination based on costs, status, tribe or similar factors. It is an interesting part of the working of capital markets in an underdeveloped financial setting. The problem is that of the borrower being able to come up with a suitable collateral which protects the lender's income in case of default. Since owned land is the most important and in many situations the only possible collateral - the cost of credit falls with larger landholding. It is possible for landowners to advance credit to sharecroppers who own little or no land. In this case the collateral is the tenancy contract itself since it is possible for the landlord to enforce repayment at the time of the harvest sharing. Sharecropping thus provides a way of partially remedying the imperfection of the credit market by linking the credit and land markets in much the same way that it partly overcomes the problem of the imperfection of the labor market by linking the labor and land markets.<sup>1</sup>

Two conclusions follow. First, if there are strong legal or institutional constraints to large landlords obtaining credit at a relatively cheap rate and then passing them on to the tenants then there will be more maldistribution of capital in favour of large farms. Secondly, what happens to output or yield per acre on a large farm depends on whether capital is complementary to or substitutable for other factors (land or labor). The empirical evidence suggests that the substitutability of agricultural machines for labor is large, but not nearly so much for land. Thus the availability of cheap capital to large farms leads to a replacement of labor by machines without significantly increasing the productivity of land. The net result is often to accentuate the problem of dualism - crowding more labor in the smaller farm sector without ameliorating the problem of underutilization of land.

#### D. Research Needs and Priorities

The discussion of the rural sector has focussed on the importance of the failure of labor and land markets in achieving a trend towards equalization of factor-ratios across farm size groups. The loss in efficiency of the agricultural sector due to differences in marginal productivities of land and labor in farms of different sizes can be considerable. Distributional considerations are also important. Loss in income will be disproportionately severe for farm sizes which are significantly different from the mean. Thus both very small and very large farms suffer more than the average from factor market failures. Whatever happens to the Gini co-efficient the problem of poverty in the agriculture sector is accentuated.

1. Our insights into the working of rural labor markets are still based on a very limited number of village level studies in Asia. There is a clear case for support for both intensive field work at the

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<sup>1</sup> A useful summary of the main ideas in the discussion of factor market linkages in the rural economy will be found in Bardhan (1984), Ch. 12.

village level and analysis of already collected survey data on employment and wages in villages (as attempted by Bardhan for India). A major gap is the lack of longitudinal studies (in the same village or area) which are essential to throw light on how labor and land markets adjust to long term changes due to technical progress and population growth. Even if proper panel data are not available much can be learnt from repeat studies of rural areas which have already been studied.

2. At the operational level, national labor force and household surveys can be used more systematically to identify areas of the rural economy which seem to suffer from a more than average incidence of underutilization of labor and/or land. International agencies are in a particularly good position to suggest the way existing (or planned) national sample surveys can be used (or modified) to provide information on this issue.
3. The existence of disguised unemployment provides a prima facie case for a program of public works as one of the instruments for increasing the utilization of labor. Although widely advocated in the fifties and sixties rural public works policies have not always been as successful as might have been hoped.<sup>1</sup> Interest in these schemes have been revived with the increasing emphasis on food aid in recent years. A fresh examination of the experience with public works programs in different parts of the world seems to be a task of high priority.
4. Underutilization of land seems to be a particularly serious problem in Latin America, although the problem was first studied analytically in the Asian context. While land reform involving redistribution of land seems to be the obvious policy conclusion, it may be outside the scope of the agenda for research because of sensitive political considerations. But even in the absence of land reform much can be done by increasing the efficiency of the factor markets in the "non-reform" sector. Economists have from time to time pointed to the negative effects of government policies which have discouraged the leasing out of land, and also promoted socially suboptimal capital intensive methods in large farms. Examples include tax systems in Brazil which provide for excessive deduction of fixed investment expenditures in farms, subsidization of prices of farm machinery in many countries and provision of cheap credit which is used disproportionately by large farmers. A systematic study of government policies as they affect the working of rural factor markets in a few<sup>2</sup> selected countries of Latin America should provide a high pay-off.

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<sup>1</sup> A useful survey with many references is Manley and Costa (1974), Chapter 6. But this was done a decade ago.

<sup>2</sup> Squire (1981) wrote: "Studies of wage determination in Latin America, where land distribution is extremely unequal and many people are landless, would be of great value in this context, but such studies unfortunately do not exist." This statement is still true.

5. In sub-Saharan Africa historically the abundance of land is thought to have caused the non-development of rural factor markets (including land, labor and credit markets). As the land frontier is being reached and property rights in land are beginning to be established. But factor markets in the smallholder sector are very slow to develop - leading to the same phenomenon of widely different factor proportions in farms of different sizes.<sup>1</sup> The evolution of rural factor markets in Africa is an emerging area of study which will attract much research effort in the coming years.<sup>2</sup>

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<sup>1</sup> For a recent analysis on Kenya, see Collier (1983).

<sup>2</sup> The African "base case" is described in Binswanger and McIntire. See also Eicher and Baker.

PART III

The Urban Labor Market and Policy Intervention

### A. Types of Intervention

In contrast to the rural labor market it is possible for the government to act directly on wages and conditions of employment in a substantial part of the urban labor market. This is because in most LDC's the urban formal sector, where it is possible to enforce labor laws, is quite large. The following are the principal types of intervention:

- (i) Direct effect on wage levels, either through minimum wage legislation or through wage settlement machinery in which the state plays a significant role.
- (ii) Labor legislation affecting the conditions of employment, particularly the laws ensuring tenured status to regular workers.
- (iii) Public sector policies which not only determine the wages and employment conditions of its own workers but also affects the private part of the labor market because of its size.

A large number of developing countries have adopted minimum wage legislation. Unlike the normal practice in developed countries, the aim of such minimum wage legislation has often been rather more than setting a floor to the earnings of particularly low wage groups. LDC governments have frequently sought to increase wages in different sectors of the economy. But due to difficulties of enforcement the impact of the legislation has been mostly felt in the large scale formal sector. MW's may be set separately for different industries, regions and age groups. Systems of minimum wages are dominant in Africa, Latin America, the Caribbean and the Middle East. They are much less common in Asia. In India minimum wage boards are established to serve the purpose which they originally served in developed countries, viz, try to prevent wages in "sweated" trades from falling too low. Instead, wage determination in the large scale industries in India is the preserve of tripartite wage boards - consisting of representatives of employers, employees and governments: It is really a system of state supported collective bargaining. There is no minimum wage legislation in Hong Kong, Singapore and South Korea. In countries with extensive minimum wage systems a key issue is the provision for revision of wage rates. Formal systems of indexing wages to movements in price levels exist in many countries, and changing the rates of indexation by executive order is an important instrument of government policy.

### B. The Problems of Assessing the Importance of Institutional Factors in Urban Wage Differentials

The problem of sorting out institutional and economic factors in the study of wage differentials is complicated by the fact that large differential in wages are seen to exist even in the absence of overt institutional influence. Historical studies of urban labor markets have shown that even unskilled labor was paid at different rates in different

parts of the labor market in the early periods of industrialization when trade unions were not developed and the government's role in wage regulation was minimal.<sup>1</sup> A large wage gap between the urban and rural labor markets (in real terms) and the increase in wages level within the urban market by size of enterprise have been specially noticed. Such differentials are also part of the economic landscape in some contemporary LDC labor markets in which the role of institutions is very small.<sup>2</sup>

Institutional influence on wages, in other words, is superimposed on a pattern of wage differentials which exist due to the operation of economic factors. If we do not have detailed data on wages before and after the institutional intervention it may be a difficult task to evaluate the extent of the observed differential which can be ascribed to institutional rather than economic factors. Our judgment may have to be based on appreciation of the strength of the economic factors which cause differentials in wages to exist even in the absence of institutional influence. It is to a discussion of these factors that we now turn.

#### Economic factors causing wage differences

A major factor affecting wages is of course, the skill of the category of labor in question. It is therefore, normal in studies of inter sectoral wage difference to confine our attention to unskilled labor. But the quality of labor may and does vary with individuals even in a range of unskilled tasks. Age and sex are, of course, the most important factors which come to mind. But in some tasks requiring very little skill (e.g. messenger boys) education may be a factor in increasing wages as it is in the more skilled occupations. It is, therefore, customary to control for the standard human capital factors - sex, age and education - in comparing wages across sectors.

The earnings of unskilled labor, net of these factors, are often seen to vary by the type of establishment. In particular they increase with the size of firms, sometimes quite sharply, in a typical urban labor market. It is tempting to conclude that the low earnings prevailing in small firms in the informal sector of the market represents the more "competitive" wage as determined by the supply price of labor. But this view ignores the strong economic forces which cause wages offered by employers in free competition to increase with the size of firm. Three theories discussed in the literature are of relevance in explaining this phenomenon:

- (i) The different supply prices of temporary and permanent migrants, and the different mixes in which they are used in the small and large sectors;
- (ii) The wage-efficiency relationship.

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<sup>1</sup> Cf. Mazumdar (1973) on India, Minami (1970) and Saxonhouse (1976) on Japan.

<sup>2</sup> Cf. Luch and Mazumdar on Indonesia.

## (iii) Internal labor markets in the large-scale sector.

The three hypotheses are really complementary, and might apply sequentially in the course of the formation of a labor force in the factory sector of a developing country. We will discuss the first group as probably contributing to the establishment of a high wage sector in the first place.

(i) Temporary and Permanent Migrants

Two distinct types of migrants are attracted from rural to urban areas. There are migrants who come for short periods of their working life, usually without their families; they include seasonal migrants, those working to meet a specific income goal, and those wanting to survey the urban labor market without committing themselves to any long-term career there. Then there are migrants who spend most of their working life in the towns, even if they retain some links with their rural areas for holidays or retirement. They are mostly settled in town with their families. The supply price of the permanent (family) migrants is, for several reasons, higher than that of the temporary (lone) migrants.<sup>1</sup> First, the loss of income in the family farm due to the absence of an individual may be considerably less than the total farm income, because other family members are able to substitute for his labor on the farm. This is particularly true when the absence is during the slack periods in agriculture. Secondly, the earner-dependent ratio for a family is significantly lower in the urban sector in many LDCs because of the more limited role of women and children when compared to rural market activity. Thirdly, the cost of living in town for a family is higher not only because of higher commodity prices, but also because the person who has migrated with his family incurs the cost of finding for himself protection against old age, unemployment, and ill health -- protection that is ordinarily provided by the social security system in a developed country, and which the rural family would provide for the individual migrant.

Given this difference in the supply price of the individual and family migrants, if demand for labor in the urban market were undifferentiated, little family migration would take place as long as the operation of the agricultural economy allowed for a plentiful supply of individual migrants. But if employers perceived a strong link between stability and efficiency of labor in particular types of firms, the wage level would be set high enough to attract family migrants. In those types of firms or sectors where the link between stability and labor productivity is weak, wages would be lower, nearer to the supply price of individual migrants.

Organized sector firms using expensive machinery are likely to value stable labor more than firms operating at the lower end of the market. A

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<sup>1</sup> For the argument that follows it is not necessary to assume that all permanent migrants are family migrants. It is sufficient that a fair proportion are.

positive relationship between firm size and the wage level would then exist insofar as larger firms use more sophisticated technology. This will be particularly so when the labor force requiring new skills for modern large scale industry is being developed, and the cost of learning new work routines and skills is high. Once a stabilized labor force has been formed, it is not replaceable by the "floating mass", as was noticed in the history of textile labor in Bombay.<sup>1</sup>

(ii) The Wage-Efficiency Relationship

Wages high enough to attract permanent rural-urban migrants define the lower limit of the wage differential relative to sectors in which non-stable labor predominates. It discourages return migration to the rural areas, and thus deals with one of the major causes of instability of labor in markets attracting a large volume of temporary migrants. But migrants, although committed to permanent urban work, may move to other firms offering better rewards in the same urban labor market. The wage required to attract stable family migrants is not necessarily high enough for an optimum rate of turnover from the firm in question. Some firms may set wages to create a firm specific labor force with a very low rate of turnover. But the wage which minimizes labor cost per unit of output may be still higher if higher wages increase working efficiency. With a firm-specific labor force the "least cost" wage is increased for several reasons. First, the firm is dealing with relatively few workers separated from the rest of the work force, so that the benefits of a wage increase are not shared out among a large number, as would happen if they worked for a number of employers over a period of time. Secondly, the employer-employee relationship takes on some of the characteristics of an implicit contract, with the understanding that the employee would achieve a certain level of efficiency and that the employer would not pass on short-term fluctuations in demand by cutting wages. Thirdly, management costs are smaller the smaller is the work force and hence there is an incentive for employers to increase wage rates rather than hire extra workers as long as efficiency responds to wage increases.

(iii) Internal Labor Markets

A third groups of ideas to support the hypothesis of a positive relationship between the wage level and the size of the firm is the formation of internal labor markets in large firms. The characteristic of internal labor markets is that jobs within the enterprise are arranged in lines of progression. New workers are recruited principally to fill jobs at the bottom of the ladder, while vacancies in higher levels are filled as much as possible through promotion. This arrangement reduces training costs because skills absorbed in a particular job can contribute to training required for the job at the next level. The possibility of internal promotion also increases the incentive to learn. In addition,

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<sup>1</sup> See Mazumdar (1973).

costs associated with screening recruits are reduced because the ability and performance of existing employees are already known to the employer, and the costs associated with hiring new workers are lower the lower is the skill level at which the recruitment is made.

Internal labor markets tend to develop an elaborate set of rules and procedures for evaluation of performance and promotions. Such arrangements and the opportunity for on-the-job training tend to provide incentives for a stable labor force for the firm.

Well-developed internal labor markets are possible only in firms of a large employment size. Workers in such firms will show a strong positive relationship between experience and earnings. The prediction of this model is that the lifetime earnings of a typical worker will be higher in large firms, but it does not suggest any reason why the entry wage of an unskilled worker will be any higher than in small firms. Indeed, if workers were concerned with expected earnings over a long period, entry wages would (in a competitive model) be predicted to be lower in large firms. If then we find that entry wages are significantly higher in larger firms, the other considerations such as, for example, the wage-efficiency relationship discussed above have to be brought into the argument.

All this is not to deny that institutional factors do not come into the picture at some stage to strengthen or even increase the size-related wage differential. A stable, firm specific labor force in a large firm, which cannot be easily replaced by competing workers, can be and often is organized.

A point of some general applicability in LDC's is that unions in the large high wage firms often built on support from both the government and employers in the interest of industrial peace and as a protection against "troublemakers" from outside.

### C. The Effect of High Wages on Employment Growth in the Urban Formal Sector

The upshot of the set of consideration given in the last section is that even if the urban formal sector wage is seen to be high relative to urban informal sector or rural wages, it will be incorrect to jump to the conclusion that it is due to excessive institutional influence. An assessment without adequate research may be misleading for policy formulation. In the Bombay labor market study coordinated by the author wages observed in large factories after controlling for human capital factors, were 250 per cent of the wages of urban casual labor, but only about 50 per cent of the difference could be attributed to the strengthening of institutional factors after Independence.<sup>1</sup> Detailed studies of this type are rare. Reynolds and Gregory document well the case of Puerto Rico where minimum wage legislation, sponsored by US and Commonwealth governments, tripled the hourly wage of production workers

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<sup>1</sup> See Mazumdar (1978), and Little, Mazumdar and Page, Ch. XIV.

between 1950 and 1963, and led to a substantial employment lag in manufacturing.<sup>1</sup> Collier and Lal<sup>2</sup> correctly point to the importance of minimum wage increases in the period 1953-68 in escalating real wage increase in Kenya at the extraordinary rate of 6.7 per cent per annum. They also refer to the detrimental effect on employment in the urban formal sector which this policy had.<sup>3</sup> But they underplay the purpose of the minimum wage policy in effecting a transition from the migratory labor system to a stable labor system. It is not surprising that stabilization of labor, and the consequent increase in labor productivity, would dampen the growth in the numbers employed. But the welfare significance of this type of employment lag is hard to evaluate, and cannot be simply dismissed as introducing "distortions" in the labor market. Gregory argues in his recent work on Mexico that although minimum wages was pursued aggressively in some periods of recent history (e.g. in the sixties), on balance its impact on modern sector employment is quite ambiguous. "In any event, over the decade of the 1970's, it would appear that any gap that might have existed between the legal minimum and the market price of urban unskilled labor must have diminished substantially."<sup>4</sup>

The impression one is left with from the few detailed case studies is that even if the 'research was extended to a systematic examination of the experience of many countries one would probably come up with the conclusion that the influence of institutional factors in the modern urban sector wage level has been exaggerated. The following points about this segment of the labor market are tentatively suggested as being generally correct.

1. The formal sector wage level is significantly higher than the informal urban or rural sector wage. But much of it is due to economic reasons.
2. Employment in the formal sector, particularly in manufacturing, has grown at a slower rate, certainly slower than the volume of output, and probably slower than the urban labor force (though this proposition has not been documented as well as it might have been). But this "employment lag" in the high wage economy may not be attributed to growing distortions in the labor market alone. It may be due partly to distortions in the market for credit and capital goods, partly to the pattern of capital intensive industrialization developed, and partly to an increase in labor efficiency over time including the benefits of stabilization of the industrial workforce.
3. The rate of increase of real wages in the formal sector had been slowing down even before the recent recession. A study by Smith

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<sup>1</sup> Reynolds and Gregory. Also Reynolds (1966).

<sup>2</sup> Collier and Lal (1985). See also Fallon and Rivers.

<sup>3</sup> The growth rate of employment in the period was negative in Kenya. Much of East Africa had a similar experience.

<sup>4</sup> Gregory (1986), p. 256.

showed that industrial wages (in the formal sector) in a number of poor countries rose significantly faster than per capita income<sup>1</sup> during the period, 1956-64. Another review of data by Gregory<sup>2</sup> in 1975, however, shows that manufacturing wages and a ratio to GDP per capita fell in twenty three out of thirty-six countries examined for the period 1964-72, while the ILO Labor Report (1985)<sup>3</sup> shows that a similar ratio fell in twenty-nine out of forty-two countries for the 1970's.

The recession in the world economy of the last few years, and the debt crisis, has produced even sharper downward movements in wages, but this is a point of sufficient importance to be discussed separately (see below).

D. The Inter-relationship Between the Formal and the Informal Sectors:  
The Harris-Todaro Model

We have so far been considering the effect of wage increases due to institutional pressures on employment within the urban formal sector. Much attention has been paid to another effect of high wages in the formal sector - that on the informal sector of the urban labor market and on open unemployment. In the work on LDC's, the linkage between the two broad segments of the urban labor market has been extended to include a further linkage with the rural sector. The labor supply in the urban market is not a fixed stock. Apart from population growth the supply is variable in both directions because of the persistence of rural-urban migration. The determinants of the nature of migration from the rural to urban areas - the nature of the migration function - is then crucial to answering the question as to how much labor will be supplied to the urban labor market at any point in time.

Many writers on this issue have worked within the framework of a model of migration and formal-informal sector linkage suggested by Harris and Todaro. The starting point of the model is the idea that rural-to-urban migrants respond not to actual wages they will get in the urban employment compared to rural earnings, but to a variable called "expected wage". Suppose wages are maintained at a high level in the urban formal sector due to a mixture of economic and institutional factors as we have discussed. Suppose also for the moment that the alternative to getting a job in the formal sector is open unemployment (i.e. we are not considering the urban informal sector as a viable option for employment just now). The probability of a migrant landing a job in the formal sector falls as the supply of job seekers exceeds the number of jobs available, i.e. as the volume of unemployment in the urban area increases. The expected wage is defined as the product of the actual

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1 Smith (1969).

2 Gregory (1975).

3 ILO (1985).

wage ( $W_f$ ) and the probability of securing a job ( $p$ ). The Harris-Todaro model says that rural-to-urban migration will continue until the expected wage is equal to the alternative earnings of labor in the rural area. That is to say, in equilibrium the volume of migration is such that there is an excess supply of labor in the market, and the rate of unemployment is such that  $pW_f = W_r$  (where  $W_r$  is the alternative earnings in the rural sector, and the value of  $p$  is less than unity).

Migrants, in this view, continue to come to the urban market even if there is a probability of unemployment, because they are betting on the chance of landing a high wage formal sector job. The cost of unemployment is a kind of investment which the migrants are prepared to pay to secure a higher stream of earnings in the future.

This simple model is easily extended to incorporate the urban informal sector. While the migrant is searching for a formal sector job he has the option of earning something in the informal sector into which entry is easy. Informal sector employment will impede the job search of migrants to some extent, so that some will decide to take such a temporary job, but others will not. Thus apart from open unemployment, the supply of labor to the informal sector is increased because of the impact of the high formal sector wage, and consequently earnings in this sector are lower than otherwise.

This model has strong implications for urban policies directed at both the formal and informal sectors. The message of the model is that high wages in the formal sector are responsible for overurbanization. While migrants try to maximize private gains in terms of their expectations, there is a social loss in so far as more migrants are attracted to the urban economy that is necessary to equate marginal products (wages) in the rural and the urban sectors. The pressure on urban services increases the social cost. The urban informal sector is viewed as a parking lot for migrants while they wait for better prospects in the formal sector. Its social productivity is low, especially when we consider the point that by facilitating the stay of migrants in town while they are involved in the job search activity the informal sector is contributing to the problem of overurbanization. Government policies in some countries have tried to discourage the informal sector through administrative harassment, taxing of urban sites and so on. The pessimistic view on urban policies emanating from this model is reinforced by the implication that, as long as the high wage in the formal sector is maintained, any attempt to improve the employment situation in the urban economy will be self defeating. An increase in the rate of job creation in the formal sector will increase the probability of getting a high wage job ( $p$ ) and will induce more in-migration and a higher rate of unemployment and/or lower average earnings in the informal sector.

### Critique of the Harris-Todaro Model

The Harris-Todaro model, and its strong policy implications, rest on some definite empirical assumptions about (a) the nature of the urban informal sector; (b) the process of recruitment of labor in the formal

sector and (c) the economics of rural-urban migration. Much empirical research in recent years has been concerned with investigating these questions. The results cast serious doubt on the premises of the Harris-Todaro model.

(a) The nature of the informal sector

The view of the informal sector as being predominantly one offering a transition stop for migrants on the way from rural areas to the formal sector is not empirically supported anywhere. The urban informal sector is a very heterogeneous one. Transitory migrants do play an important role in it, but they are mostly circulatory migrants dividing their time between town and country. A large proportion of workers in the informal sector, on the other hand, are there to stay. A number of them perform specialized tasks not generally provided by the formal sector, e.g. domestic service. Among the self employed, entrepreneurship is combined with own labor and the more successful show an earnings profile rising steeply with age. Lastly, small-scale enterprises co-exist with large firms in the same product line, but generally producing at the lower end of the spectrum of product quality with different technology and factor proportions. Empirical studies in Malaysia and Mexico have shown that the net movement of labor between the informal and formal sectors is in the direction of the informal rather than the other way round as the Harris-Todaro model would have it.<sup>1</sup> The reason for this is that some parts of the informal sector require investment of capital - even when the quantity involved is not large. Factory workers in the high wage sector often look forward to building up the required savings and set themselves up as independent entrepreneurs in their middle years.

(b) Recruitment to the formal sector

This brings us to the point about the process of recruitment of new workers to the formal sector. The Harris-Todaro view of workers "graduating" from the informal to the formal sector after a period of accumulation and job search in the urban areas is not supported by empirical research. In a study of Delhi Banerjee found that the probability of a new worker in the formal sector being recruited directly from the rural areas was nearly six times as high as the probability of him coming<sup>2</sup> from the urban informal sector.<sup>3</sup> Studies in Bombay<sup>4</sup> and Ahmedabad also suggest that the market for recruitment to formal sector jobs is located much more in rural areas than in the urban informal sector. The reasons for this are partly on the supply and partly on the demand side of labor market. On the supply side the sustained impact of

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<sup>1</sup> Mazumdar (1981), Balan et. al. (1973).

<sup>2</sup> Banerjee (1983).

<sup>3</sup> Mazumdar (1978).

<sup>4</sup> Poppola (1977).

return migration and low wages on the potential efficiency of a worker seeking entry into the formal sector is significant. Employers tend to choose fresh entrants into the labor market who have not been exposed to the different work patterns in the informal sector of the market. On the demand side, the value attached by employers to social cohesion of a firm specific labor force depends on existing employees or their plant level supervisors to introduce new applicants for vacancies. Studies in India and Africa have repeatedly noted the importance of kinship ties in the recruitment process so that we end up with what Poppola called "a de facto closed door system."<sup>1</sup>

(c) The economics of rural-urban migration

The model of the Harris-Todaro migrant is that of a gambler who responds to the expected wage in the urban labor market. Research on internal migration suggests that the risks of migration have been underestimated in this stylization of the rural-urban migrant. It is true that migrants are helped by and are very sensitive to the presence of relatives and friends in the urban economy. But the help looked for rarely extends to financing the migrant's stay over an indefinite period of unemployment. The costs of migration are significant. Most migration studies show that distance is a significant deterrent to migration flows. Similarly, the need for financing migration is revealed in the empirical result that migrants typically do not come from the poorest villages or the poorest households, but rather from those with some assets. At the urban end several studies have shown that waiting period of migrants for their first job is quite short. In the study of the Bombay labor market, both in the small scale and factory sectors, a quarter of the sample workers said that they had migrated with a fixed job or firm offer. A third said there was no unemployment before the first job, and about half said there was no need for support from the family because there was no waiting. Data collected on the duration of unemployment before the first job showed that only about 15 per cent of the migrants found <sup>2</sup> in the factory sector had a duration of unemployment of 6 marks or more.

Policy implications

The critique of the Harris-Todaro model summarized above has obviously opposite policy-implications than what was suggested by the model. In particular the view of the urban informal sector from the point of view of the policy maker is reversed. Far from being a sector with possibly negative marginal social productivity (by contributing to the problem of overurbanization) it emerges as a permanent feature of the urban economy of LDC's in the foreseeable future which has an important contribution to make to the solution of the problem of labor absorption.

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<sup>1</sup> Poppola, op. cit., p. 153.

<sup>2</sup> Mazumdar (1978), pp. 16-17.

As we have seen there has been a significant gap between the growth of employment and the growth of output in the formal, and particularly the large scale manufacturing sector of most LDC's. The role of the informal sector in employment creation has to be viewed in this context.

The first step is, of course, to avoid the misguided policies of trying to discourage the urban informal sector through various restrictions like zoning laws, licensing, and outright intimidation. Since production in this sector is carried out in a much more competitive environment than in the large scale sector, attempts to extend the scope of minimum wage legislation to this sector is likely to have even more restrictive effects on employment than we saw was the case in the large scale sector.

But apart from the avoidance of policies with negative effect on the informal sector, is there a case for policies to actively promote activities in this sector? Such policies have been tried in various countries and can be grouped under three heads: (i) subsidizing some inputs, and particularly credit to the small-scale sector; (ii) strengthening the marketing structure; infrastructure services, e.g. power supply; and the apparatus of technical assistance, (iii) physical restriction in some lines of production on the output of large scale units, i.e. reserving a part of the market for small-scale firms a policy which has been carried out most vigorously in India. The argument for such policies of protection or subsidization of the small scale enterprises is not so obvious, and has to be spelt out with some care.

- (a) As far as the labor market is concerned the large wage gap observed in favor of the large-scale sector would at first sight suggest that the distortion in the market favors the informal sector, and hence government policy should if anything try to redress the balance by protecting the large-scale. But this familiar argument is oversimplified. We have seen earlier in the paper that only a part of the wage gap is explained by non-economic factors. The difference in efficiency wages is much less than the difference in actual wages. In other words, the labor cost advantage for the informal sector may exist, but is nowhere nearly as much as the difference in earnings would suggest.
- (b) In the market for other inputs - raw materials and credit - the advantage is quite clearly in favor of the large scale sector. The economies of bulk buying and the organized credit market favor the large units, and the same is probably true for marketing of products, particularly where export markets are involved. In many countries policies of maintaining overvalued exchange rates add to the effective subsidization of the large scale, either because this sector makes greater use of imported intermediate goods, or because it is easier for the large units to obtain licenses for key imports.

In most LDC's arguments for special help for the small scale can be firmly based on the need to correct such distortions.

- (c) Perhaps the most important and widely neglected argument for protection of the small scale has to do with the difference in

product markets which firms in the formal and informal sectors serve. The informal sector typically produces goods and services which cater to the needs and tastes of poor consumers. This is even true of products ostensibly of the same narrowly defined industry. Thus, for example, soap produced by non-mechanical small units will be mostly serving the basic need of the working pop..

The co-existence of firms of different sizes and capital-labor ratios in the same narrowly defined industry is explained partly by factor price differences, and partly by the product market segmentation caused by the quality of the product.<sup>1</sup> The question might be asked: if informal sector firms locate themselves in the "inferior" part of the product market, and formal sector firms gravitate largely to the "superior" segment, is there any reason for interfering with the distribution of firms by giving special consideration to the small-scale enterprises? The case for special treatment rests on two basic arguments.

- (i) The first has to do with the distribution of income. The larger the proportion of income going to poorer sections of the community - that is, more equal the distribution of income - the more will be the demand for the products of informal sector firms. At the same time, since the informal sector offers more employment at lower wages than the formal sector, and also the share of profits is lower in the former,<sup>2</sup> any increase in informal sector output relative to the formal sector will tend to shift the distribution of factor income to the lower-income groups. Thus the expansion in the supply of informal sector products tends, to some extent, to create its own demand. In other words the size of the informal sector is dependent on the distribution of income, and one of the variables affecting both is the degree of protection granted to the sector.
- (ii) It has sometimes been maintained that the demand for high quality formal sector goods is exaggerated by inappropriate imitation of products of western technology. The public sector may be responsible for such "distorted" patterns of demand, or the distortion might be caused by expensive marketing and advertising campaigns which the informal sector cannot afford.<sup>3</sup> Again the production response to the distorted demand pattern produces further repercussions in the inappropriate direction by worsening the distribution of income and hence increasing the demand for formal sector products.

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<sup>1</sup> This point is discussed at length in Little, Mazumdar and Page (1985), Ch. XIV.

<sup>2</sup> This follows from the proposition that the capital-labor ratio is lower in the informal sector, even if the rate of profit on capital is equalized.

<sup>3</sup> See, for example, the extended discussion in Stewart (1977).

While both these points are theoretically valid, the question if the informal sector is smaller than what is socially desirable can only be answered in terms of the specific country experience and its stage of development. The formal sector technology is more appropriate to the world market. Thus an important issue is the possibility of the countries' development in the export market. India may have been a country where the small-scale enterprises were overprotected. Several countries in Africa or Indonesia might have gone too far in the implicit or explicit encouragement of the large scale sector. It is suggested that these issues should be amplified with country experiences in a separate paper. The major references are Stewart (1977), and Little; Mazumdar and Page (1985), and the numerous studies referred to in these two works.

#### E. The Urban Formal Sector and the Recent Recession

The impact of the recent recession on the world economy and the debt crisis have produced sharp reductions in real wages in the urban formal sector in many LDC's. The relatively quick response of the labor market to the downturn, and the extent of real wage declines provide further evidence of the limited importance of institutional factors in protecting rigid wages in the urban formal sector. We still need systematic analysis of this phenomenon with intercountry comparison. The relative movements in employment and wages in the urban informal sector which have accompanied the downturn in the formal sector are also largely unknown. But the importance of studying the impact of the recession on the different segments of the labor market cannot be overstated - both for their immediate policy interest, and for the understanding of how LDC labor markets work.

Attention might be drawn to one particular facet of this recent downswing which is of great importance in several LDC's, particularly in Africa. The public sector is a large employer of labor in the formal sector (its size in several countries exceeding that of the private sector). After independence and throughout the decade of the sixties the public sector had yielded to promises to increase wages (partly due to a desire to reduce the wage differential between native and expatriate workers in the colonial period). This wage inflation was bought at the cost of lowering the rate of increase in employment, and in many cases created a private-public wage gap in favor of the public sector. Since educational credentialism plays a particularly important role in public employment, this phenomenon created a significant problem of unemployment for the educated.

The experience of the last decade has been, by and large, that the earlier trends have been reversed. In many countries the real wage in the public sector has dropped precipitously, generally accompanied by an extraordinary compression of grade differentials. Employment, by contrast, has increased consistently more than in the private sector. A particularly graphic example is provided by Ghana where between 1975 and 1983, the public sector employment increased at an annual rate of 15 per

cent per annum while wages declined at the same rate.<sup>1</sup> The public-private differential has probably now moved sharply against the former. This has its impact on efficiency in both the public and private sector. Public sector employees have to undertake moonlighting on a significant scale to maintain a minimum standard of living. This in spite of the overmanning efficiency in government services is very low. It would appear that public employment is in the nature of a subsidy to those private sector firms who may offer secondary jobs to government workers. The effective subsidy, of course, discriminates between private firms, and not necessarily in favor of the socially most efficient ones.<sup>2</sup>

#### F. Research Priorities in Urban Labor Markets

1. A point of some importance which arises from the preceding survey that while we have valuable insights from individual case studies, it is difficult to be confident of generalization because of the lack of any comparative study of country experiences based on a tightly defined common framework. This is not a difficult task because it is possible to draw on much empirical material which exists both in the form of case studies of particular problems, and a wealth of survey data. What is needed is a central organization of the framework of analysis, and the selection of 12-15 countries which seem appropriate from the point of view of labor market experience and availability of data. Such a comparative study should cover the experience of the period when institutional determination of wages seemed to be growing in importance a la Harris-Todaro (roughly the period 1960-75), and the subsequent experience of the recession. The relative rates of change in earnings and employment in the period in the formal and the informal sectors - and the factors affecting them - could be the organizing theme of the study.
2. We have discussed at some length the importance of the informal sector. The dynamism of small scale entrepreneurs has been identified as one of the force promoting equitable growth in the urban economy. Small enterprises and off-term employment in the rural sector are also likely to be of growing importance in many LDC's. Continuing research in this area is of high priority.
3. Public sector employment and wage policies have been destabilizing elements in the working of urban labor markets in many LDC's. They have been in different ways inimical to sustained growth both in the period of expansion and in the recent recession. In some African countries in particular it is one of the most serious problems which need attention both at the research and operationa<sup>l</sup> levels.

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<sup>1</sup> World Bank (1983).

<sup>2</sup> The "African case" has been documented well in Lindauer, Measook and Suebaen (1986). Similar conclusions are reached by Hansen (1981) in the study of Egypt.

Part III

The Absorption of Labor

As indicated in the Introduction to this paper the problems of the rural and the urban labor markets discussed in the last two parts are those which need to be tackled to enable the growing labor force to be successfully absorbed into productive employment at the highest level of wages which is compatible with the growth process. A successful employment policy is one which increases employment elasticity without dampening the growth rate of output. It will be useful to turn briefly to the long-run macro issue to provide a better perspective of the balance between aggregate supply and aggregate demand for labor in the recent history of LDC's.

Wages are higher in the urban sector, and within the urban economy large scale factories and modern services provide the highest earnings of labor. Thus successful development has often been thought of as the relocation of labor from agriculture, "traditional" services, handicraft production to the large scale secondary sector. This view is confirmed to some extent by looking at the time series of labor absorption in nineteenth century England and the cross section analysis of Chenery and Syrquin (although none of these types of analyses are able to work with data distinguishing the "small" and "large" sectors in either industry or services).<sup>1</sup> It is, however, not often realized that more recent economic development on land scarce economies like Japan has deviated substantially from the nineteenth century English model. It is even less recognized that the European model can be reproduced in the developing countries only in the case of the most exceptional growth records established by two countries, Korea and Taiwan. It might be useful to set out the essential statistical record briefly.

The discussion of the relocation of labor away from agriculture in a land scarce economy is connected with the concept of the "turning point" in wage behavior. Whatever the theoretical basis of the concept (which should not detain us here) historically we have evidence for all the three Far Eastern economies that at a certain point when the share of employment in agriculture fell to low levels, real wages in the farm sector in a matter of years grew at a rate six to ten times higher than the historical, very low rates. In Japan between 1951 and 1963, real daily wages for male workers in agriculture grew at 5% per year, six times the rate of growth observed during the period 1894-1939, which was 0.74% per annum.<sup>2</sup>

The evidence suggest that in Japan it took a very long time (at least 75 years) of sustained growth in agricultural output and of steady decline in the agricultural labor force before the turning point was reached in the 1950's. The reduction in the labor force in agriculture was never dramatic in absolute terms, varying between -0.1 per cent per annum and -0.3 per cent per annum. As can be seen from the figures given in Table 1, labor was relocated throughout this period as much to the tertiary as to the secondary sector so that the share in employment of these two sectors increased at about the same rate. It should also be

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<sup>1</sup> Kuznets (1966), Ch. 3; Chenery and Syrquin ( ). Note that "large" services really mean the more modern tertiary sector.

<sup>2</sup> Minami (1968).

remembered that small scale industry played a very important role in Japan throughout this period. Thus the greater proportion of the growth in non-agricultural employment took place either in the tertiary or in small scale manufacturing.

Taiwan and Korea experienced a period of intense growth after the Second World War and the turning point in the agricultural sector in both economies seemed to have been reached by 1966-7, after which there was very sharp upward movement in real wages in this sector. Although the rate of population growth was much higher during this period of growth than it was in Japan's long period of transition, output growth was much more dramatic - of the order of 8 per cent per annum against the historical Japanese record of 3.4 per cent. Nevertheless, the farm labor force declined marginally if at all. What was different is that the labor force seemed to have been absorbed at a much higher rate in the secondary sector, so that the share of the labor force in the tertiary sector remained roughly unchanged. Moreover, the growth process witnessed a natural decline in employment in small scale manufacturing.<sup>1</sup>

Korea and Taiwan, therefore, fit the classical model of reallocation of labor from agriculture to large-scale industry with economic development.

It would not, however, be surprising to find (although research on this point is not complete) that Korea and Taiwan have been the only two countries to record the type of labor reallocation envisaged in the classical model. A more typical picture of labor absorption in developing countries in recent years is probably provided by the experience of Indonesia. GDP in Indonesia grew in the decade of the seventies at the very respectable rate of 7.3 per cent, and agriculture experienced a growth rate of 3.6 per cent well above the rate of population growth. Employment in agriculture grew at the rate of 1 per cent per annum so that there was some reallocation of labor to the non-farm sector. But much the most important part of this reallocation was to the tertiary sector. The ratio of increase in tertiary activities to that in manufacturing was so much as 5:1. Moreover, much of the labor absorption was in the rural sector itself - the rate of urbanization in Indonesia being fairly low.<sup>2</sup> It is the rural off-farm sector which has been the leading sector in the process of labor absorption.

Research needs suggested by the data are, first, to see for other developing countries, which have had a reasonable growth rate in recent years if the tertiary sector has been playing quite the kind of role in labor absorption as is suggested by the Indonesian experience. The suggestion here is to increase the scope of the study of employment trends in the formal and informal sectors already mentioned in Part II.

Secondly, the discussion underlines the importance of intensive research on the economies of the small-scale enterprises (including the rural off-farm sector). If these activities are going to play the major part in the labor market of developing countries in the foreseeable future a good deal needs to be known about the income generating capacity of different subsectors within this groups. A particularly unknown area is the nature of linkages between these subsectors and agriculture, on the one hand, and the urban economy on the other.

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<sup>1</sup> Ho ( ).

<sup>2</sup> See Lluch and Mazumdar (1983). Also Scherer (1982).

Table 1  
Employment Shares by Sector (percentages)

	<u>Agriculture</u>	<u>Industry</u>	<u>Services</u>
<u>Japan</u>			
1887	73	13	15
1917	58	21	21
1937	46	28	21
1962	30	36	34
<u>Korea</u>			
1960	58	12	30
1970	50	17	33
1978	38	29	33
<u>Taiwan</u>			
1952	49	15	36
1962	42	23	35
1972	31	35	34

Sources: Japan, Ohkawa and Rosovsky (1973).  
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EMPLOYMENT RESEARCH

A Concept Paper for AID

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## EMPLOYMENT RESEARCH A Concept Paper For AID

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 synthesizing 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 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/Scitovsky/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 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 in 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) Publicly Owned Enterprises, An Important Factor in Labor Demand. 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) Demand for Labor by Infrastructure, Services and Trade Institutions. 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 policies 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 (Schydrowsky). 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. International Variables: The Consequences of an Uncertain World Setting

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

1) High World Unemployment. 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

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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 (how 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.

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## 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 three objectives suggests the following approach:

### 1. A Lead Institution.

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. A Flexible Administrative and Contract Structure.

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 institutions, including governments, as closely as possible with the research:

- a. they have invaluable knowledge of and access 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

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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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