1973

Five Approaches to the Urban Unemployment Problem in Developing Countries: A Comparison

R. A. Berry

Follow this and additional works at: https://ir.lib.uwo.ca/economicsresrpt

Part of the Economics Commons

Citation of this paper:
RESEARCH REPORT 7302

FIVE APPROACHES TO THE URBAN EMPLOYMENT PROBLEM IN DEVELOPING COUNTRIES: A COMPARISON

R. A. Berry

January, 1973
Five Approaches to the Urban Employment Problem
in Developing Countries: A Comparison

The 1960's, and especially the latter part of the decade, have witnessed the surfacing of unequal income distribution and unsatisfactory employment possibilities as important social and economic issues in developing countries. Open unemployment, most commonly measured by the unemployment rate, is one manifestation of employment difficulties, but attention has also been focused on such other indicators as low participation rates due to difficulty of getting a job, part-time employment, instability of employment, various forms of low productivity employment which are presumed to be related to the difficulties of getting other jobs. In terms of direct impact on welfare, employment difficulties must be distinguished from low income; the additional problem involves the effort expended searching for jobs—particularly severe in the case of occasional labourers who have to search for new jobs frequently, the income instability associated with periodic unemployment, and the psychic costs associated with insecurity as to the future flow of income. Finally, there is likely to be psychic cost to the unemployed in that their rejection by the economic system must suggest the irrelevance of their talents. It is not possible to analyze the problem satisfactorily without introducing psychological and sociological theory and concepts; pending successful integration of these with economic concepts, plausible speculation must substitute for solid analysis in the employment problem where—as distinguished from the low income problem—non-economic aspects cannot be reasonably ignored. In summary, "employment problems" correspond to the difference between actual welfare and the welfare level which the representative individual would have if the labour market were perfect, allocating quickly, efficiently, without insecurity with respect to future income, and without generating any unrealistic job aspirations.¹

¹This last condition would correspond, technically, to perfect foresight or perfect market information.
Most of the discussion of employment generation and unemployment prevention has tended to treat these as the same phenomenon. But there is substantial evidence that equivalence is much too strong a claim, and possibly a very misleading one. On the one hand, some interpretations of the development process suggest that urban employment generation does not necessarily even lower the urban unemployment rate, let alone be the other side of the same coin. It has been argued that rural-urban migration is so elastic that for every good urban job created more than one person will migrate and an increase in total unemployment will result.¹ In this case successful employment generation brings with it urban unemployment. Whether this is a valid description of the situation of most LDC's is a debatable point, but it is clearly a serious hypothesis and illustrates why the equivalence of employment generation and unemployment prevention cannot be taken for granted.² A second weakness of the unemployment rate as an indicator of employment difficulties is that other factors than the objective difficulty of acquiring a job affect the unemployment rate; one is the individual's desire or need to get a job; if his economic situation is


²The logic underlying this mechanism is related to an urban-rural wage or income differential which makes it attractive for rural individuals to migrate to the city; at the same time the urban labour market is assumed not to be a perfect one, with the result that there is only a probability rather than a certainty of acquiring an attractive urban job if one migrates to the city; the alternative is to remain unemployed or casually employed. For those migrating the certain probability of getting a good urban job is preferred to holding the rural job in question with certainty so people migrate to the city, the lucky ones get the desired jobs, and the unlucky ones enter the unemployed or low productivity pool.
precarious, then he may work consistently despite the difficulties involved.\footnote{Perhaps the classic case of this sort of phenomenon is the self-employed waste paper gatherer, as portrayed in Carolina Maria de Jesus, 
Child of the Dark, New York, New American Library, 1964.}

It may be argued in some instances that a high unemployment rate is more a
function of a gap between aspirations and job possibilities than of the ob-
jective difficulty of getting some sort of job; under such conditions, it
would be possible for a cross-country comparison of unemployment rates to
give an inverted picture of the objective difficulties of job acquisition.

For these reasons, our focus here is employment generation; some fur-
ther discussion is presented below as to why this seems a more appropriate
argument to include in the objective function than is unemployment preven-
tion.\footnote{The present discussion excludes disguised unemployment of the type
postulated in labour surplus models. Were we primarily concerned with
underutilization of resources, it could not be ignored. But the output
loss associated with it is reflected in the variable "total income" and
since the individuals in question are workers and receiving income, the
additional effects of employment difficulties above are not present.}

While much discussion has already surrounded the issue of employment
generation and unemployment prevention, and many specific diagnoses and
proposals have been put forward, it appears that these can, without serious
distortion, be summarized into five broad strategies; many specific pro-
posals will, of course, contain elements of several, although frequently
the emphasis tends to be on only one or two. These approaches are:

1) control and reduction of rural to urban migration
   either by direct means or by decreasing the incentive
for migration by improving rural living conditions.¹

2) pushing for faster growth as a means of creating more jobs in a given period of time;² the implicit assumption underlying this policy position is that either a) the rate of growth of per capita productivity in desired jobs is independent of the output growth rate or b) that if the two rates are causally related, this relationship is not too strongly positive.

¹One study in which this approach enters as an important component is International Labour Organization, Toward Full Employment: A Program For Colombia, Geneva, 1970; the literature is rife with the policy recommendation that migration be slowed down, and the associated interpretation of the source of the unemployment problem. A typical statement is the following: "...leaders can hardly afford to allow their unskilled farmers to swell the slum sectors of cities where their labor cannot be utilized. It would seem more rational to keep them on the land by having them engaged in tasks they can perform, such as the building of roads and dams, drainage ditches and canals, and even crude schools, houses, and community centers, and so on, rather than to be allowed to agglomerate into an amorphous mass in shanty towns, without streets, lights, water, or doctors, thus creating a kind of cancerous growth, a subproletariat, a class of pariahs or untouchables. Once they have enjoyed just a few of the amenities associated with the bright city lights, the modern Lorelei, once they have lived in modern times, even if just barely on the margin of modernity, getting literally fringe or crumb benefits, they will never willingly return to isolation and a way of life that has not changed in thousands of years--their eyes will continue to be on the stars, rather than on the pitfalls of slumdwellers." (Raymond Crist, "Subsistence Agriculture in Latin America," Annual Report of the Smithsonian Institution: 1963. Washington, U.S. Government Printing Office: 1964.)

²Studies where this second policy is discussed and/or recommended are Robert Slichton, "Urban Unemployment in Colombia: Measurement, Characteristics and Policy Problems." Santa Monica, The Rand Corporation, January, 1968; James L. Plummer, "Estimating the Trade-offs Between Growth of Output and Urban Employment, A Multi-Sector Planning Model for Colombia," USAID/Colombia, August, 1971, mimeo., and, again, many other authors. This is perhaps the majority point of view on the problem. An excerpt from Slichton, who discusses the idea without going overboard in accepting it, is of interest. "Given the figures for rates of increase in employment and output per worker shown in Table 15 it is evident that a rate of growth of total output of about 5.0 percent per year would have been required to prevent any increase in unemployment rate for the economy as a whole during the period 1951-1964. The actual rate of increase of output was 4.7 percent per year. There are a number of reasons why the above estimate of the required rate of growth must be used
3) increasing the demand for labour by changing factor proportions in given industries, or changing the composition of industries towards more labour intensive ones; a variety of policy tools with varying degrees of directness have been suggested within this broad strategy; fiscal tools such as subsidies (or tax rebates) to firms as a function of their total employment or their labour/capital ratio exemplify one line of thinking; export promotion is frequently suggested on the presumption that export industries are of above average labour intensity. Favoring small firms seems to have some potential, based on their systematically higher labour capital ratios than large firms.

4) controlling the level of job aspirations, in order to maintain a balance with the composition of labour demand by type, e.g., by controlling the growth of education at those levels which produce unrealizable aspirations or by propagandizing the social merits of low prestige jobs.

5) slowing the rate of population growth.

The objective of this discussion is to compare the potential of these five strategies for alleviating employment problems, based on gradually accumulating empirical evidence on the nature of the growth process in developing countries.

cautiously. The estimated normal rates of increase of output per worker in both the agricultural and non-agricultural sectors are subject to strong biases because of changes in the proportion of redundant labour. ..." (Op. cit., pp. 45-46).
I. Controlling Unemployment by Restraining Rural to Urban Migration

The observable fact that in LDC's open unemployment tends to be low in rural, primarily agricultural areas and high in urban areas leads naturally to the speculation that the unemployment is fed by rapid rural to urban migration and could correspondingly be alleviated by a slowing of that flow, either by the sort of control devices which have been used in some socialist countries, or by greater emphasis on improving rural living conditions.

Two separate questions may be asked with respect to this alternative: first, whether the linking of the migration process to high open urban employment is warranted by the facts, and second, whether even if this relationship does exist it constitutes sufficient reason to tamper with the free flow of migration, i.e., whether there are offsetting gains from the migration.

The evidence on the first point is not yet adequate to provide any general answer, and there is reason to expect the relationship to differ among countries. There is increasing evidence for some Latin countries that a surprisingly high share of unemployment is semi-voluntary in nature, involving individuals' aspirations not being satisfied rather than the absolute unavailability of jobs in general; this unemployment appears more characteristic of city-born people than of immigrants, and least of all the relatively unskilled immigrants, who seem to find work of one sort or another fairly quickly after arriving in the city. In other countries there may be more evidence of a migration-unemployment link.
Where open unemployment does tend to have an important element of
the voluntary and not to correspond generally to low income immigrants,
there would appear to be little point in holding down the migration rate.
But even if something like control of the immigration of those groups par-
ticularly subject to unemployment could somewhat reduce the urban unemp-
ployment rate, careful consideration would be warranted before application of
such a policy. In most countries, certainly the Latin ones, migration to
the city implies better health opportunities, better educational oppor-
tunities, and so on, advantages which must be weighed against the possibly
greater insecurity of employment in the urban area.

While it is certainly true that neglect of the agricultural and rural
sectors has been a systematic policy bias in many LDC's, and that the recti-
fication of this bias might under some circumstances reduce the migratory
flow, the case for any general attempt to resolve the unemployment problem
in this fashion seems flimsy, given the uncertainty both as to whether mi-
gration contributes importantly to unemployment, and as to whether if it
did, other positive contributions it makes might offset any welfare loss
associated with unemployment. Among the issues which require fuller under-
standing is the effect of migration on the welfare of the rural
to urban migrants themselves. Most studies have found that monetary
incomes of migrants tend to be higher after the move,¹ although it

¹A number of such studies are cited in Joan M. Nelson, Migrants,
Urban Poverty, and Instability in Developing Nations, Harvard Center for
International Affairs, Occasional Papers in International Affairs, No. 22,
Sept., 1969, Chap. 1. See, for example, Doris Phillips, "Rural to Urban
Migration in Iraq," Economic Development and Cultural Change, Vol. 7,
No. 4, July 1959, p. 417; Janet Aba-Lughod, "Urbanization in Egypt: Present
State and Future Prospects," Economic Development and Cultural Change,
is not clear that real purchasing power is higher unless one includes differences in the implicit prices of education, health, and so on. When these are taken into account, the advantages of urban life are frequently striking. ¹ And it is by no means clear that employment difficulties are, in general, less in rural than in urban areas; the open unemployment rate is higher in the latter, but this might be attributed to greater disadvantages of being unemployed in rural areas rather than greater difficulty of getting employment in the urban areas. Numerous studies of the motivation behind migration have found "better employment opportunities in urban areas" to be a major factor. ² A few studies suggest that ex ante expectations in this respect were not met, but this is not a systematic or general result, and there is certainly no evidence that ex post the migrants think that employment difficulties are greater in the city than in the country. It might be argued, further, that disguised unemployment in the form of low productivity work on one's own small plot when nothing else is available not only reflects as serious a waste of human resources as does open unemployment in the urban areas, but may also imply a substantial instability of real income and something of the same sort of frustration as is associated with open urban unemployment. All these issues remain to be settled empirically, and the results are likely to vary by country, by type of economy, and so on. And it is not clear whether there is a net output cost

¹ In some economies the advantages of slower population growth—and there seems some evidence that this results from urbanization—are also part of this package.

² See, for example, a study dealing with Colombia, Marco Reyes, Rafael Prieto and Bill Hanneson, Estudio Agroeconomico de la Hoy a del Rio Suarez, Centro de Estudios Sobre Desarrollo Economico, Universidad de Los Andes, Bogota, 1965.
to rural-urban migration in cases where it does contribute to urban unemployment, since the open urban unemployment may have a rural parallel in disguised unemployment; (some of the literature implies that there is an output cost to migration which produces urban unemployment).\textsuperscript{1} It should not be forgotten either that there may be substantial disguised unemployment in urban areas, so that the overall calculus of the output effect of rural to urban migration is a complex one.

Perhaps the major doubt with respect to the "migration control" policy for improving employment conditions is the lack of evidence in most countries that migration is a significant cause of open unemployment. Conceivably the migration of relatively unskilled persons is an important source of employment problems which do not show up in the open unemployment rate; but since severe employment problems appear to plague rural areas as well, and greater ease of employment acquisition is a commonly stated reason for migration, the empirical evidence available to date would seem to run against this theoretically possible relationship.\textsuperscript{2}

The optimal policy on migration might well be to promote certain types and discourage others. Appropriate migration control could vary substantially by the skill level of the individual, by whether the migration is rural to small town, small town to city, etc. In short, it would probably be erroneous to argue from current evidence that the optimal migration policy is a simple one; if it finally turns out to be, it will probably be close to the no-control end of the spectrum of possibilities.

\textsuperscript{1}This is the case in the Todaro model, cited earlier.

\textsuperscript{2}None of this is to say that, under appropriate employment policies, migration would not slow down. If the altered factor proportions policy discussed below turned out to imply a more rapid increase in labour demand in rural than in urban areas, such would be the case. But this result could not be predicted with present knowledge, and in no case could the migration reduction be thought of as the source of a better employment situation; it would be an associated effect.
II. The "Faster Growth" Alternative

As hinted above, the implicit thinking underlying the argument that faster growth would be a sufficient and perhaps necessary step to alleviate employment problems frequently borders on a fixed factor proportions vision of how the economy functions; faster growth is linked implicitly to faster capital formation and the idea emerges that only with more capital can more employment be created. This is perhaps the most dangerous view of all, since it seems frequently to be held (inconsistently) by persons whose idea of faster growth also involves labour-saving technological change, i.e., technological modernization, introduction of foreign production processes, etc. Since in the long run growth is associated with labour saving technological change, this latter idea is not surprising, nor is it surprising that many recipes for growth should bring with them the danger of employment and/or income distribution problems. Thus, many of the levers which would presumably be manipulated by proponents of such a point of view (e.g., increased foreign investment, subsidies to domestic savings and investment) would, not infrequently, lead to the choice of higher capital/labour ratios by production units. If there were no such link between the rate of growth and the technological choices of firms, there seems little reason to doubt that faster growth would be an advantage. But such a ceteris paribus statement is not likely to add much to the discussion.

That rapid growth has not consistently implied low unemployment rates is fairly clear from both one country and cross country empirical studies. The Puerto Rican case, with continued rapid growth coupled with continued high open unemployment is a case in point; considerable discussion of whether the tie with U.S. unions or the extensive U.S. investment have been special
factors contributing to the high unemployment has not yet produced a consensus.\textsuperscript{1} Brazil and Mexico seem to have been cases of fast growth and relatively low unemployment, but no analysis has as yet been attempted to test for a causal link between the two phenomena. About all that can be said to date is that rapid growth is not a sufficient condition for low unemployment, nor does it necessarily result in high unemployment. Possibly there are important trickle-down effects of growth, but it is not clear whether these are sufficient to imply a net beneficial effect of fast growth in terms of low unemployment.

The reasons for doubting the merits of this alternative are thus partly empirical--fast growth, especially in the industrial sector, has notably failed in most LDC's to bring rapid employment generation and high unemployment rates are observed in some fast growing countries. And they are partly theoretical--related to those concepts of growth and development which link it to the diffusion of more modern methods, methods normally designed in and for the developed countries, and hence tending to be more capital-intensive than the traditional technologies.\textsuperscript{2} If a speedup in the growth rate is due to more rapid capital formation which permits and is


associated with more rapid technological change of a labour saving type, there is little reason to expect that fast growth will be employment generating, and the "fixed proportions" assumption often underlying the optimism with which this fast growth strategy is viewed is clearly inconsistent with the nature of the growth process.

In the other direction it may be argued that, whereas in certain sectors of the economy rapid growth is usually associated with labour saving technological change and little employment generation (e.g., the industrial sector) rapid growth in such key sectors as industry and agriculture could stimulate changes in the composition of demand towards more labour-intensive production mixes; in particular it could stimulate increases in demand for services, and could thus, in effect, generate a sort of trickle-down effect both in terms of employment opportunities and of income.\(^1\) If this effect were strong enough, then accelerating the rate of growth could make a net positive contribution to the resolution of the employment problem. As noted earlier, the empirical evidence remains too fuzzy to permit any general conclusions along these lines.

The above arguments have been addressed primarily at the issue of employment generation; the implications of rapid growth for unemployment reduction may not bear any simple relation to those for employment generation. Rapid growth often implies increasing complexity of the economic system and may or may not be accompanied by rapid increases in education. Where educational advances are not rapid low unemployment rates are probably more likely; but the implicit mechanism in this argument is complex--see below.

---

III. Incentives to Increase Labour Demand

Recently considerable discussion has surrounded propositions to increase both output and employment by inducing production units to change their factor proportions in favour of labour and against capital. The argument, implicitly, is that at present, and presumably due to certain types of market imperfections, firms do not choose the factor proportions which would maximize the total output of the economy; their choice of relatively more capital-intensive techniques lead both to a lower output and to either or both of a more skewed income distribution or greater employment difficulties for labour. Such a situation is a natural result in an economy with labour surplus characteristics, or with powerful labour unions (probably a less frequent circumstance) so that the opportunity cost of labour to the firm is above its social opportunity cost. It is frequently true that larger scale firms who hire relatively expensive labour have, at the same time, easy and low cost access to capital. The economy is dualistic, with one sector tending to choose capital-intensive technologies because of these two market imperfections, and the other using labour-intensive technologies since the cost of (frequently family) labour is lower and the cost of capital higher. Figure 1 demonstrates the idea; a capital-intensive firm may choose a technology like A, and the smaller labour-intensive firm a technology like B. In general it may be assumed that the optimal factor proportions lie between these two technologies—being closer to one or the other according to the relative size of the two sub-sectors.  

1 In fact, the term "dualistic" is to a large extent an heuristic device to aid in the explanation of the principle in question, and its use is not generally intended to imply a bi-modal distribution of firms in terms of the factor proportions they choose; rather the firms lie along a spectrum and the basic points to be made are that the two ends of the spectrum are very far apart, and that there may be clusterings at these two ends relative to what one would find in a neoclassical type of economy.
If this description of a representative industry is accurate, then it is true that a policy which would decrease the variance in factor proportions across firms would lead to an increase in output, and probably to an improvement in employment opportunities for the majority of the labour force. In the dualistic situation described, it is true, obviously, that not everyone searching for a job with the relatively higher wages characterizing the capital intensive sector will be able to get one. Whether, under these circumstances, the result of this labour market imperfection is unemployment or lower income for people working elsewhere depends on problems of capital distribution outside this modern sector, aspiration levels, and other factors. With a more perfect labour market which would be likely to result from the decrease in dualism, and a more perfect capital market—which would be one of the prerequisites to ending the state of dualism—wages for the majority would be higher and less employment problems per se would be expected to arise.

Given the evidence that some employment might be generated by more effective use of the capital stock (i.e., smaller dispersion in capital/labour ratios,) -- a distribution improving policy as well--this possibility warrants detailed consideration; factor suitability in the various sectors must be analyzed. Although evidence from various LDC's demonstrates the possibility of a wide variety of factor proportions,¹ it remains unclear how much the demand for labour in a given situation can be affected by the manipulation, for example, of factor prices. In Colombia, for example, factor

proportions used in different production units vary greatly, so if all of the existing technologies are considered to be alternatives, the economy has a wide range of choice. It has been argued that some of the labor intensive alternatives are dominated and would not exist in the presence of perfect factor markets, but there seems now to be adequate evidence that some of these could compete satisfactorily and even expand under perfect factor markets. Further, it is highly probable that serious governmental attempts to make available more information on labour intensive techniques from other countries—countries like Japan—would help substantially in reducing the problem. Finally, it must be borne in mind that, if factor prices were changed, the composition of output would change, and even if factor substitution were limited in the majority of existing industries, this would not mean that it was limited for the economy as a whole.

The real problem in this context, however, is not "what would the demand for labour be had no past mistakes in the capital intensity of investment projects been made, and were the government and other institutions

---

Although many statistical problems and difficulties of interpretation remain, it seems clear that within a given industrial sector—and sometimes for the same product or very close substitutes—the labour/capital ratio typically varies considerably across firm size. And, at least in some sectors, it appears that the small firms with higher labour/capital ratios are not dominated, i.e., they have higher output/capital ratios. In this connection, see John Todd, "Size of Firm and Efficiency in Colombian Manufacturing," Research Memorandum No. 41, Center for Development Economics, Williams College, Williamstown, Mass.; Albert Berry, "The Relevance and Prospects of Small Scale Industry in Colombia," Mimeo., 1971. These studies suggest that the capital/output ratio is substantially higher for the large capital intensive plants; it is very unlikely that the difference between that size category with the highest output/capital ratio and the largest plants is less than two to one. A similar phenomenon has been observed in Colombian agriculture. While other sectors have apparently not been studied in this light, it seems probable that the phenomenon is a rather general one. And it has been observed in many developing countries.
highly efficient in learning about and transmitting to the private sector information on labour intensive techniques used elsewhere?" The more practical questions are: a) "How much would manipulation of factor prices affect the demand for labour given that much capital is now installed, a substantial learning process has been effected in the use of capital intensive techniques but (probably) less in the use of potentially productive labour intensive techniques, and the information apparatus of the private and public sectors in terms of labour intensive technological change is quite retarded?" and b) What other policy steps could be taken to foster demand for labour and with what success? There are practical problems with respect to the manipulation of factor prices and improvement of factor markets, which might limit the extent of achievement possible; though it seems clear that policy should move in this direction to the extent feasible and consistent with other objectives, it remains open to question how much can be achieved. It is, correspondingly, important to consider complementary steps such as extension services to aid in technological change and adaptation, etc.

The above discussion suggests that, starting from the existing sub-optimal factor allocation, if all options are open and broad manipulative powers are available to the government, there should not be serious conflict between the goal of improving employment opportunities, that of improving income distribution, and that of output growth. Labour intensive firms (high L/K) are almost by definition intensive in blue collar labour and usually in relatively unskilled (at least relatively low paid) labour. This being the case, increased emphasis on such firms and technologies should raise output (with given capital stock), improve distribution and raise the demand for low income labour. The feasible outcomes available to unconstrained
policymakers might form a series of points like those plotted in Figure 2; only the points on the frontier would be relevant, the rest being dominated. If, as suggested by the widespread evidence of current inefficiency of resource allocation, the economy is well inside its static frontier, so that many feasible output-employment combinations would imply an increase in both variables, the fact that on the frontier there is a trade-off between the two goals may not be too big an issue. The obvious first step is to move to the frontier.

Where policy is constrained, for example, by the absence of much flexibility in terms of choice of size structure, there may be a growth/employment trade-off warranting consideration. Given real world technical and political difficulties in achieving optimal policy, it seems most likely that alternatives considered are well within the technical frontier; secondly, only a few of the feasible alternatives are likely to be considered and this group is likely to include points not in the first quadrant, e.g., R, S, and T. Political constraints, especially, are likely to lead to consideration of rather extreme points. Probably all points considered are dominated by many of the points on the technical or theoretical frontier but given the lack of analysis of and practice with the optimal policy packages (witness our lack of knowledge of how to generate high output/capital forms of production) this may have little relevance for policy making in the short run. Framing a policy to move the economy towards the frontier is likely to require longer run and more experimental approaches. Meanwhile
FIGURE 2

Rate of Income Growth

Rate of Employment Generation

Points labeled S, R, C, D, E, and T.
points like R, S, and T may be the ones under consideration—requiring that an important goal trade-off choice be made, and that the detailed characteristics of the social welfare function be clear. It seems, however, that from the economist's point of view and given the relative neglect of this area, it may be most fruitful to emphasize the possible existence of points further out than any of those being considered, i.e., points which have both better employment and output characteristics. ¹

IV. **Control of the Educational Process**

That unemployment is explainable primarily as a gap between aspirations and possibilities of people with some secondary school or completed primary—and who aim for jobs which would put them in the top quarter or third of the income distribution does, unlike the arguments just presented, suggest the possibility of an inconsistency over the next decade or so between policies designed to raise output and improve income distribution and policies designed to alleviate the unemployment of this middle-class group of aspirants to white collar jobs and standards. ²

¹The characteristics of factor proportions and output/capital ratios across firm sizes, mentioned above, suggest strongly that such points as C, D, and E do exist; the first order of business for intermediate or long-run policy would seem to be locating them and relating policy to them, and a second order to consider possible trade-offs of optimal or near optimal (i.e., frontier) points.

²This interpretation of a substantial amount of L.D.C. unemployment is now a common one. A classic statement of the phenomenon comes from India. 'Moreover, 87 per cent of the families own their own land in this Block so that 'there is practically no unemployment, except of the educated', and that because, as Channabasappa of the village of Ragibonnahalli put it, 'once they read they do not enter the fields. They want jobs in government service. Till they can find a job, they put on fine clothes and waste their time by riding about on the bicycle and drinking coffee. Even if we offer to give them coffee at home they prefer to go out. We old people do the work and feed the younger generation these days. Education is good. But once they get it they want to go away to the town'.' (See Kusum Nair, *Blossoms in the Dust*, New York, Frederick A. Praeger, 1961. And Richard Morse notes, in the context of the
Just as different industries and sectors vary in terms of their capital/labour ratios and the functional distribution of income between labour and capital which they generate, they also differ—and quite widely in some cases—in terms of the participation of relatively low-skilled blue collar labour, higher skilled blue collar, and white collar labour. To the extent that unemployment is a middle-class or aspiring middle class phenomenon, and to the extent, as is possible, that the political power of this group is greater than that of the lower income workers (usually unorganized), it is not implausible to anticipate that, deliberately or not, there will be an increasing tendency to focus on the creation of jobs in the higher skilled and white collar categories, rather than the lower skilled categories. That would be a natural reaction to political pressure.¹ Leaving aside for the moment the high income group whose main source of income is capital, it is clear that

alleged town to city talent drain in Latin America, "Large cities do not so much drain off talent and enterprise from towns, perhaps, as provide a structural complement to small-town attitudes and institutions, particularly in the case of the "disintegrated" community as defined by Forni-Marmora. For the "education" of prospective migrants consists not in imparting skills and trades for which there is a big-city market—a service which French towns rendered for nineteenth-century Paris—but in communicating a general outlook and set of expectancies and in making youths dysfunctional for local occupation." (Richard M. Morse, "Trends and Issues in Latin American Urban Research, 1965-1970 (Part I)," Latin American Research Review, Vol. VI, No. 1, Spring 1971, pp. 31-32.

¹This presumes a fairly refined reaction on the part of decision makers to pressures. It would probably not be a valid interpretation of the way decision-making currently takes place in most L.D.C.'s. To the extent that industrialization has gradually veered toward white collar and high skilled blue collar job creation, this has probably been a side effect of other forces—the fact that, of necessity, low skill industries evolved first and the relationship between capital intensity and "high income labour" intensity.
such a policy would be a distribution-worsening one, since the beneficiaries are far from the bottom of the distribution. And, especially if make work type solutions are the core of the white collar employment policy, it seems distinctly probable that whatever productive capacity these human resources have will not be fully taken advantage of, i.e., the employment policy will have a cost in terms of output.¹

Contributing importantly to the problem of "high aspirations" unemployment have been the relatively rapid expansion of secondary education (and in some countries of higher level primary) in large part reacting to heavy demand from the people (as reflected in the increasing share of students attending private schools) combined with the continuing antipathy to blue collar work as something demeaning, "lower class." If the continued rapid expansion of secondary education and this cultural attribute are, in effect, constants, then the implications for unemployment problems in the future are gloomy indeed. Further, even were it politically feasible to attempt to ease the problem by restricting the level of secondary education,² any such restriction would presumably be applied to the amount of public education—that component most easily and directly controlled by the government. Since public secondary schools are more likely to cater to children of lower income families, any such restriction would decrease one avenue of economic and social mobility and would worsen the income distribution, at least within a certain range.

¹As a corollary of the changing skill composition of the labour force, comparative advantage would gradually shift away from highly blue collar intensive sectors to sectors where higher skilled labour and white collar labour is a substitute for capital. Precisely which sectors these might be remains to be seen.

²Or whatever level is relevant to the problem at hand.
Education is sufficiently akin to motherhood in many countries that a policy forthrightly countenancing its restriction cannot easily be put forward in public discussions. But there is still, of course, some flexibility in the distribution of public funds among types of education, even at the same level (e.g., as between academic and vocational secondary). Even if policy in this area can only provide, at best, a small contribution to unemployment control, the fact that the education which leads to the unemployment is also likely to lower the contribution of the individuals in question to output (and hence lower total output) gives added weight to whatever can be done. Unfortunately too little detailed analysis has been undertaken of the precise relation, short and long run, between education and unemployment to permit a very refined approach.

One of the important questions, obviously, is whether aspirations are sufficiently flexible to adjust to real opportunities in a reasonable period. And, in fact, some experience from L.D.C.'s does suggest that attitudes towards different occupations are fairly flexible, so that if unemployment remains a problem over a period of time, or excess supply in an occupation pushes incomes down, the attitudes may gradually—perhaps even quickly—change. Whether this flexibility characterizes people at most levels of education, or attitudes towards most occupations, remains unclear; only accumulating experience in varying situations will provide the answer.

Even if this answer is a favorable one, there remains the danger that, before the negative attitudes towards certain occupations have given way, they may force policy measures to increase the opportunities for the group in question, e.g., making its qualifications a requirement for certain jobs; then the forces which would otherwise have helped to erode the attitudes may be weakened; the attitudes may, in other words, be self-perpetuating.
In this context, one might argue that there is some optimal level of unemployment, a level determined by weighing, at the margin, the benefits of a higher level in terms of (a) forcing a breakdown of the idea that certain jobs are unacceptable for a person of given educational level and of (b) possibly better income distribution, against the economic cost of failure to utilize all the available resources and the psychic cost borne by the unemployed.

V. **Population Policy**

The contention that rapid population growth is a cause of unemployment tends to be the other side of the coin from the argument that faster output growth will reduce it; unemployment is conceived as the outcome of a race between output growth which creates jobs and population growth which eats them up. As observed above, such a conception is dangerously oversimplified; perhaps the only policy prescription implicit in this view which does not seem to have backfire potential is population control, but the arguments already presented would suggest that its major benefits would not be in unemployment reduction; more likely they would be in better income distribution and faster growth of income per capita. Unfortunately such benefits as this policy may have could not easily be brought to bear in the short run—no reason to downgrade it, but reason to focus elsewhere for the short run components of an overall policy package. While not devoid of value, it often leads to dangerous misinterpretations of the problem.

VI. **Summary: The Broad Strategies**

The first two employment strategies considered—reduction of rural to urban migration and promotion of more rapid growth—appear at our present level of understanding to have little to recommend them. Incentives to increase labour intensity appear to offer the major hope for alleviation of
those employment difficulties associated with the objective lack of demand for relatively low skilled persons. (See below). Reduction of "high aspirations" unemployment might be best handled by limiting the growth of education, but this seems a high risk policy for a number of reasons, and is unlikely to become very popular until better understanding cuts those risks. A direct attack on the attitudes creating the problem generally occurs only during social revolutions. Incentives to increase the demand for white collar labour--parallel in principle to those which could be used for blue collar labour--might well benefit that group, but in all probability at the expense of the lower income labouring class, so such a policy seems dubious at best.

Bearing in mind both the seriousness of the first type of employment problem referred to--it might be called "the low income employment problem"--and its probably greater susceptibility to policy measures, the strategy of increasing demand for relatively low skilled labour by altering the factor proportion chosen by firms deserves more detailed attention.

VII. Some Specific Policy Alternatives to Raise Demand for Low-Skilled Labour

Perhaps the most promising way to alleviate that extreme form of unemployment or employment difficulty--whichever manifestation presents itself--related to low incomes (and to alleviate the low incomes at the same time) lies in improved international trade policy. Evidence for this comes both from direct empirical observation--such countries as Korea and Taiwan have increased employment in the urban and industrial sectors rapidly via their dramatic export booms--and from those general principles of international trade which underly the observation in a number of countries that import substitution industries--especially those of the later import substituation period--are highly capital intensive, whereas some of the obviously
export potential industries like wooden furniture, footwear, clothing, and so on tend to be labour intensive.

Whether this policy should be thought of as complementary to import substitution—as when exporting is not possible until enough import substitution has been carried out to evolve a certain complexity of industrial structure—or whether it is more of a substitute, a stage to which a country could evolve quickly under optimal policy, is not yet clear. But there is now ample evidence that many L.D.C.'s can export both to other developing countries and to developed countries, focusing on labour-intensive products in which the developed countries cannot easily compete due to their high labour costs. The world competition which is avoided in an import substituting policy but cannot be avoided to any significant extent by exporters has not only the positive effect of forcing efficiency in general, but also tends to force the industries to be more labour intensive than they otherwise would have been. Firms seem sometimes to have a non-economic preference for capital intensity, and when insufficient competition is forced on them they opt for this course; but when pushed against the wall they develop more labour-intensive ways of doing things. An interesting example of this is Mexico; the northern industrial region now exports extensively to the U.S., whereas the older industrial centre around Mexico City involves more the import substituting lines and produces primarily for domestic consumption. Even with respect to the same product, the northern region uses more labour intensive techniques, since this is the only way in which it can compete

---

1 Studies giving attention to this question include Ian Little, Tibor Scitovsky and Maurice Scott, Industry and Trade in Some Developing Countries A Comparative Study, London, Oxford University Press, 1970; unpublished work by John Fei and Gustav Ranis on Taiwan and Korea respectively.
in the U.S. market; the interior industry, not under the same competitive conditions, has used more capital intensive technology.

The usual combination of stimuli for exports seems appropriate here, i.e., a closer to equilibrium exchange rate, good credit facilities, and perhaps especially the provision of certain complementary services like information and improved commercialization, services particularly relevant to the small-scale producer whose output is exported. It might be noted also that the chances of improving the "income distribution-employment" situation would appear from some points of view to lie more in trade with the developed countries than with the less developed ones; this proposition is plausible both on theoretical and empirical grounds at present.¹ But the restrictions placed on this trade by the developed countries constitute a barrier and both options should no doubt be pursued.

One interesting idea is that of creating large labour intensive firms. Evidence on the relationship between capital intensity and size suggests that this could be a difficult undertaking, but the problems of the small scale exporter are equally well documented, so size, either at the production or the commercialization level seems important. More understanding of why large firms are so consistently capital intensive is necessary; if this tendency is due largely to their functioning in protected markets, the export orientation could resolve a considerable part of the problem.

Several suggestions in the broad monetary-fiscal policy area have been made with a view to employment generation. One of the major hypotheses

¹Comparative advantage with respect to the developed countries of an LDC seems particularly likely to be related to labour intensity, whereas in trade among less developed countries, this would, for any given country, be less likely, with such aspects as natural resources, the particular history of growth, and so on becoming relatively more important.
as to why some firms are so capital intensive and generate so little employment is that, as a result of capital market imperfections, capital is available to them at very low prices, thereby making it profitable for them to become capital intensive; this is more true if labour legislation, unions, or other factors keep wages above the opportunity cost of labour. An obvious suggestion, then, to increase employment in industry and in other sectors is to improve the capital market and to prevent firms from receiving subsidized credit; this would force capital intensive firms to at least try to substitute labour for capital; incapability to do so would decrease their competitiveness vis-a-vis labour intensive firms and lead to a gradual decrease in their market share and a corresponding increase in overall labour intensity. Capital markets cannot, of course, be made perfect over night, but eliminating the subsidized interest rates which some borrowers receive, especially in countries where inflation is high and nominal interest rates are not raised in line with the inflation, is an obvious first step. Giving credit successfully to labour intensive firms, which are frequently small ones, may be a harder job but should at least be given serious consideration.

The second theoretically obvious suggestion in this area is subsidies to firms according to the amount of labour they use, in other words an attempt to make labour's price to the firm equal to its opportunity cost, which proponents of labour surplus economics allege to be low or zero.\footnote{See W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labour," The Manchester School, Vol. 22, May, 1954.} Despite its theoretical attractiveness, this policy is often alleged to involve serious practical problems in its application; these problems may have been over-emphasized, however, as is suggested by the fact that a quite
similar scheme, the tax incentive to investment, is frequently discussed and applied in L.D.C.'s. On the surface this policy, borrowed from and much more appropriate in the context of the developed countries, appears more likely to do harm than good; evidence from a few studies in L.D.C.'s is that it has very little effect one way or the other on investment, so that its only probable effect is a worsening of the government's financial situation. The theoretical reason to anticipate neutral or negative effects from tax incentives to investment is that the policy is framed for a situation where a) for some reason there is too little incentive for firms to invest and as a result demand for investment goods is below supply and requires stimulation and b) output expansion involves primarily investment in capital, and can therefore be effectively stimulated by making that capital cheaper. Many developing countries have, on the contrary, an excess demand for capital goods which must be restrained by licensing imports of those goods; this has its parallel in excess demand for bank credit. Stimulating the demand for capital goods when there is already an excess demand would seem purposeless. Worse, the situation is one in which the desired form of firm growth is the expansion of labour inputs rather than capital; tax exemptions for investment do precisely the wrong thing in encouraging the use of the economy's scarce factor, by making it cheaper to firms. The only conceivable argument in defense of such a technique, it would seem, would be that it did raise total investment, e.g., as in a situation where provision of a certain amount of subsidized credit would encourage the firm to undertake greater savings

---

itself. But it seems as likely that credit so cheaply received substitutes for own savings rather than complementing them, a possible additional negative effect. Certainly differential tax treatment of one sort or another for purposes of favoring one industry or one region against another may be appropriate; but there is no general reason why this should be effected using large subsidies to some firms and neutrality towards the rest; it would seem more appropriate to have small subsidies to some and small taxes to others.

The two serious proposals cited above, manipulation of the interest rate and subsidies to the use of labour, are both alleged to have serious difficulties and there is pessimism as to their potential. Some of the pessimism has probably been a legitimate reaction to exaggerated claims, for example as to what changes in the interest rate could do to the factor proportions of now existing firms. Many businessmen, engineers, and other observers have argued that firms have little choice in the relative amounts of labour and capital they use, and would thus not be in a position to react flexibly to the relative cheapening of labour implicit in the interest rate change proposed. This is very likely true and does place a limit on the possible short run impact of the policy. Other observers have argued that in some industries it is simply not possible to be labour intensive even if the best efforts were made. This argument has limited relevance in the long run, since one of the major contributions of an effective interest rate policy could be in preventing such industries from starting in the first place—provided the good is tradable—by making capital as expensive to them as it is to the economy in general. It would be expected that new firms would concentrate in the labour intensive industries, which would be particularly competitive after factor markets were brought closer to equilibrium.
Probably the major doubt as to the potential of this policy in the medium or longer run follows from the fact that most firms in developing countries have internal funds as a major if not the major source of capital, i.e., they depend only to a limited degree on the credit market. If large firms already control much of the flow of new funds becoming available for investment each year, it is unlikely that they will make it available--via financial intermediation--to more labour intensive firms; even if the rate of return is substantially higher for the latter firms, costs of intermediation are usually high in LDC's. Such transfer of funds tends to occur, as is well documented in Japan and elsewhere, when the small firm's output is complementary with the activities of the large firm.¹ Facilitating these supplier relationships is important, but it is not enough, of course. If public policy can affect factor proportions and industrial growth only in cases where firms must borrow to grow, this may miss many large powerful capital intensive monopolistic firms, the ones which it would be most desirable to put curbs on.

Similar obstacles, plus the disadvantage of a net fiscal cost, seem inherent in the policy of subsidizing labour use. But it is not unfeasible, just as tax credits for investments have not been unfeasible. Both have fiscal costs,² and a subsidy to the use of labour would be infinitely more effective as an employment policy than a subsidy to the use of capital. There


²Though, as just noted, this can be avoided by making the policy fiscally neutral, i.e., taxing firms with low L/K ratios and subsidizing those with high ratios so that fiscal revenue and expenditures to firms just cancel out.
remains an important question as to the quantitative impact of the measure; for the same reasons that interest rate manipulation may have a limited impact, especially in the short run, a labour subsidy might also. But this is not so evident as to suggest that the policy should not be at least given a fair trial; as firms learn how to take advantage of the subsidy, a significant contribution may result. Given the difficulty of getting budgetary funds allocated firmly enough to make the program credible if it relies on subsidies actually being paid to firms, it is more plausible to administer it as a tax reduction; since the firms for which a deduction could be valuable—the relatively large and usually capital intensive firms which would be paying taxes—are also the ones for which providing an incentive is most important, there is some built-in effectiveness in the program.

Another possible policy direction involves improvements in the functioning of the labour market. Many imperfections (e.g., those caused by unions, firms having monopsony power in the market, etc.) may be constants in the situation, but informational problems, lack of good advice, etc. may be more avoidable. In many countries the evidence tends to suggest that most labour markets function fairly well in the sense of generating wage rates reasonably close to the equilibrium level, and therefore clearing without too long delays. This seems to be the case in the unskilled labour market

\[1\] i.e., the markets in which most individuals find their jobs.

\[2\] That a labour market functions well in the sense of generating the wage which equates supply and demand does not imply, unfortunately, that the overall allocation of labour is efficient. In the labour surplus model, the supply price of labour is above its social opportunity cost, so that the equilibrium wage corresponds to too little employment. In short, to say that the market generates an equilibrium wage is not to say that, for example, a subsidy for the use of labour is not desirable.
where minimum legislation and especially fringe benefit legislation has not been too widely applied. It is not so easy to see how well markets work for skilled blue collar workers and white collar workers in general. Over the long run, there is unquestionably a relation between wage rates and the state of the market; in several countries the increasing supply of people looking for white collar jobs has, over the last decade or so, lowered the white collar/blue collar wage ratio. In general, however, it may well be that in these more complicated and narrower markets, it takes some time for excess supply to have its impact.

It is unclear the extent to which institutions designed to direct people to sectors where demand for labour exists could contribute to relieving the unemployment problem for blue collar groups, especially the unskilled. For the relatively homogeneous labour supply which becomes available for work on construction, small scale industry, etc., it appears at first sight, that not much could be anticipated here— that, in fact, the basic problem is not one of lack of information with respect to demand, but lack of demand. It is also true, however, that most people develop skills over time; in construction, for example, a reasonable share of the originally unskilled workers gradually move to higher skill classifications; the same goes for workers in small scale industry. Although the individual may be

---

1In Colombia, for example, as between agricultural workers and urban construction workers, there is usually a fairly small differential (20 to 40 per cent) part of which may be due to cost of living differences (although this is not clear) and the evidence suggests that the flow of rural to urban migration adjusts fairly quickly to keep this differential within reasonable bounds over time. Minimum wage legislation (and more importantly, the fringe benefits) is not generally applied in agriculture; the same is true in construction where a subcontracting system permits the avoidance of the fringe benefits. (The minimum wage itself is not so much of a problem, since it has not normally been above even the unskilled construction worker wage in recent years.)

as well informed on where he can obtain employment in the short run as
anyone else, an institution which would guide him toward sectors where the
skills he learns in the next few years will have greater long run produc-
tivity might make a contribution. It is not clear how such an institution
would function, or what leverage it could have over the decision process of
individuals. So few studies have been done with respect to occupational
patterns over life, occupational immobility at various levels of experience,
etc. as to make this a difficult problem to handle.

Conclusions

Accumulating evidence points to two distinct employment problems in
L.D.C.'s, the first related to a low aggregate demand for labour and afflicted
primarily the low skilled member of the labour force though not necessarily
or generally manifesting itself in the form of open unemployment, and the
second related to the failure of the economy to generate enough white collar
(or more generally, "desirable") jobs to satisfy the aspirations of the ex-
panding group of relatively educated persons, and their consequent decision
not to work at all rather than to accept jobs below their standards. The
relative seriousness of the two phenomena varies with the country and with
one's value judgments. It appears, however, that most prescriptions for
employment maladies have been directed toward the first problem, and that
none of the common recommendations are likely to help much in resolving the
second one; it therefore requires more careful and detailed attention. Still,
a strong case can be made that the low skill employment problem is the more
serious one. Of the five strategies discussed here (and pertinent to this
problem)--reduced rural to urban migration, faster economic growth, altered factor proportions, slower population growth, and an educational program which does not generate the aspirations so commonly observed now-- the first two seem of doubtful value; both theory and empirical observation contribute to this assessment, which is nevertheless by no means a final one since only now are the relevant questions beginning to be asked of the data. A policy of altering factor proportions seems to be the only survivor, and several of the specific suggestions such as fiscal incentives and focus on labour intensive exports are clearly worthy of serious consideration. The effect of an altered educational program should be felt primarily on the high aspirations unemployment; population policy is unlikely to have quick effects.

---

1 As discussed earlier, both faster economic growth (probably) and slower rural-urban migration (possibly) would result from an effective "factor proportions" policy. The point, however, is that they are not means to the goal of better employment, but joint products with it. Treating them as solutions could be counterproductive.