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Segmented Labor Markets in LDCs


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Segmented Labor Markets in LDCs

By Dipak Mazumdar*

The largeness of the subject forces me to confine my discussion to the urban labor markets in LDCs, and furthermore to manual workers. I shall outline the process by which the urban market for workers of low skill tends to develop a sector of high wage, often accompanied by job security and fringe benefits unavailable to the large number of workers outside this sector. Furthermore, since the number of jobs in the high wage sector is limited, many urban job seekers with skills or human capital endowments similar to those employed in the sector have only limited opportunities of getting into it.

I

The high wage or "formal" sector is easy to identify today by the operation of labor laws and/or unionism. But, while in a particular market the institutional factors might determine the point (or size class of enterprises) above which the formal sector extends, this sector cannot be said to owe its existence to institutional influences. First, the institutions have come into operation in a significant way only since World War II. But historical studies of labor markets show that the wage levels of regular workers in large-scale modern industry had been established well before the era of trade unions or government legislation (see, for example, my 1973 article, and Y. Yosuba, 1976). Secondly, there are many LDCs in which the substantive effects of trade unions or government legislation are limited even today, but wage levels are relatively high in the formal sector.

At the level of generalization, I would like to suggest a conceptual framework which seems to me to distill the experience of a number of LDCs regarding the emergence, consolidation, and exacerbation of labor market segmentation. This framework might be viewed as describing both a sequential process of labor market development in a particular economy and a cross-section picture of different LDCs having reached the stages described in varying degrees.

A.

The starting point should be a basic feature of rural-urban migration in LDCs—the distinction between different types of migrants with different supply prices. In particular, we should distinguish between individual migrants who came to the urban areas for long or short periods without breaking their ties with the rural economy, and family migrants who gave up rural residence (and activities) in a much more permanent way. The supply price of the latter will be necessarily at a higher level, and for several reasons. 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 of LDCs, because of the more limited role of women and children in market activity in towns compared to the rural areas. Third, the cost of living in town for a family is higher not only because of the higher cost of housing, but also because the person who has migrated from the rural community with his family incurs the cost of finding for himself protection against old age, unemployment, ill health, etc.—protection which will ordinarily be provided by the Social Security system in a developed country, and which the rural family would provide the individual migrant. The institution of the extended family might reduce the cost for the rural born individual who migrates to town with his wife and

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children, but it is unlikely that it will be for the entire amount.

Given this difference in the supply prices of 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. This was indeed the experience of large parts of the African urban or nonagricultural sector for a long time before the end of the colonial era. In some LDCs, however, the employers in emerging modern industry saw the value of the higher efficiency of stable labor committed to industrial work over the major part of their lifetime. Wage levels were set at a high enough level to attract stable family migrants. Thus we find the emergence of a modern sector with wage levels that were perceptibly higher than the earnings of labor in those activities in which individual unstable migrants dominated (see my 1973 article). These activities—like casual labor—did not provide the same incentive for wage increase because of a weaker link between stability and efficiency. The higher wage level of stable migrants in the mechanism described so far could be interpreted as the reward for superior labor (from the point of view of employers) with a higher supply price.

**B.**

I have so far discussed wage policy geared to creating a stable labor force by the formal sector as a whole, as though all employers were acting in unison. But, in a large urban labor market, individual employers will have their own policies of wage setting. The step from a wage policy designed to provide a labor force stable in terms of its urban residence to one aimed at keeping a firm-specific labor force is a short and perhaps inevitable one. This creates its own momentum for further wage increases. A profit-maximizing firm has an incentive to increase the wage of its own labor force as long as the increase in wage leads to a more than proportionate increase in efficiency. With a firm-specific labor force, the likelihood of the "least cost" wage being established at a relatively high level is increased for several reasons. First, the firm is dealing with a body of workers separated from the rest of the work force, so that the benefits of the wage increase are not shared out among a large number, as will 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 employers would not pass on short-term fluctuations in demand by cutting wages. Thirdly, management costs are smaller the smaller is the work force one deals with, and hence there is a built-in incentive for employers to increase wage rates rather than hire extra workers as long as efficiency responds to wage increase.

The mechanism discussed here establishes wages in the formal sector at levels even higher than the supply price of stable labor, but efficiency wage is not correspondingly higher. In the neoclassical model, this process could be viewed as increasing wages to select a body of high quality labor. The relatively high wage, in other words, merely represents the rent accruing to superior (and scarce) labor. The alternative view to be considered is that the causal mechanism does not run from efficiency to wages, but the other way round. Suppose stable labor is in elastic supply to the formal urban sector at a certain wage. It is not in scarce supply at this wage. A certain body of workers is selected (more or less at random) to provide a stabilized work force. The subsequent increase in wage is not due to the prior scarcity of workers of a certain quality. It is due to the pursuit of a high-wage policy within a firm dealing with an exclusive body of workers—which produces net profits to be shared between management and workers.

**C.**

The third stage in this schematic presentation of an urban labor market in LDCs is the opportunity offered by a stabilized and firm-specific labor force to the coming of unions. The process described above suggests that stabilized labor in the formal sector
might develop into a group which does not compete with and is not replaceable by the general mass of urban labor. Such a body of workers can be and often is organized. But the point to be emphasized is that unionism is established as a natural consequence of the labor market segmentation produced by the previous stages, rather than being a cause of the segmentation. In fact, in many situations employers are themselves known to have encouraged “responsible” unions as a protection against troublemakers. A point of some general applicability is that unions are often built on support from the government, who are also known to pursue labor policies on fringe benefits, job security, etc., and serve to enhance the privileged nature of formal sector employment. Government industrial policies in LDCs often create opportunities for high value productivity in modern industry through protection, cheap credit and so on. Interests of political stability demand that part of these “rents” created by public policy for private industrialists are shared with their workers. Pressures for such sharing are stronger when the employers are multinationals.

II

Studies of wage differentials between the formal and informal sectors have been done within a framework of human capital model of wage determination. First, we want to see if there is a “net” difference in wages after controlling for education, experience and other human capital endowments. Second, a point to be investigated is if education or experience are being used as screening devices for selection of workers in the high-wage sector. Third, a major point of interest is if returns to education and experience are themselves significantly higher in the formal sector of the labor market.

An example is my 1979 study of the Bombay Labor Market. I undertook a multiple classification analysis (a form of the analysis of variance) of the determinants of the earnings of a sample of 5,000 wage workers in Bombay City in which the sector of employment (casual, small enterprise, and factories distinguished by three employment size group) was included along with human capital variables (education, age, knowledge of English, and training). All the variables were highly significant and the model explained no less than 68 percent of the variance. But the important point was that the “sector of employment” variable turned out to be the most important explanatory factor, measured either by the ranking of the various variables in the order of explanatory power, or the spread of earnings associated with each category of variables after controlling for the others. Thus workers in factories employing 500 or more workers earned two and one-half times the casuals, after controlling for other factors, while the earnings of workers with postsecondary schooling were only 40 percent higher than those of illiterates.

It is also important to note that the increase in “net” earnings became stronger with the size class within the factory sector. Workers in factories employing 500 or more workers earned 60 percent more than workers in factories of 10–99 workers. (The wage difference between the latter and workers in small establishments with less than 10 workers was about 40 percent.) The result underlines the limited importance of purely “legal” factors in creating wage differentials since the Factory Acts cover most workers in enterprises with more than 10 employees.

The model was tested for the two-way interaction of the explanatory variables, and it was only the interaction between the size of the firm and the age of the worker which was of significance. The educational distribution of the workers in the different sectors of the labor market was very similar. Returns to the various educational levels, although significant in each sector, did not differ very much as between sectors.

The age-size interaction is important in showing the predominance of young workers in the small scale and casual sectors of the market. This is probably the result of a significant rate of return migration to the rural areas of workers staying in these sectors. However, the hypothesis that age-earnings profiles are flat in the informal sector of the labor market was rejected. Among those who continued in the informal labor market,
particularly in small establishments, earnings responded to age as much as in the factories. The role of the employment size of firm in accounting for wage differentials (after allowing for human capital factors) has been noted in many economies in Asia, Africa, and Latin America. The quantitative importance of this factor would obviously vary. In terms of the conceptual framework of Section I, it would be large in economies where a plentiful supply of rural-urban circulatory migrants keep up the competitive pressure on wages in the small-scale and casual sectors. At the other end of the scale, the importance of large-scale firms, making use of capital intensive modern technology, could also exacerbate the size related wage differential. In Japanese studies, where this phenomenon has been recognized for a long time, it has been related to the process of technological diffusion. "Dualistic" industries defined as those showing wage differentials by size of enterprise have been industries which had been showing rapid change with borrowed foreign technology—and the list of such industries was different in different periods of Japanese economic history (see Yosuba).

III

Even if a high wage formal sector is identified in the urban economy, it does not follow that the labor market is segmented. As noted earlier, there is a significant difference in age distribution between the Bombay factory sector and the other sectors. It might be hypothesized that the low-wage sectors are staging posts in the process of entry into factory jobs, as in the Harris-Todaro class of models.

The significance of this point turns very much on the empirical evidence on the extent of "graduation" from the informal to the formal sector. The two labor market studies I have done—one in urban Malaysia and the other in Bombay—both show graduation does exist, but is limited. In Bombay City, the proportion of large-scale factory workers at the time of the survey whose first jobs were in other urban wage sectors was about 25 percent. In urban Malaysia, the proportion was a little higher, partly because the survey included movement out of self-employment. These figures, of course, represent the average experience of a large number of cohorts over varying periods of time. In his study of migration into Delhi, Biswajit Banerjee compared the proportion of new migrants who had entered the informal sector in a particular year but had moved to the formal sector within a 12-month period with the proportion of new arrivals who had found jobs in the formal sector directly. His figures showed, for example, "that in 1967 new arrivals were at least four to six times more likely to get formal sector employment than those who had entered the informal sector in 1966." The Asian evidence points strongly to the conclusion that the market for recruitment to formal sector jobs is located much more in rural areas than in the urban informal sector, as implied by the graduation hypothesis. This is particularly surprising because the rate of growth in employment in the formal sector is generally much longer than in the informal—and a large wage gap exists in favor of the former.

The reasons for this are partly on the supply and partly on the demand side of the labor market. On the supply side, the sustained impact of return migration and low wages on the potential efficiency of a worker seeking entry into the formal sector is significant. On the demand side, the value attached by employers to the social cohesion of a firm specific labor force leads them to depend 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 noted in his study of Ahmedabad factories, a "de facto closed shop system."

This process of recruitment has the strong implication that the traditional hierarchical systems of caste relationships in rural labor markets would be carried over into the urban labor market. John Harris in his 1982 study of the Coimbatore labor market in India found that the dominant agricultural castes of the region were most strongly represented
in the regular work force of large engineering firms, whereas general casual labor in the town was dominated by members of the scheduled castes (who also constitute the bulk of landless agricultural labor).

IV

I conclude with some reflections on the welfare implications of the type of labor market segmentation above. I view the problem of large wage differentials within the urban manual work force more as one of distribution of income than as creating “distortions” or inefficiency in the neoclassical sense. As I have argued, the difference in efficiency wages (and hence of labor costs) between different size classes of enterprises could be much less than the observed wage gap. Nor can it be maintained that the creation of a stable, firm-specific labor force with virtual security of tenure in the formal sector creates rigidities in the system. The principal method by which large firms take care of fluctuations in labor requirements (and also cut down on the costs of fringe benefits and costs of recruitment) is the use of a body of “temporary” or “casual” workers. They are found in most LDC labor markets today, and are well known to students of Japanese labor history.

The concern with the distribution of income has both a static and a dynamic aspect. At any point in time, labor market segmentation, as I have discussed it, creates a privileged (and to some extent closed) class of workers who share in the relatively high net value added created in the formal sector, but are a minority of the urban work force. The course of development of the urban economy, in the recent history of many LDCs have added an extra dimension to this problem. A rate of growth of employment in the formal sector in excess of the rate of growth of the labor force would provide the possibility of an increasing proportion of the urban labor force being included in the high productivity formal sector. Typically, however, LDCs have had a rate of growth of employment in the formal sector well below the growth rate of the working population with employment lagging significantly behind the growth rate of value-added in the formal sector. In some situations, the increase in the “least cost” efficiency wage of labor with technological progress is central to this development. In other situations, the market structure in which formal sector producers operate with protection from foreign competition, encourage inflation of wages and prices over time rather than translation of higher productivity into falling prices. In still other cases, direct institutional effects on the urban labor market have reinforced the market-determined developments stressed so far. Examples are the successive increases of minimum wages applicable to the formal sector in several African economies—which were originally intended as instruments to stabilize the migrant urban labor force, but overshot the mark. In many LDCs, the public sector is a large employer of labor outside agriculture, and has yielded to pressures to increase wages of the existing work force which, of course, reduces its potential for hiring new workers with its budget constraints. The consequence of all these developments is that the urban economy is characterized by widening wage differentials between the formal and the residual sectors with a declining proportion of the urban labor force employed in the former. What happens to income distribution in its lower reaches depends crucially on the dynamism of the self-employed sector of petty producers and traders—which often shows high returns to small doses of capital and entrepreneurship, and which may provide an alternative to job seekers not able to get into the high-wage sector.

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