

## *Chapter 2*

# **LABOUR MARKET MODELLING AND THE URBAN INFORMAL SECTOR: THEORY AND EVIDENCE**

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## **INTRODUCTION**

The goal of economic development is to raise standards of living throughout an economy. Most persons' standards of living are determined by their labour earnings. Consequently, rising real wages at full employment are rightly viewed as a primary means of improving standards of living. For many workers, the best available job is a poor one in the city. This job is not "formal" or "modern" in the sense that those terms are used in the development literature to refer to activities in factories and offices similar to those of the industrialized world. Nor is the worker "unemployed" in the standard ILO sense of not working for pay but actively looking for work. The worker who is employed in a non-modern activity needs to be counted somewhere. Such workers, the jobs they hold, and the incomes they earn have come to be termed the "urban informal sector." In what way does it make sense to talk about an informal sector, as distinct from a formal sector? Mazumdar (1976, p. 656) gives a good answer: It is sometimes maintained that the characteristics which constitute the basis of the formal-informal sector distinction represent a pattern of continuous variation in a typical LDC labour market and, therefore, the dichotomy is unwarranted. There are two reasons for rejecting this contention: (a) whether the relevant characteristics represent a continuum or not is itself a subject of research, and, if we are to go by casual empiricism; then certainly the view that the "formal" sector is separated sharply in some ways from the rest of the urban market is more valid than the contrary one for many LDC urban markets; (b) even if the difference between two types of employment is one of degree rather than of kind, so long as it is of marked degree the methodology of economics can be applied successfully by operating with models which assume that the labour market is split into two different sectors.

The purpose of this paper is to assess the compatibility between theoretical models of the urban informal sector (UIS) and empirical evidence on the workings of that sector in the context of developing countries' labour markets. My major point is that although the UIS is an excellent idea which has served us well in the 1970s and 1980s, we have need in the next round of research to refine our terminology and our models in light of empirical findings which have come to the fore in the interim. I would contend that what empirical researchers label "the informal sector" is best represented not as one sector nor as a continuum but as two

qualitatively distinct sectors. Wage employment or self-employment in small-scale units may be better than or worse than employment in the formal sector. This is not a new point: diversity of earning opportunities and other job characteristics within the informal sector has long been noted — among other places, in the pathbreaking work of Hart (1973) and in the critiques of the informal sector concept by Bienefeld and Godfrey (1975), the ILO Sudan Report (1976), Standing (1977) and Sinclair (1978). But only recently has this view come to the fore: "A third point in which agreement has been reached concerns the degree of heterogeneity within the informal sector. Contrary to the prevailing image of a decade and a half ago to the effect that the informal sector was of a homogeneous nature, it is clear today that there are different segments within this sector" (Tokman, 1986, p. 13).

My view on heterogeneity of the informal sector is somewhat different from that expressed by many others. I am not simply saying that earnings and other aspects of jobs vary within sectors as well as between them. As I see it, the differences within the informal sector are systematic vis-à-vis the formal sector. Let me elaborate.

Consider the situation of a new entrant to the labour market or a new (or potential) migrant to the city. For such a person, a low-paying job in agriculture may be an option, although for those who live in land-scarce economies, even that may not be possible. In the city, the best initial alternative, if available, may be employment in the formal sector. Unemployment in the city is a distinct possibility. In between formal sector employment and open unemployment is employment (or underemployment) in the urban informal sector.

But persons who have been working in the formal sector for a long period of time do not necessarily wish to remain there. As they acquire experience, skills, and money, some of them may endeavour to leave wage employment in the formal sector and set up their own small businesses. Although these businesses are usually small and unregulated and may well lack a fixed work place, these businesses differ from the kinds of jobs described in the previous paragraph in one key dimension: they are not free-entry. At least some human and financial capital, often a considerable amount, is required before one can get into this kind of work.

Consider now the range of activities in which firms are small, workers are unprotected by labour legislation, work hours are variable, and the work place is not fixed. Usually, such employment is called informal. However, based on the distinction drawn in the previous two paragraphs, I would suggest that two very different things are going on within that "sector." Part of it consists of employment which is free-entry, low wage, and undesirable relative to formal sector employment. However, another part of it consists of employment which is limited-entry, high wage, and preferred to formal sector employment. From the point of view of the worker, as well as that of the outside evaluator, these two groups are very different in their position relative to the formal sector: the first is worse, the second better. In most empirical research, however, these two segments are lumped together and treated as one. As a result of combining two very different groups, the typical empirical study, which purports to offer data on the "informal sector," conceived of as a free-entry sector within the urban economy and broadside by firm size or some other equally indistinct categorizing variable, is rendered dubious, if not downright invalid.

This implies the need for a clear distinction between the two sectors. The terminology I would suggest would be "easy-entry informal sector" and "upper-tier informal sector."

Section I of this paper reviews some of the major labour market models of the 1960s for developing countries. This section serves to show both what was present in the thinking of the researchers of the day and what was missing. What was present was labour market

dualism, purposeful job search, and unemployment. What was missing was an informal sector.

Section II presents characterizations of the urban informal sector. This section points up the features that led to the perceived need for an additional sector and presents the definitions of the UIS that were suggested as a result.

Section III reviews ways that the UIS has been integrated into theoretical labour market models. After presenting each of the major theoretical efforts, the strengths and weaknesses of these various formulations are evaluated.

Sections IV and V set forth some of the empirical evidence on the UIS, from existing studies and from economic anthropology respectively. These findings pose challenges not only to those labour market models which incorporate an urban informal sector but to the very concept of the UIS itself.

Section VI summarizes the main conclusions.

## **I. SOME EARLY LABOUR MARKET ANALYSES**

### **1. Stylized Facts of LDCs' Labour Markets**

Any realistic analysis of labour markets in developing countries must capture two empirical features of their labour markets: open unemployment and wage dualism.

Open unemployment rates, as tabulated by Turnham (1971), Squire (1981), and others are sizable, often in double-digits. And this excludes underemployment, the rates of which are also found to be substantial (Yotopoulos and Nugent, 1976; Sabot, 1977; Squire, 1981).

Wage dualism arises when apparently homogeneous workers are paid different wages depending on the sector of the economy in which they are employed. Both tabular presentations and multivariate analysis demonstrate wage differentials for observationally equivalent labour; see Berry and Sabot (1978), Fields (1980), Squire (1981) and the references cited therein. From my reading of this evidence, it appears that after standardizing for relevant differences in workers and firms, there remain wage differences between comparable workers in different sectors.

The reasons offered for these apparent differentials fall into two categories — institutional and market — of which the institutional dominate thinking and discussion. Five institutional forces, singly or in combination, have potent influences on wages in most of the developing world. Minimum wage laws are commonplace and when enforced cause wages to be higher than they otherwise would be. Labour unions often are very strong. At times, this is because of the close association between organized labour and the political party in power. Other times, it is because labour unions are encouraged as a means of achieving higher wages for workers. Pay policy for government workers often sets the pattern of wages for the rest of the economy, and those in charge have a propensity to pay high wages to all government workers (including themselves). Also, multinationals often pay high wages, partly to maintain parity between expatriate and local employees and partly (in some instances) to appear to be good corporate citizens and thereby to avoid expropriation or expulsion. Finally, labour codes may require higher wages, fringe benefits, and severance pay, resulting at times in bloated work forces and inflated labour costs. Market reasons for higher-than-market-clearing wages have been offered by other analysts. For example, Stiglitz (1974, 1976, 1982) suggests that firms may find it profitable to raise wages by  $x$  per cent if this

leads to a greater-than-x per cent increase in worker productivity due to better nutrition, improved morale, or lower labour turnover.

Not all wages are affected identically by wage floors, either for market reasons (e.g. a more experienced labour force is more valuable in some industries than in others) or for institutional reasons (e.g. trade unions exert differential influence in different industries, certain industries or occupations are exempted from minimum wage laws). The result is a structure of wage differentials. As a stylized version of the differential applicability of wage floors, economists from such disparate fields as development economics, labour economics, and international trade have formulated two-sector models with a wage floor in one sector but not the other. Wage floors would be expected to affect directly the sectors involved and to affect indirectly via migration and other general equilibrium phenomena the other parts of the economy.

## **2. Some Early Models**

Some models in international trade have two economic sectors with the same wage floor in each. Models from other fields of economics have wage dualism but lack unemployment: the dualistic models of economic development, the trade models with fixed wage differentials, some general equilibrium models of sector-specific wage floors, and some but not all minimum wage models of labour economics. These classes of models differ from one another in important ways, but have one central feature in common: they do not have both wage dualism and unemployment. It would be desirable to have a model with both.

## **3. Models with Wage Dualism and Unemployment**

Wage dualism arises due to incomplete coverage by minimum wage laws, strong trade unions in some sectors but not others, and the like. Open unemployment arises from the purposeful movement of labour between sectors on the basis of the expected wages in each. Labour may move on the basis of the strict mathematical expectation (i.e. wage multiplied by probability of employment), or the employment probability may be included in some other way. But the equilibrium tendency is toward equalization of wages adjusted for probability of employment. This contrasts with flexible wage models; it is an increase in unemployment in the high wage sectors rather than a fall in the wage that ultimately equilibrates the supply side of the market.

Models with the preceding features have been developed by Todaro (1969), Harris and Todaro (1970), Harberger (1971), Tidrick (1975), Mincer (1976), and others. The core features of this framework are:

- i)* A dualistic economy, consisting of a modern urban sector and a traditional agricultural sector, or a covered sector and a non-covered sector;
- ii)* Wage dualism, resulting from:
  - a) A rigid wage above market-clearing levels in the modern sector, along with
  - b) Market-clearing wages in agriculture;
- iii)* Migration on the basis of differences in expected wages (the wage if employed adjusted for the probability of employment);

- iv) Persistent urban unemployment;
- v) Tendency toward expected wage equalization.

#### 4. Evaluation

The Harris-Todaro model (and others in that class) improved enormously on previous models. Harris and Todaro tried to capture the features of the Kenyan labour market (and, we learned later, the features of many other countries' labour markets as well). This they did much better than labour market models which preceded it. However, despite the many attractions of the Harris-Todaro model, and the subsequent extensions and refinements of it, a certain disquiet arose: the urban labour force did not fit neatly into Harris and Todaro's two categories: employed in the modern sector or unemployed. It became increasingly evident that within the urban areas of developing economies, there existed a significant group of people who were neither employed in modern sector jobs nor unemployed. They occupied an intermediate position, sometimes called "underemployment," whereby they were working (hence not unemployed) but the work was by no means modern (nor, for that matter, was the pay). A number of authors studied this sector and made its characteristics known. The result is the widespread recognition of what has come to be called the "urban informal sector."

## II. CHARACTERIZATIONS OF THE URBAN INFORMAL SECTOR

Around 1970, researchers became aware that people in developing countries were working in an urban sector that was not modern. Included in this sector were small traders, street vendors, shoeshine boys, self-appointed parking attendants, beggars, and others in somewhat shadowy activities, as well as carpenters, masons, tailors and other tradesmen, cooks, taxi-drivers, etc.

The criteria for the informal sector identified in the ILO report on Kenya (1972, p. 6) were:

- i) ease of entry;
- ii) reliance on indigenous resources;
- iii) family ownership of enterprises;
- iv) *small scale of operation*;
- v) labour-intensive and adapted technology;
- vi) skills acquired outside the formal school system; and
- vii) unregulated and competitive markets. Informal-sector activities are largely ignored, rarely supported, often regulated and sometimes actively discouraged by the Government. The characteristics of formal-sector activities are the obverse of these ..."

Of these many possible distinguishing characteristics, which are most crucial? My concern in this paper is with labour market choices. From that point of view, what matters about the informal sector is not its economic efficiency or inefficiency, nor its possible contribution to a country's future wealth, but rather its role as a source of earnings for those who wish to work there. Thus, for my purposes, the critical distinguishing feature of the informal sector is ease of entry or lack thereof.

Mazumdar (1976, p. 656) shares this view of the distinction between the formal and informal sectors. In his words:

The basic distinction between the two sectors turns on the idea that employment in the formal sector is in some sense or senses protected so that the wage-level and working conditions in the sector are not available, in general, to the job-seekers in the market unless they manage to cross the barrier of entry somehow.

If by definition, the informal sector exhibits free entry, which means that all who are willing to take up employment in that sector can receive a cash income, the mechanism whereby incomes are determined within that sector must be specified. Harberger (1971, p. 574) characterized it thus:

The second variant associates disguised unemployment not just with low wages but with situations in which the marginal productivity of labour lies below the actual wages earned. This is clearly a quite different concept, which could among other things apply to high-wage as well as to low-wage workers. There are a variety of activities to which this argument applies. A classic example is that of fishermen on a lake. The addition of more fishermen increases the total catch, but not proportionately, yet the last fisherman has an equal chance of making a given catch as the first. The expected catch is the same for all, and is equal to their average productivity. But, owing to the fact that the total catch does not increase in proportion to the number of fishermen, the marginal productivity of a fisherman is less than what he earns. Other cases, more frequently cited in the economic development literature, are the shoeshine boys in a given square, where the presence of the last boy does not proportionately increase the number of shiners, or the hawkers and vendors found in the streets of less developed countries, where the addition of another man selling a given product does not proportionately increase the amount sold but has the effect of somewhat reducing the average amount received by each.

Implicit in Harberger's examples are certain assumptions about institutional arrangements, resulting in average product determining individual incomes. In his fishing example, the assumption is that existing fishermen cannot restrict the marginal fisherman from fishing in their waters and reducing their catch — which is, of course, what free entry means. In his shoeshine example, it is assumed the customers who enter the square in search of shoeshines choose a particular shoeshine boy one n'th of the time — and thus, there is no particular advantage to one location within the square compared with another. These are reasonable assumptions, but the need to make them should be pointed out.

By definition, the formal sector jobs pay better than the informal sector jobs. Because of this, workers naturally aspire to formal sector jobs. But formal sector jobs are not available to all who seek them. Unemployment or underemployment will result.

Which will it be: unemployment or underemployment? The answer depends upon earning opportunities and ease of on-the-job search in the different sectors. In the Harris-Todaro world, a worker has only two options: he can migrate to (or remain in) the city and search for a formal sector job while unemployed, or he can locate in the rural sector and relinquish any chance of getting a formal sector job.

Moving beyond the strict Harris-Todaro specification, we might want to allow for on-the-job search from the rural sector, in which case the two search strategies are search while unemployed in the urban area or search while employed in agriculture. In this case, everyone in the labour force aspires to a modern sector job, because that is the best earning opportunity in the economy. Some search while openly unemployed; others search (albeit

with a reduced probability of success) while employed in agriculture. The only persons in the economy who do not search are those who are already in modern sector jobs.

The existence of earning opportunities in the informal sector gives each member of the labour force yet another search option: he might take up a job in the urban informal sector and search from there in the evenings, on weekends, or during the day when working hours are variable. In the typical developing country, most of the formal sector jobs are located in the cities. Urban informal sector workers would therefore be expected to have a better chance of obtaining an urban formal sector job than would an agricultural worker, if for no other reason than simple proximity to places of hiring. Writing in the early 1970s, based on observation of the Kenyan situation, I characterized the search process as follows:

New arrivals in the cities ordinarily stay with friends or relatives who help house and feed them while they look for work. A dozen or more people crowded into one room is not uncommon. They need not live in housing which is rented or provided as part of job compensation. Squatter settlements and shanty towns house a substantial portion of urban populations, particularly in Africa.

Open unemployment is not very common. Additional household members are expected to contribute to their support. Frequently, they assist with the household chores by preparing meals, washing clothes, or caring for children. Simultaneously, they search for work (albeit on an irregular basis) and are classified as unemployed.

The most fortunate new migrants obtain a permanent modern-sector job as a clerk, messenger, or whatever. However, these are the best jobs and the typical migrant is forced to find some lesser means of earning a cash income. He may secure one or more typically a succession of wage jobs (e.g., house-servant, cook in a small lunch kiosk, assistant in a family shop) or engage in self-employment (e.g. selling produce, newspapers, curios, or shoe shines on the street corner).

The defining characteristics of the (informal) sector are ease of entry and the lack of a stable employer-employee relationship. The urban areas of less developed countries typically have a wide variety of such open entry, casual employment types of jobs. For instance, a person can get started by buying some peas in the market, removing the pods at the side of the road, and selling podded peas to passers-by at a higher price. Prostitution is another occupation which has notoriously easy entry.

Workers in the (informal) sector are ordinarily classified as employed although they themselves and the statisticians who measure those things would be inclined to consider them underemployed. [Fields, 1975, pp. 171-172]

I would maintain that this characterization is equally valid today as a characterization of a broad range of economic activity, not only in Kenya but in a wide variety of developing countries.

Others agree. For example, Oberai and Singh (1984) conducted a study in Ludhiana in the Indian Punjab. They found (p. 509) "that more than 90 percent of migrants seeking work found a job within two months of their arrival, which means that migrants are being absorbed fairly quickly into the urban labour market". But much of this is free-entry self-employment. In Oberai and Singh's words (pp. 516-517): "... a fair proportion of migrants who take up self-employment on arrival start in the informal sector where they work as street vendors, porters, shoeshine boys and the like. Perhaps some of them also work in small family enterprises. All such employment requires little capital or skill. The proportion of migrants who are engaged in the formal sector as own-account workers or employers rises in most

cases with length of stay; the increase is particularly sharp during the first few years". And in a study of Jamaica, Doeringer (1988) has written: "In particular, a distinction is drawn between those jobs (generally in what is often called the informal sector) where easy entry and work sharing are the principal determinants of income-earning opportunities, and those which are protected by formal sector internal labour markets. This distinction is critical for understanding how employment and productivity are affected by economic change, and by institutional forces in the workplace".

Thus, the main features of the urban informal sector, as I characterized it in my 1975 paper and as it remains characterized in many people's minds today are:

*Free entry*, in the sense that all who wish to enter this sector can find some sort of work which will provide them with cash earnings;

*Income-sharing*, because of the institutional circumstances of that sector's production and sales patterns;

*Positive on-the-job search opportunities*, in that those who are engaged in the urban informal sector have a non-zero chance of finding a formal sector job;

*An intermediate search probability*, in that those in the urban informal sector have a better chance of finding a formal sector job than do those in agriculture but a worse chance than those who are openly unemployed and searching full time; and

*A lower wage in the urban informal sector than in agriculture*, arising endogenously as result of the higher on-the-job search opportunity here.

Free entry is the defining feature of the informal sector, and the other characteristics just listed are attributed of that sector in a typical developing economy.

Not everyone shares this view. Tokman (1986), for instance, explicitly rejects it. He writes (p. 3): "As it happens, migrants and newcomers to the labour market are characterized by their lack of capital, both physical and human. This determines the type of activities they can perform, their main requirement being easy entry into the sector". However, he continues (p. 5): "The ease of entry has not been dropped from the analysis and is still kept as an important factor to examine the rules of income determination. However, the organization of production is the main variable, while the characteristics of entry are only used to qualify the differences between the units which use labour, either paid or unpaid, and the individual units of production".

The utility of any concept depends on the use to which it is put. If we regard work in the informal sector as a labour market option for workers, and if we wish to analyse the functioning of that sector's labour market and its linkages with other sectors' labour markets, then the ease or difficulty of entry into the sector is the critical distinguishing feature. For other purposes, such as for designing industrial policy or urban development policy, conceptualisations based on form of organization might be better. But for the purpose of labour market analysis, free entry must take precedence.

### III. THE URBAN INFORMAL SECTOR IN THEORETICAL LABOUR MARKET MODELS

An urban informal sector has been included in some of the better-developed formal theoretical labour market models. The models fall into three broad classes, depending on the extent of freedom of entry into the informal sector and on the nature of the job-search behaviour posited.

One class of models posits the behaviour: Take an informal sector job if you can't get a formal sector job. The earliest model of which I am aware that contains an urban informal sector, Lopez (1970), has this feature. His starting point was the rural-urban migration model of Todaro (1969). He generalized the Todaro model to include the possibility that those who were not employed in the urban modern sector might possibly be employed in the urban informal sector.

In the first of Lopez's formulations, an urban resident who seeks a formal sector job and is unsuccessful automatically takes up informal sector employment. The problem with this formulation is that by assumption, it excludes the possibility of urban unemployment. Since urban unemployment exists, that possibility must be allowed for.

Another class of models posits different behaviour for those who do not succeed in getting formal sector jobs: Take an informal sector job if you can get one. A second variant of Lopez's model allowed for this. A potential migrant from the rural area or a new entrant to the labour force in the urban area would face three possibilities: employment in the modern sector with probability  $@(t)$ ; unemployment in the city with probability  $[1 - @(t)] k'$ ; and employment in the urban informal sector with probability  $[1 - @(t)] [1 - k']$ . In later years, essentially the same model was carried forward independently by Mazumdar (1976).

Note how unemployment arises in this class of models. In any given time period, informal sector jobs are not available to all who might wish them. Rather, Mazumdar felt that new hiring takes place frequently, so that those who are unemployed today have a good chance of being hired tomorrow. He wrote (1976, p. 676): "The labour market in the (informal) sector is assumed to represent, in its broad outline, a casual labour market. Workers are hired on short contract, say for the day. No worker is certain of obtaining a day's work in any particular day, but everybody gets some work over a period of time". Thus, entry into the informal sector is essentially free, in the sense that anyone wishing to enter that sector can do so and share in the available work over time; yet unemployment exists, because not all of the labour hours supplied are actually demanded.

The introduction of unemployment alongside employment in the urban informal sector (or, as it sometimes called, "under-employment") is a clear improvement on models which lacked an informal sector. However, the specific way in which unemployment is introduced is not necessarily the best. From the point of view of job search and job-getting behaviour, the formulations of Lopez and Mazumdar are controversial, if not downright problematical: they assume implicitly that those urban workers who are employed in the urban informal sector have the same chance of getting a modern sector job as those who are completely unemployed. This is probably unrealistic, empirically. One observes that urban informal sector workers appear to have a lesser chance of getting a modern sector job than those who are unemployed. One reason for this is that informal sector workers have less time to spend on job search. Put differently, whenever a modern sector job vacancy occurs, the unemployed worker engaged in full-time job search has a better chance of being in the right place at the right time to be hired as compared with the worker who is employed in the informal sector. The presumed greater efficiency of search while unemployed relative to on-the-job search should be brought into the analysis.

This leads to a third class of models with the decision rule: Take an informal sector job only if it pays you to take one. Search while unemployed should be more effective than on-the-job search. This may be included in a three-way choice among the following options:

- i) Remain in the rural area without hope of getting a modern sector job. Earn the agricultural wage.

- ii) Search while unemployed in the urban area. Take a modern sector job if one is offered. Otherwise, be unemployed.
- iii) Search while employed in the urban informal sector, with a lower probability of success than if searching while unemployed. Take a modern sector job if one is offered. Otherwise, earn the informal sector wage.

The first two of these strategies correspond to the Harris-Todaro options. The third is an additional option, first introduced in Section 4 of my 1975 paper [Fields (1975)].

The considerations entering into the choice between options (i) and (ii) are familiar from the Harris-Todaro problem, and so require no elaboration here. Regarding option (iii), however, questions may arise. Why would anyone search from the informal sector if it means a reduced probability of getting a modern sector job? The answer is that those who search from the informal sector receive a wage while employed in that sector, as opposed to the unemployed who do not (although they might receive transfers from family members).

The opposite question might also be asked: why doesn't everyone search from the informal sector if they can receive a wage while working there? The answer is that they would all do exactly that if the earnings they could receive were sufficiently high to compensate for the reduced chance of finding a modern sector job. But if not all of them do that, there must be some reason for it. The reason, I suggest, is that if all were to enter the informal sector and search for formal sector employment from there, they would drive the informal sector wage down so low that it would be in some of their interests to alter their behaviour. Some would therefore pursue modern sector jobs more intensively and search while unemployed.

Finally, it might also be asked: Why does anyone remain in agriculture? If it is possible to earn a wage in the urban informal sector and have a non-zero chance of obtaining a modern sector job, why stay in agriculture, where the chance of getting a modern sector job is small if not zero? The answer is that workers who stay in agriculture must be compensated for their lack of access to the formal sector by being paid a higher wage than they could earn in the urban informal sector. Put differently, in equilibrium, the wage in the urban informal sector must turn out to be sufficiently below the wage in agriculture for it to be advantageous for some workers to choose to remain in agriculture, as indeed they do.

We are now in a position to understand what must be the case for all three labour market strategies [(i) - (iii) above] to be chosen: if the chance of getting a modern sector job is highest while unemployed, next highest while employed in the urban informal sector, and lowest (or zero) while employed in agriculture, the wage must be higher in agriculture than in the urban informal sector (which is in turn higher than the transfer income while unemployed). This reasoning therefore predicts that an economy with these features will reach an equilibrium in which urban poverty will be widespread and more serious than rural poverty — a quite plausible explanation for the existence of miserable Third World urban slums.

In Fields (1975), I extended the model just presented in other ways: by allowing for on-the-job search for modern sector employment while in agriculture, by introducing differential educational qualifications and allowing for the possibility that modern sector employers might hire the better-educated preferentially, and by embedding all of these extensions of the Harris-Todaro model in a multi-period framework. Because these extensions do not have a bearing on the characterization of the informal sector per se, I shall not elaborate upon them here.

Since the appearance of my 1975 paper (which received favourable attention from, among others, Todaro, 1976 and Krueger, 1983), other models have appeared. Stark (1982) published a model of the informal sector similar in a great many respects (even notation). I do not find any additional insights in that paper which were not already in the models cited above.

Harris and Sabot (1982) reiterated one of the major conclusions of my model: that the urban informal sector wage is predicted to end up below the rural wage. They then adopted a standard job search formulation from labour economics and discussed how this class of models might be generalized to allow for searching from among a wide range of urban wage offers; but because their model is so general, it does not produce any specific results.

The models discussed thus far have not treated skill differences among workers. Yet, it is a well-established empirical fact that workers with more education or training have a higher chance of working in the better sectors of an economy. My 1975 model allows for this (Fields, 1975, Section 8). The possibility is raised that education might be necessary to qualify for better-paying jobs in the formal sector. The model also allows for the possibility that, if there are surplus educated workers relative to the demand for them in the better jobs, some might take their education to the informal sector, where they might be more productive or be hired preferentially for wage jobs.

Cole and Sanders (1985) have formulated a model which also has formal and informal sectors in the urban economy as well as rural sector and workers who differ in educational qualifications. Their model has a number of desirable features, including intersectoral linkages, expected wage equalization among alternative search strategies, and specification of the demand and supply sides of informal sector output. It has a number of defects, though. One is that according to their specification, workers migrate either in search of formal sector jobs or in search of informal sector jobs but that these are mutually exclusive strategies. They thereby exclude on-the-job search from the informal sector — a not very realistic assumption.

Another very recent line of work bears mention. We now know that on-the-job search raises an additional complication not recognized by myself in my 1975 paper or by subsequent authors working in a similar tradition, including McDonald and Solow (1985). This is that workers' choices among search strategies *ex ante* are not the same as the *ex post* outcomes. *Ex ante*, workers begin by allocating themselves between the three postulated search strategies such that the three expected wages are equalized. But when there is on-the-job search, some of those who started in agriculture or in the urban informal sector get modern sector jobs, hence leave the sectors they began in. Consequently, the rural labour force and the urban informal sector labour force will be smaller *ex post* than *ex ante*; and likewise, the urban labour force will be larger than the number of urban searchers *ex ante*. One implication of this is that even in a rational expectations equilibrium, the average urban and rural wages will not equalize. Another is that urban unemployment will be smaller the more efficient is on-the-job search from the informal sector. For details, see Fields (1987).

A final line of work deserves mention. A model with diversity within non-formal urban activities has been constructed by Steel and Takagi (1983). They distinguish "small scale enterprises" from the "residual sector" within nonformal activities. However, a number of specific features of the model make it less than fully satisfactory for analysing the informal sector:

- i) Some of the key variables are approximated rather than solved directly.
- ii) An earlier error made by Todaro (1969) is repeated: the failure to distinguish the probability that a worker will get a modern sector job (which is a transition

probability) from the probability that a worker will have become and will continue to be employed in a modern sector job (which is a state probability).

- iii) All who are engaged in "small scale enterprises" or in the "residual sector" are assumed to be searching for formal sector jobs. However, the small scale sector does not receive workers who have accumulated capital in formal sector jobs. This is inconsistent with empirical evidence on the small scale sector, to which we now turn.

#### IV. CHALLENGES AND RESPONSES

The empirical observations cited in Section II and the resultant theoretical formulations contained in Section III led to a well-defined view of what the informal sector is and how it interrelates with the rest of the labour market. But almost immediately after these views were put forth, and continuing up to the present, empirical researchers have challenged the earlier views. The purpose of this section is to review and critique the available evidence.

##### 1. Challenges to the Earlier Views

The following challenges have appeared in the literature:

*Claim 1:* What appears to be free entry isn't. According to Sinclair (1978, pp. 96-97), "the belief that entry into informal occupations is easy is widespread". He cites studies of Indonesia (Sethuraman, 1975) and Brazil (Merrick, 1976), as well as more general analyses (Reynolds, 1969) in support of this view, but then offers contradictory evidence of his own from Nigeria and elsewhere. It has also been argued that past researchers have been fooled by their own observations. In this view, outside observers who look in at the informal sector and see people begging, selling things on the streets, or working in illegal or quasi-legal activities are mistaken in inferring that anyone who wishes to engage in such activities can freely do so. The argument is this: Anyone who tries begging in front of the Hilton Hotel will quickly find that someone very strong and powerful will come along and either shoo that person away, by force if necessary, or demand a sizeable amount of protection money to permit the beggar to remain.

The response is that although many activities which might appear to be free-entry in fact are not, it is nonetheless true that there exist opportunities for those who wish to enter some sorts of urban activities and earn at least some cash, even if earnings are low, the work unsteady, and protection minimal at best. This is all that the established view requires. House's study of Nairobi finds exactly this (1984, pp. 282-4):

The popular image of the informal sector is that it is easy to enter because skill levels are low and the amount of money required to set up in business is insignificant ... [My findings show that] entry to the sector is clearly not as easy as the popular image would have us believe ... Clearly, business proprietors in the informal sector are urban residents of long standing and not young, recent migrants ...

However, the survey findings reported below reveal that employees in the sector are much younger and more recent immigrants to Nairobi than their employers. For them the informal sector offers the promise of a way into an urban existence, albeit at a bare subsistence level.

**Claim 2:** The earnings of informal sector workers are lower on average than earnings in the formal sector. However, informal sector earnings are not uniformly lower. Rather, the two distributions exhibit substantial overlap. The theory supposes that workers in the informal sector earn less than formal sector workers, and that for this reason, they seek to leave the informal sector if they can. The evidence is in part consistent with this, in that the average wages among urban informal sector workers are generally reported to be lower than those among formal sector workers. Among those reporting such findings are Merrick (1975) for workers in Belo Horizonte, Brazil, Webb (1975) for Peru, Kugler et al. (1979) and Bourguignon (1979) for Colombia, and Pang and Liu (1975) for Singapore.

Despite these average differences, the evidence also appears to show that the earnings distributions in the two sectors have substantial overlap. Here, for example, are Webb's findings for Peru:

#### URBAN LABOUR FORCE BY MONTHLY INCOME, IN US\$, PERU

Income	Informal (%)	Formal Blue-Collar (%)
0 - 23	32	9
24 - 26	27	20
47 - 115	29	60
116 - 230	8	11
231 +	4	1
Average	50	68

Source: Webb (1975)

Taking the self-employed as "an important category of the informal sector," Mazumdar (1976, p. 662) cites the following examples of overlapping distributions: the work of Webb for Peru, showing that 37 per cent of the self-employed earned as much or more as the modal earnings of formal sector workers; Sabot's (1975) work on Tanzania, in which the income of the self-employed is shown to be less equally distributed than the income of wage earners; and Mazumdar's own work on Malaysia, in which the male self-employed were found to earn only slightly less at any given age than male employees. And reflecting the view that "the tertiary sector is tacitly accepted to be the substantial part of both the informal sector and the self-employed in the urban labour market," Mazumdar (1976, p. 666) examined the available evidence for Malaysia, Brazil, and Korea and found a "lack of factual basis behind the popular myth about the tertiary sector." (p. 670).

**Claim 3:** The earnings of informal sector workers are not lower than the earnings of agricultural workers. The theory of Section III led to the conclusion that the earnings of urban informal sector workers should be less than the earnings of comparable agricultural workers. If earnings are quoted in nominal pesos, rupees, or whatever, one reason that informal sector workers might be observed to have higher earnings than agricultural workers

is that the urban cost-of-living is higher than the rural cost-of-living. Of course, such differences should be standardized for.

An example of evidence which at first glance appears to contradict the predictions of the theory is the work of Webb (1975). He classified Peruvian workers on the basis of their relative importance in the four quartiles of the country-wide income distribution in 1970. He found:

PERCENTAGE OF LABOUR FORCE IN EACH CATEGORY IN QUARTILES, PERU,  
1961

	Poorest	Second	Third	Richest
Urban formal	0	4.0	26.0	70.0
Urban Informal	9.5	29.8	39.4	20.0
Rural traditional	45.8	24.9	16.0	13.4

Source: Webb (1975)

From this, he concluded:

"Though urban cost of living differences inflate the apparent real incomes of urban residents, most urban incomes surpass the limiting income for the bottom quartile by a longer than any plausible correction (sic). The common assertion that urban workers (except for a lucky few placed in modern establishments) are no better off than the rural poor, is an erroneous generalization derived from the case of the urban fringe: the poorest (and most visible) 5-10 per cent." (Webb, 1975, p. 29, cited in Mazumdar, 1976, p. 671).

**Claim 4:** Because informal sector workers have been in that sector a long time, the "staging area hypothesis" is wrong. The extended Harris-Todaro theory suggests that some number of job aspirants for the formal sector begin their search in the urban informal sector. This is sometimes called the "staging area hypothesis," in that the urban informal sector is regarded as a temporary stopping-off ground through which workers pass as they move into formal employment. It is thought to relate to migration, insofar as people migrate from rural to urban areas in the hopes of improving their chances of being hired for formal sector jobs, most of which are typically located in urban areas.

Some of the evidence purporting to contradict this hypothesis is the following. In Belo Horizonte, Merrick (1975, p. 21) found that the proportions of native-born and migrants in the informal sector were more or less the same. Webb (1975) found that 63 per cent of workers in the urban informal sector were migrants and that an identical 63 per cent of formal sector workers were migrants. Formal sector workers had resided in the city for an average of 16.9 years, as compared with an average of 15.3 years among informal sector workers. Sabot (1975) found that of migrants in urban Tanzania, 60 per cent had been self-employed for 5<sup>1/2</sup> years or more. Mazumdar (1983, p. 257) reports that graduation from the informal sector

factory workers at the time of the survey whose first jobs were in other urban wage sectors was about 25 per cent. In urban Malaysia, the proportion was a little higher, because the survey included movement out of self-employment". Steel and Takagi (1983, p. 427) cite a number of other studies showing that workers commonly find "permanent employment" in small firms rather than as temporary positions while in transition to modern sector employment.

What does this mean? It does not tell us anything about workers' intentions about leaving the informal sector, which is my understanding about what the "staging area hypothesis" is all about. At best, we learn from such evidence about workers' opportunities to leave. If we wish to know about workers' intentions to leave, we must get more direct information.

**Claim 5:** The urban informal sector is not the major source of recruitment for the urban formal sector. Formal sector jobs are often filled by rural residents. The Indian case is well-documented. Banerjee (1983) found that a worker newly-hired into the formal sector of New Delhi was six times as likely to have come from the rural area as from the urban informal sector. Mazumdar (1978) and Poppola (1977) reached the same qualitative finding for Bombay and Ahmedabad respectively.

Although this evidence poses a problem for the Harris-Todaro model, it is not a problem for the extended Harris-Todaro model. The Harris-Todaro model rules out recruitment of rural workers for formal sector jobs by assumption, so evidence that most of those hired in the formal sector come from rural areas is clearly at odds with the assumptions of the model. However, the extended Harris-Todaro model (e.g. Fields, 1975) allows rural workers to have a non-zero probability of finding a modern sector job. If rural workers have a good chance of securing a modern sector job relative to informal sector workers or the unemployed, the extended Harris-Todaro model implies that in societies like India where most of the people are in rural areas, most of the jobs will be filled by rural residents. There is no contradiction here.

**Claim 6:** Many people are in the urban informal sector by choice, not because they are forced into it. The theory of Section III suggests that people are in the urban informal sector partly by choice and partly not. They are hypothesized to be in the informal sector by choice in the sense that they could have remained in rural areas, yet they left those areas in the pursuit of something better. They are hypothesized to be in the informal sector not by choice in the sense that once in that sector, they would willingly leave it and move into formal sector employment if such employment were offered, but because no such employment is offered, they remain where they are.

The evidence is at odds with this viewpoint on two counts. 1) Many of those in the informal sector say they are not looking for formal sector jobs. Many say that they migrated to the urban area specifically to take up informal sector employment. For instance, Banerjee (1983, p. 414) found in a study of migrant heads of households in Delhi: "Forty-one per cent of those who entered the informal wage sector continued job search ... Thus, it can be claimed with some confidence that a sizeable proportion, possibly one-half or more, of migrants who entered the informal wage sector and the non-wage sector had been attracted to the city by opportunities in these sectors, and did not consider employment there as a means of survival while waiting in the queue for formal sector jobs." A similar conclusion has been reached in unpublished work on Korea by Rhee (1986). 2) A significant number of workers now in the informal sector previously had worked in the formal sector. The net flow of

labour was actually found to be from the formal sector to the informal sector in studies by Mazumdar (1981) of Malaysia and Balan et al. (1973) of Mexico.

Of all of the challenges to the empirical relevance of the theoretical model, this is the most serious. I shall return to it later. But first, before accepting the proffered evidence, let us look carefully at the definitions used, and hence what the evidence in fact is.

## **2. How the UIS Is Defined in Empirical Studies**

Critical to any attempt to judge the preceding evidence is the practical matter of how the urban informal sector concept has been operationalized in these studies. The ILO has taken the lead on this. In the words of Sethuraman (1981, p. 17): informal sector "... consists of small-scale units engaged in the production and distribution of goods and services with the primary objective of generating employment and incomes to their participants notwithstanding the constraints on capital, both physical and human, and knowhow". In practice, the working definition used in many studies is based on firm size; firms employing five workers or fewer are classified as informal. Sometimes, workers in certain occupational categories are also classified as informal; typically, self-employed workers (excluding professionals or those with higher levels of education) and unpaid family workers are so included. PREALC (the ILO's regional programme for employment in Latin America) has adopted the following definition: "The informal labour market consists of those persons who develop activities for self-employment, those who work in small firms and those who provide low-productivity personal services." (PREALC, 1974, cited in Tokman, 1979, p. 75. Translation mine.)

Other researchers have defined the urban informal sector in similar ways in their empirical research. Webb defined the informal sector to be small firms, plus all of the self-employed except for those in the liberal professions. Merrick defined the informal sector to be those employers who did not make payments to Brazil's social security system. Banerjee classified workers as belonging to the formal sector if they were employed in government or public sector establishments or in privately owned establishments employing twenty or more workers; all others were classified as informal. Mazumdar regarded workers in the factory sector as formal and those in small-scale enterprises and casual employment as informal.

One is hard-pressed to see how these working definitions of the informal sector conform to the earlier notions based on free-entry. Only Mazumdar's even comes close.

## **3. A Restatement of Results**

Given the preceding definitions and empirical operationalizations, the actual findings of the studies cited in Section IV.A. can be restated. We may say that for some countries, the evidence shows:

- i)* Some of the activities which appear to be free-entry are not.
- ii)* The earnings of workers in small firms are lower on average than the earnings in large firms. However, the earnings in small firms are not uniformly lower. Rather, the two distributions overlap.
- iii)* The earnings of workers in small urban firms are not lower than the earnings of rural traditional workers.

- iv) Those presently working in small firms, in firms not covered by social security, and in self-employment have been in those jobs for long periods of time.
- v) Formal sector jobs are mostly filled by rural residents, not by informal sector workers.
- vi) Many of those who are in small firms and in self-employment are there by choice.

When the studies are viewed this way — in terms of what the evidence actually shows rather than in terms of the labels and terminology of the authors — the early theoretical models are found for the most part not to be seriously challenged or contradicted by the empirical evidence.

There is one exception, though: contrary to the earlier theoretical models, empirical studies show that workers do indeed move into the informal sector by choice. Because this point leads to a major conclusion of this paper, I elaborate on it at some length below.

## V. SOME ECONOMIC ANTHROPOLOGY — TYPE FINDINGS

To get a better handle on the the workings of the informal sector labour market, I led a research team in conducting a series of interviews with informal sector workers in the two cities: Kuala Lumpur, Malaysia and San José, Costa Rica. Three major findings emerged.

### I. Diversity within the Informal Sector

Informal activities prove to be quite diverse. Some are activities with easy entry and no fixed hours of operation. They may be characterized by self-employment or employment of unpaid family labour or of unskilled labour with non-specific work relations. By contrast, other informal activities exhibit limited entry due to higher set-up costs and/or complicated licensing requirements, irregular hours of operation, and employment of family labour and unskilled labour with semi-specified work relations. These contrast with formal sector enterprises, which are characterized by restricted entry, regular place and hours of operation, and employment of non-family labour with specific work-relations. These belong in the category of formal sector, even if they are very small in scale. One example would be professional services companies which, although small in scale, cannot be viewed in any meaningful way as part of the informal sector.

Some examples may help clarify the distinction between the three types of activities. In transportation, trishaws in Malaysia (pedi-cabs) are examples of easy entry activities. They require very little capital investment. They are usually operated and owned by one person. Their owners operate them at irregular hours and at negotiable prices. No particular skill is required to be a pedi-cab driver. Typical of the upper-tier informal activities are the individually owned and operated taxi-cabs. Taxis are much more expensive to purchase than trishaws and the operating costs of taxis are much higher. Hours of operation can be regular or irregular, and the owner may hire a second driver to operate at different times of day (such as the night shift). Finally, there are the large established taxi companies which own a fleet of vehicles and hire a number of drivers to operate them. The taxi-drivers are expected to report to work at regular, agreed-upon hours. Sometimes they are paid fixed wages, sometimes a percentage of the fares. These taxi companies are examples of formal sector activities.

In commerce, street-vending is an obvious representative of free-entry activities. Street-vending (e.g. a sugar cane juice stand or a fruit stand) requires relatively low set-up costs. There is no skill requirement to this work. Street-vending licenses are easily procured. Location rental fees are nominal. Hours of operation are irregular. Paid employees are rare; even unpaid family workers are not very numerous. For the upper-tier informal sector in the commerce industry, examples are small retail stores such as sundry shops. They face higher set-up costs than do street-vendors because of higher rental fees and also because more licenses are involved. Although these shops are opened and closed at the same hours on most days, they may without notice close up earlier or not open at all at the wish of their owners. These shops are usually family-run with some hired help. The hired workers can be non-relatives, although relatives are sometimes employed with semi-specified responsibilities. Supermarkets owned by a large company exemplify the formal sector in commerce.

In manufacturing, backyard industries belong to the easy entry informal sector. Entry is easy because capital costs are small and rental fees are minimal, since the owners live and work in the same house. These backyard industries use manual labour, sometimes with very few tools. Workers may have to put in long hours to fill an order, or when there is no order, the shop may have to close up. These workers are usually family members or paid relatives and are generally unskilled. The small manufacturing industries in the upper-tier informal sector have higher capital and property costs. Because of the kinds of machinery used and the larger number of workers hired in these activities, licensing requirements may be more complicated and time-consuming. Workers in the upper-tier informal sector are both family members and hired labourers who are either unskilled or semi-skilled. Work relations are semi-formal.

Thus, within the informal sector, we find considerable diversity. The UIS does not consist uniformly of free-entry, low-wage, unorganized enterprises and workers, although, some activities do indeed fit this characterization; I would refer to these as the easy entry informal sector. Others do not. These others have significant barriers to entry, higher capital or skill requirements, and fairly regular labour relations arrangements; yet, they too may also be small, employ family labour, and operate at irregular hours and places. I shall refer to these as the upper-tier informal sector. In Malaysia and Costa Rica, there are really two urban informal sectors.

## **2. Voluntary Participation in Upper-Tier Informal Activities but not Easy Entry Ones**

Another major conclusion from the interviews is that many people are in informal activities by choice. When asked their reasons for doing what they were doing, many informal workers in Costa Rica gave the following answers most frequently: *i*) They felt they could make more money at the informal sector job they were doing than they could earn in the formal sector, or *ii*) Even though they made a little less money, they enjoyed their work more, because it allowed them to choose their own hours, to work in the open air, to talk to friends, etc.

Here are some examples of such people. One man, 46 years old, sells a peanut-sugar-butter candy called "melcochas" in downtown San José. He has been selling melcochas on the streets for 37 years, and before that his father made and sold them. He was very insistent that he was there voluntarily, doing what he likes to do, and that it pays better than formal sector work. His brother had, at one time, started up a small factory making melcochas, which he then sold to the public. The brother eventually gave up this factory

because he realized that he could make more money selling in the streets himself. That is, the informal sector work paid better than formal sector work.

Another interview was with a 50-year-old man selling fruit on a corner. This man had worked in the United States in several paid positions, and could easily have become a formal sector job in Costa Rica. Yet he sold fruits, because he earned more money (US \$36 a day) than in any other type of work he could get in San José.

These examples illustrate what I call the constrained voluntary nature of much upper-tier informal activity. That is, given the constrained choices open to them, a great many of informal sector workers are in that sector voluntarily. These people know that job opportunities are available in the urban formal sectors for people like themselves and that they could get such jobs. Yet, they choose not to seek such jobs, the foremost reason being that they prefer the combination of monetary rewards and psychic aspects of their informal sector jobs.

Of course, not all informal sector activities are of such a type. Many people face such severely constrained options that the informal sector involvement can only be seen as their making the best of a bad situation. Representative of this kind of informal sector activity is a woman sitting on a market street in Kuala Lumpur, garlics set out on a piece of newspaper in front of her for sale. She calls out the price of her products to shoppers who pass by. Whenever she sells off her garlics, she is ready to go home. If the market turns out to be slow for the day, she sometimes stays for longer hours; other times, she sells her products at a substantial discount. If it happens to be raining, she takes the day off. This kind of activity is clearly small in scale. It also has free entry; all anyone has to do to enter similar economic activity is buy a supply of garlics from a rack jobber. The owner is self-employed and manages her business in a very casual (though not necessarily inefficient) way. She is very poor.

### **3. Linkages Between the Formal Sector and Informal Sector Labour Markets**

A third important conclusion is that the upper-tier informal sector and the easy-entry informal sector are linked to the formal sector in very different ways. Whereas most participants in the easy-entry sector reported themselves dissatisfied with their positions and sought better jobs in the formal sector, those in the upper-tier informal sector had typically come from the formal sector and were glad to leave the formal sector behind.

There are barriers to entry to many upper-tier informal sector activities. One needs skills and tools to repair shoes or watches. Even to sell fruit, one needs capital for the initial stock, contacts with fruit wholesalers in the market, and money to buy a license for a good street location. However, these barriers can be overcome by working in the formal sector.

The formal sector was found to provide training for workers to move into upper-tier small-scale employment. Examples are food industry workers who leave jobs in the formal sector to set up their own small food processing activities, office-workers who leave to work in small family stores, and repairmen who learn their trades in large work places and then leave to set up their own shops. In Costa Rica, a study by the Ministry of Planning found that more than 70 per cent of those self-employed in the informal sector had previously held wage or salary jobs in the formal sector. This finding was reaffirmed in our interviews of such workers in San José.

The formal sector also provides the opportunity for workers to accumulate savings to start up their own businesses. Examples are repairmen and small manufacturers who save

part of their wages to buy their own machinery, tools, and raw materials for use in their own businesses. In Costa Rica, these savings from formal sector jobs are a much more important source of finance for new businesses than are loans from banks or other financial institutions.

At the other end of the spectrum, the formal sector was found to employ preferentially those workers who have acquired training in the easy entry segment of the informal sector. Examples are managers of appliance stores who had previously worked in small family businesses. These people tend to be young and well-educated. The growth of the formal sector enables workers to move out of the easy entry informal sector into newly-created formal sectors jobs. This is especially true in Malaysia, where the economy has been on a sustained positive economic growth path. It is much less the case in Costa Rica, where the severe economic crisis of the early 1980s led to a loss of formal sector employment. Examples in Malaysia are young people who start out in family stores but end up as clerks in fast-food restaurants or as mechanics in car-repair shops — jobs that have opened up due to the growth of the formal sector.

Although on balance the linkages between the informal sector and the formal sector were found to be positive, there is one identifiable group of losers among informal sector firms: those who fail to respond to the dynamic changes in the economy. Yet, a repeated finding from the interviews in Malaysia and Costa Rica, as surprising as it was consistent, is that those who do not respond often have deliberately decided not to. Many do not want to change. For example, proprietors of small family shops (often older people) prefer to go on operating them in much the same way as before despite growing competition from shopping centres. Another reason for losing out due to economic growth, much less common than the first, is technical change. An example is the reluctance of watch repairmen to enter new lines of work despite the fact that demand for their services has plummeted due to the advent of cheap digital watches which cost less to replace than to repair. It was rare for informal sector workers to report that they themselves or others in similar lines of work lost out because they were squeezed by formal sector firms.

## CONCLUSIONS

### 1. Major Findings

The analysis of urban labour markets has gone beyond the simple dichotomy between formal sector and unemployment. The existence of non-formal employment is well-recognized in what has now come to be called the "urban informal sector".

It is clear that urban labour markets in developing countries possess a sector with all the characteristics postulated many years ago: virtually unrestricted entry, low wages or self-employment incomes, irregular work hours and work place, lack of protection and regulation. What distinguishes this sector is that it is not a "target of employment" for job-aspirants. Persons working in that sector are at the bottom of the job structure and hope to get out. Existing theoretical models have done a good job of capturing the essential features of this type of activity.

More recent empirical studies raise some new issues/findings which do not fit neatly into classification of the urban labour market into just the categories of formal employment, informal employment, and unemployment.

When one tries to define the urban informal sector in a manner consistent with the empirical evidence, one finds that there exists yet another category of urban employment:

restricted-entry self-employment. The workers in this sector have willingly left formal sector employment, because the wages and/or working conditions are better if they work on their own. This sector is not a free-entry sector: sizeable accumulations of financial and/or human capital are required to enter it.

The upper-tier informal sector has not yet been worked into theoretical models. In order to integrate it, researchers will need to specify how this sector works, what determines incomes in it, how workers gain entry into it, etc.

Empirically-implementable ways need to be devised to identify the easy entry self-employment sector in a household survey programme.

Because the term "urban informal sector" refers to widely disparate activities, some of which are preferable to formal sector employment and some of which are not, the use of one all-inclusive term invites the neglect of that sector's fundamental duality. To distinguish between the different parts of the informal sector, I suggest the terms "easy entry informal sector" and "upper-tier informal sector."

## **2. Implications for Further Study**

I have concluded that the urban informal sector consists of two distinct groups which need to be conceptualized and analysed separately. Some activities are easy entry and low-wage, and the workers and enterprises in those activities are unorganized and unprotected. People in those activities seek to get out of them. Other activities have significant barriers to entry, higher capital or skill requirements, and fairly regular labour relations arrangements. People aspire to those activities. It is a mistake to talk of these two segments as if they were one.

The conclusion about the desirability of breaking urban nonformal employment into two groups has important implications, one empirical and one theoretical.

The empirical implication is that the two sectors must be considered as different entities in subsequent empirical studies. It is not obvious how to do this, so it will take much careful thought. As regards existing data sets, researchers will have to investigate their potentiality for yielding up information on questions of interest. As for surveys yet to be administered, they should be designed so that the necessary distinctions can be drawn.

The theoretical implication is that although the models we now have possess quite a number of valuable features which should form the basis for subsequent theoretical efforts, they need to build in another sector: the restricted-entry self-employment sector, into which workers may enter only upon completing a work spell of sufficient length in the formal sector. One way of doing this would be to formulate a three-period model with work in a free-entry job followed by promotion to the urban formal sector and then by work in the restricted-entry self-employment sector as a possible work trajectory. Another would be to build an n-period model with Markov chains linking up the various sectors.

In addition, the model should be generalized in other directions. One desirable development is to refine the analysis of education as a determinant of earnings and intersectoral mobility. Another is to deal with sources of differences among individuals such as their personal characteristics, rural opportunities, and family and social contacts.

Both the empirical and the theoretical tasks are formidable.