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The measurement of urban underemployment

A report on three experimental surveys

Ernesto KRITZ and Joseph RAMOS [1]

Introduction

Our experience with the urban employment surveys currently in use in most Latin American countries has increasingly convinced us that the rate of open unemployment is a grossly inadequate measure of the general employment situation in developing countries. Yet it is precisely open unemployment that such surveys are designed to measure. Our reasons for dissatisfaction are various.

(1) In many ways open unemployment is a " luxury of the rich ". How else can one interpret the fact that in India's teeming cities, where according to all visible signs labour is abundant and people are falling over one another in search of a steady job, open unemployment, measured with the same sort of questionnaire most of us use, hovers at around 5 per cent? Are we really supposed to conclude that the employment situation in Santiago, Panama City, Bogotá or San Juan is worse than in Bombay, Delhi, Madras and Calcutta? Or is it not more probable that the really poor and desperate cannot afford to be unemployed and must eke out an existence doing any odd job they can find? If so, a low rate of open unemployment need not signify a healthy employment situation or a tight labour market.

(2) The rate of open unemployment cannot adequately represent the occupational situation of the self-employed, since reductions in the demand for the latter's services are principally reflected in a decline in their income, and only secondarily, if at all, in increased unemployment. Hence the fact that over a third of the labour force in Latin American cities is self-employed further

[1] Staff members of the ILO Regional Employment Programme for Latin America and the Caribbean (PREALC). The authors are grateful to PREALC colleagues for their encouragement and criticism, especially Jaime Mezzera and Paulo Souza, who designed, conducted and analysed the Asunción survey.

limits the usefulness of the unemployment rate as a measure of the general employment situation.

(3) The rate of open unemployment has been *too* stable in most of the Latin American cities surveyed. A notorious case is Puerto Rico. In a period of over 25 years, during which time the economy has grown at a real annual rate of 8-10 per cent and the employment situation for the bulk of the population has markedly improved, the rate of open unemployment has only declined from 14 to 11 per cent. Such insensitivity to dramatic economic improvement raises further doubts as to the usefulness of the open unemployment rate as a measure of the general employment situation.

No doubt the problem arises from the fact that open unemployment is neither the sole nor the principal form of labour underutilisation in developing countries. *Under*employment is almost certainly more important, but empirical work in this field has been hindered by the difficulty of measuring the phenomenon. It is true that in recent years several countries have included in their employment surveys questions aimed at uncovering forms of underutilisation among the economically inactive population (the " discouraged worker effect "), though as we shall show later this has been greatly overestimated. Much less work has been done in disclosing and measuring underemployment among the employed.[1]

In an effort to confront these issues directly, the employment surveys for the low-income neighbourhoods of Managua (Nicaragua, July 1972) and for the whole of Santo Domingo (Dominican Republic, February 1973) and Asunción (Paraguay, May 1973) were expressly designed to reveal the main forms of labour underutilisation typical of the cities of developing countries. Although the principal innovations concern the measurement of underemployment among the employed, efforts were also made to clarify the notion of underemployment among the inactive, as well as to examine the precise significance of open unemployment.[2]

The conceptual framework of the surveys is simple. Rather than adopt the dual classification—employed or unemployed—typical of current surveys we specify degrees of underutilisation. The unemployed are considered fully underutilised but we no longer suppose that the employed are fully utilised. The employed may be underutilised because they are engaged in work of a sporadic nature which is not their normal occupation (" occasional workers "), or because the demand for their services during the survey week did not fully utilise their potential capacity (" fluctuating-income workers "), or because their job does not fully utilise their qualifications and experience (in the case of " fixed-wage workers "). In all cases the extent of underutilisation is defined as the degree to which the worker's job fails to use his full productive capacity.

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[1] Except for employed persons desiring to work longer hours (" visible underemployment "), who are not in fact so numerous, as we shall see, since many of those in marginal activities already " work " (i.e. wait for something to do) for long periods every day.

[2] Sample questionnaires are available on request from PREALC, Santiago de Chile.

Finally, the inactive may be underutilised to the extent that their inactivity is not voluntary, and that their employment options outside the market do not fully occupy them.

Underutilisation among the employed [1]: the more important findings

Underemployment among the employed is almost as serious as open unemployment in terms of the wasted productive capacity it represents, and far more extensive.

In order to detect different forms of labour underutilisation we first asked employed workers whether they had *(a)* a regular job with a stable income, *(b)* a regular job with a fluctuating income, or *(c)* an odd job with a sporadic and fluctuating income. We then put a different set of questions to each group. The differences in average income among these three groups show that the distinctions between them are not just verbal but have underlying social and economic bases. The first group is composed mainly of salaried workers in large modern establishments; the second, of the self-employed and piece-rate workers generally in smaller firms in the so-called informal sector; the third, of the unskilled, on the verge of unemployment, who eke out an existence with any odd job that may come up. Let us now consider these three groups in the reverse order.

Occasional workers

Some workers are so severely underutilised that when asked if they had worked during the survey week, they answered that they were unemployed and looking for work, though later in the interview we learned that they had earned some income that week. We had to list them as "employed" in accordance with the normal practice of employment surveys, but it was clear that in fact they were virtually unemployed. Their work is neither regular nor specialised; they work at jobs lasting a few days which crop up sporadically and are badly paid. We have called these persons occasional workers.[2]

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[1] For reasons of space this article deals with the main emphasis of the surveys, i.e. underutilisation of labour in hitherto neglected areas such as among the employed and the inactive. However, an attempt was also made to measure open unemployment more precisely. Among the more interesting results were: *(a)* that the rate of open unemployment is very sensitive to the period of reference used (if instead of asking whether respondents had looked for work during the previous week we simply asked whether they were looking for work, the number of unemployed rose 30 per cent); *(b)* that although we tend to assume that the unemployed are all looking for full-time work, no fewer than 35 per cent were in fact seeking part-time work; and *(c)* that despite the high rates of open unemployment disclosed by the surveys (above 12 per cent in all three cases), between 35 and 60 per cent of those unemployed had not been laid off but had left their jobs voluntarily.

[2] Besides the seemingly unemployed who are, in fact, occasional workers, there are seemingly inactive persons who, one later discovers, also earned some income during the survey week. These too might be considered occasional workers, for their reported inactivity is clearly a result of discouragement at failing to find regular work. Future surveys should try to study this group in greater detail; we merely detected their presence in the case of Asunción.

It may be asked how we detected occasional workers. In addition to the usual questions about what they had done to find work and the duration of their unemployment, we asked the unemployed how they had managed to survive. The purpose of this question was precisely to detect those who had worked to make ends meet, even if the work was not of a regular nature. Those who admitted to living from odd jobs were then asked what the work consisted of, how much they had earned from it that week, how many hours they had worked that week and how regularly they worked while " unemployed ". Such persons [1] were then transferred from the " unemployed " list to that of " occasional workers ".[2]

The relative size of the occasional worker group varied from a seventh (Asunción) to half (Santo Domingo and Managua) of the openly unemployed. Given that the rate of open unemployment was very high in all the survey areas, this is a sizable group. More significantly, however, almost twice as many members of the primary labour force [3] do occasional work as are openly unemployed. This substantiates our presumption that open unemployment is not an option that all can afford; when employment is hard to find, members of the primary labour force, in their desperation to feed, clothe and house their families, are driven to take on practically any odd job, however irregular and marginally productive it may be.

The survey data suggest that the majority of occasional workers have a relatively low level of schooling. The two surveys for which we have such data (Asunción and Santo Domingo) reveal that the proportion of occasional workers with less than four years of schooling is more than half as great again as that of the rest of the employed. Workers with more education are not only less prone to unemployment but also less likely to be obliged to take on just

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[1] In the case of Asunción we chose to consider all who had earned less than US$4 or worked for less than 30 hours on odd jobs that week as unemployed; the remainder formed the occasional workers. Such a distinction is arbitrary and in the final analysis unnecessary. The point is that although, strictly speaking, they did some work during the week in question, it was well below what they were capable of; they were neither fully employed nor fully unemployed. In fact they are a category all to themselves, an example of serious but not total underutilisation.

[2] Our way of detecting occasional workers probably caused the magnitude of the phenomenon to be underestimated, in that many unemployed who claimed to have lived off family income or assistance may also have worked on odd jobs. Because the income from such jobs was not enough to pay for their keep, they simply considered themselves dependent on their family. This is particularly likely to be the case with secondary labour force members (defined in the next footnote). Our method of questioning is especially suited to detecting this problem in the primary labour force. Future inquirers wishing to define the size of the occasional worker groups more precisely might simply ask all seemingly unemployed persons whether they had in fact received any income that week and whether it came from some form of work. If so, our remaining questions could then be asked.

[3] The primary population is defined in the Managua and Santo Domingo surveys as male heads of households between 25 and 54 years of age; in the Asunción survey as all heads of households between 25 and 54 years of age. The secondary population (i.e. all of the rest over 12 or 14 years of age) has a far more elastic supply curve because of the larger number of alternatives available to it outside the market (e.g. study and housekeeping). The primary and secondary labour forces are of course those parts of the labour force made up of members of the primary and secondary populations.

any job. This is, of course, not surprising, since they are not only likely to find better work more easily but also to have personal savings or to come from families which can help tide them over while they look for suitable employment.

Occasional workers tend to work fewer days or hours per week and to earn only about half as much as other employed persons. Their condition is made even more precarious by the fact that the work is irregular, so that they cannot count on even this level of income each week. We have therefore considered occasional workers to be about 50 per cent underutilised with respect to their potential capacity; in other words two occasional workers represent one effectively employed person. Naturally, many occasional workers eventually find a steady job that more fully utilises their capacities. To be an occasional worker is not generally the permanent condition of any one worker but rather a transitory state through which many pass. Nevertheless, this is a permanent social and economic problem since at any one time between 2 per cent (Asunción) and 10 per cent (Santo Domingo) of the labour force consists of occasional workers at a low degree of utilisation.

Workers with fluctuating incomes

As already pointed out, variations in the rate of open unemployment cannot adequately represent variations in the employment situation of persons who are self-employed or who are paid by the job. For example, a worsened employment situation for a salesman, a barber or a plumber is reflected by fewer sales, fewer haircuts or fewer calls. A decline in the demand for the services of such workers is thus reflected in lower income rather than in unemployment; conversely, an improved employment situation is reflected in a rise in income.

For such persons full employment means enough work to produce at their full capacity all the time. Their potential is no doubt difficult to determine, but it is reasonable to suppose that it is at least equal to their peak output (measured by income) in any one week (much as full employment capacity for the economy is generally estimated by the previous peak in output). The difference between their peak output or income in any week and their actual output or income per week would be a rough measure of the degree of utilisation of their potential productive capacity at any point in time.[1] The greater the spread between their peak and actual income, the greater the

[1] Strictly speaking, the reference income should be that attributable to labour services alone and should not include income from capital. Where a worker employs few tools (i.e. capital) the value of output and labour income would be almost the same. Should he work with significant capital, however, as for example a taxi-driver with his own cab, one would have to charge for capital services and deduct it from the value of output to determine labour income. Even then, since what is really of interest is the degree of underutilisation, we may suppose that variations in the use of labour services (as well as capital services) will be approximately proportional to variations in the value of output. Thus in practice the value of output in a peak week and a normal week will suffice to determine the degree of average labour underutilisation.

underutilisation of their labour. The better the employment situation, the fewer workers we would expect to find working in this category, and the smaller the variation between the peak and the current week's income.

Having identified those who had worked or held a job during the survey week, we proceeded to ask each one whether he worked as a self-employed worker, as a manual worker *(obrero)*, as a white-collar worker *(empleado)*, as an employer, or whether he worked directly for his family without remuneration. The self-employed were, of course, immediately shunted to the section of the questionnaire for workers with fluctuating incomes. We then asked manual and white-collar workers whether they were paid a fixed wage, by the job or on piece rates.[1] Those who answered that they were paid by the job or on piece rates were also classified as workers with fluctuating incomes.

In addition to determining his branch of activity, we asked each worker with a fluctuating income whether he had worked in one or more jobs that week. In order to determine the degree to which he was underutilised we asked three questions: (1) how much he had earned by all such jobs that week; (2) how much he normally earned in a good week; and (3) how much he normally earned in a bad week. His normal earnings in a good week served as the benchmark for his full employment capacity. The unweighted average of his good week and bad week earnings was taken as representing his normal level of utilisation. Finally, we asked whether he would like to have a job with a steady income, whether he had actually looked for one, and if so how long ago. In order to ascertain his knowledge of the labour market and the rationality of his expectations, we asked each person who wanted to work for a fixed income the minimum wage at which he would be willing to do so.

In each of the three cities we surveyed, about 40 per cent of the employed were workers with regular jobs but fluctuating incomes. This group is distributed fairly evenly between the primary and secondary labour forces, though with the former having a slight edge. Although the majority of workers with fluctuating incomes are self-employed, close to two-fifths are either blue-collar or white-collar workers. Indeed, a considerable proportion of blue-collar workers (44 per cent in Santo Domingo and 35 per cent in Managua) and a not insignificant number of white-collar workers (10 per cent in Santo Domingo and 14 per cent in Managua) earn the bulk of their income from piece-rate work or commissions.

The fluctuating incomes characteristic of this type of work largely reflect variations in the demand for such services and thus in the utilisation of the workers' productive capacities. In the three surveys the weekly income of this category varied from up to 45 per cent above average during a good week to a similar percentage below during a poor one. Between 10 and 20 per cent of such workers experienced income fluctuations of under 20 per cent on either

[1] Interviewers were instructed that in case of mixed forms of payment the person should be classified according to the one which normally provided the biggest proportion of his earnings.

side of the average, but for the overwhelming majority the figure was well over 20 per cent. Such huge variations indicate how much the rate of underutilisation varies, for output in a poor week is well under half that in a good one. In any case, the difference between a worker's peak capacity (good week's income) and that actually used during the week of the survey (the survey week's income), i.e. about 40 per cent, is a measure of the degree of underutilisation or underemployment experienced that week by this category of workers. This degree of underutilisation would imply that a worker with a fluctuating income is equivalent to only about 0.6 of an effectively and fully employed worker.

Not surprisingly, in view of the above, the proportion of workers with fluctuating incomes who live on the fringe of poverty is far greater than that among workers with jobs that yield steady incomes. In the working-class neighbourhoods of Santo Domingo [1], for example, almost half the workers with fluctuating incomes earned $15 or less in the survey week, as against only about 20 per cent of workers with a regular job providing a steady income. Obviously, this disparity is even more general and acute during the bad weeks.

Proportionately more jobs yielding a fluctuating income than those providing a steady income are held by persons with little education. For example, in the former type of job the proportion of male workers with three years or less of education is close to double that in the latter type.[2] Furthermore, almost without exception, the earnings of workers with fluctuating incomes are below those of steady-income workers in the same age group and with a similar level of education.

Finally, the majority of workers with fluctuating incomes (66 per cent in Santo Domingo, 61 per cent in Managua, and 52 per cent in Asunción) expressed the desire to change to a steady-income job [3] and of these about half said that they had in fact looked for such work. This desire for a stable income was, as might be expected, all the greater among workers with *low* fluctuating incomes.

Workers with steady incomes

Approximately half of the employed in our three surveys had a regular, fixed-income job. In a situation where utilisation of human resources varies

[1] These were defined as areas where the upper-income 15 per cent of the population did not live.

[2] To be precise, in Santo Domingo male workers with three years or less of education account for 40 per cent of all those with fluctuating incomes and only about 18 per cent of those with steady incomes. In Managua the respective percentages are 39 and 26, while in Asunción they are 17 and 8.

[3] It must be kept in mind that the desire to change to a steady-income job is a relative one depending both on the degree of underutilisation in fluctuating-income jobs as well as on the availability of productive jobs with fixed incomes. The greater desire to change to fixed-income jobs in Santo Domingo, for example, could be due either to a relatively worse situation of workers with fluctuating incomes or to a relatively better situation of those with fixed ones. The city in which the fluctuating-income worker is worst off in absolute terms cannot be deduced from these percentages alone.

widely, such a job is a clear indication of well-being and stability. Moreover, steady-wage workers are generally the best paid. On the whole, therefore, we consider them to represent the highest level of labour utilisation among the employed. Open unemployment is probably a more pertinent measure with respect to this group than to the others.

Nevertheless, even in jobs of this type workers do not necessarily utilise their potential productive capacity to the full. Though the degree of such underutilisation is not, as a rule, very great, steady-wage workers may be underutilised in a variety of ways. For example, they may work fewer hours a week than they would like, or their job may make less than adequate use of their skills and experience. The first of these forms of underutilisation (which has come to be known in the literature as " visible underemployment ") is fairly objective and, within limits, its measurement is straightforward. Naturally, it is far more difficult to determine the extent to which the training and experience of steady-income workers are being utilised. Because of the far more tenuous nature of underemployment among this category, therefore, this part of our experimental surveys should be considered no more than a series of probes into hitherto unexplored territory.[1]

We sought to minimise the subjective element as much as possible. For example, visible underemployment has normally been detected by asking the worker if he would like to work more hours per week. In our case, we asked all those who had worked less than 40 hours in the week this subjective question, but also whether they had in fact tried to find more work. Thus we regarded as visibly underemployed only those who did not work longer hours because they really could not find more work, and excluded those who wanted it but had taken no practical steps to obtain it.

The second and admittedly less tangible form of underutilisation was explored by inquiring about sources of job dissatisfaction among workers with steady-income jobs. For simplicity's sake we assumed that most people who do not want to change their job are satisfied with it, so our first question was whether they would like to change. If the answer was no, we considered that on the whole their present position made good use of their capacities.[2] Those desiring to change may have a variety of reasons, including the inadequate use of their abilities. To determine this, we asked them for their reasons. Two responses suggested possible dissatisfaction with the utilisation of their capacities. The first was lack of opportunity for promotion, which directly implies that the individual considers himself to be capable of more than his present job

[1] Our reasons for nevertheless undertaking it were twofold: we wished, if possible, to register the discrepancy which many people feel to be growing between education and the uses to which it is put (of which the problem of the educated unemployed is only an extreme case); and we were concerned to explore all the main possible forms of underemployment.

[2] Clearly, some people are disinclined to change not because they think their capacities are fully utilised in their present work but because they fear that available alternatives may be even worse. To this extent we tend to underestimate the magnitude of underemployment among steady-income workers, but we still believe that our approach represents a first step in the right direction.

requires. The second was dissatisfaction with the wages earned. Inasmuch as believing that one ought to earn more does not mean that one is in fact capable of producing more, we asked these persons whether they had earned more in a former job. Only in this case were we willing to concede that they were underemployed.[1]

Visible underemployment among steady-income workers [2] proved to be rather low in all our surveys; it was particularly concentrated among women. To begin with, a large majority of steady-income workers worked more than 40 hours per week, the average during the survey week ranging from 43 in Santo Domingo to 45 in Asunción and 53 in the low-income neighbourhoods of Managua. Of those working less than 40 hours a week, the majority did not desire to work more hours, and by no means all of those who did had in fact looked for more work. Thus few steady-income workers are subject to this form of underemployment.[3]

Our three surveys disclosed that between 60 and 70 per cent of workers with a job yielding a steady income did not want to change it. On this basis, as explained earlier, we supposed that their jobs fully utilised their productive capacity. Obviously, the 30-40 per cent desiring to change jobs may have wished to do so for reasons not related to the utilisation of their productive capacity, for example because their work schedule did not suit them or because they did not get along well with their employer. As it turned out, about two-fifths of those wanting to change jobs seem to have been underutilised.

Thus about a seventh of all workers with steady-income jobs want to change because they have good reason to believe that their present work underutilises their capacity. Though this is a rough estimate of the number affected, it says nothing about the severity of the underemployment they suffer. In so far as it affects people with a regular job and steady income, it seems reasonable to suppose that it is not very severe.

Steady-income positions depend to a large extent on the existence of large and medium-sized firms which, by their nature, possess considerable working capital of their own or have fairly easy access to credit. The vast majority of fixed-wage workers are employed in establishments with more than ten employees. Such jobs also tend to be fairly stable. In Santo Domingo, for example, almost half the fixed-income workers had held their jobs for over four years; in Asunción the proportion was over 70 per cent. Finally, as might be

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[1] We also asked steady-income workers (regardless of their desire to change jobs) whether they thought that their present employment made full use of their education and experience. Finally, we asked them to give their evaluation of the relative merits of more education, greater experience, and more and better contacts in obtaining a better job.

[2] We did not ask workers with fluctuating incomes whether they desired to put in more hours, since these persons often work (or wait for work, an unfortunately indistinguishable exercise) 60-80 hours per week. Their problem is the ineffective use made of their working time, and not its duration.

[3] About 6 per cent of steady-income workers experience this form of underemployment in Asunción, 4 per cent in Santo Domingo and 2 per cent in Managua. This means that respectively only about 2.5, 1.5 and 1 per cent of the total labour force in these cities are affected.

suspected, education greatly increased an employee's chances of gaining a steady job with a stable income. In Santo Domingo over two-thirds of workers with seven or more years of schooling had steady-income jobs as opposed to fewer than 30 per cent of workers with three years or less of schooling. Moreover, income clearly rises with education, once allowance is made for age and sex.

In the Asunción survey, in an interesting attempt to measure the inadequate use of fixed-wage workers' skills, experience and education in quantitative rather than qualitative terms, Jaime Mezzera and Paulo Souza experimented with a more objective (though still somewhat arbitrary) definition of underemployment. It is based on the same questions but uses a formula which incorporates multiple characteristics in defining underemployment. Put simply, it is presumed that differences in income among steady-income workers are due to age, sex, years of schooling, the number of hours worked per week, the industrial sector, the size of the firm, and length of service. Knowing these characteristics, one can predict, by means of multiple regression analysis, how much a person should earn on the average. The underemployed were then defined as all those who earned at least 20 per cent less than this. Only then was it considered certain that their job was making insufficient use of their productive potential. By this method it was estimated that 24 per cent of fixed-wage workers were suffering from underemployment, which was concentrated among young workers, new employees and workers with higher education. There was little correlation with sex.[1]

In any case, whether we use the estimate from our qualitative study or from this quantitative technique, it is clear that the extent of underutilisation among fixed-wage workers is appreciable even though obviously much less serious than among the openly unemployed.

Underutilisation among the inactive

By now it will be clear that the problem of underutilisation may also affect a fair proportion of the economically inactive population. The so-called discouraged worker effect has been carefully studied by many experts and a good deal of experience in measuring it has been acquired. Nevertheless this phenomenon seems to be obeying the law of the pendulum: at one time it was either unknown or rejected, whereas nowadays there is a tendency to regard all inactive persons as suffering from disguised unemployment so long as they express willingness to work.

For this reason we consider it imperative to ask not just whether they wish to work but a series of related questions all of which tend to detect effective availability and, so far as possible, identify varying degrees of underutilisation.

[1] For further details see PREALC: *La situación y perspectivas del empleo en Paraguay* (Santiago de Chile, 1973; mimeographed).

In addition to inquiring whether the inactive person desired to work for most of the year (the only question normally put to him) we also asked whether he was interested in full-time or part-time work, whether he had in fact made efforts to seek work within the past three months, how long it had been since he had last held a regular job, how many years he had worked in his life, and the minimum wage he would now accept for a regular post.

As one might suppose, a rather high percentage of the inactive—ranging from 15 per cent in the poorer neighbourhoods of Managua to 38 per cent in Santo Domingo—expressed the desire to work for most of the year. Had we limited ourselves to this question, we would have concluded that there existed a serious problem of underutilisation among the inactive population.

However, when asked the type of work they preferred, the majority—between 55 and 70 per cent according to the city surveyed—desired only part-time work. This is a first qualification of the raw results, and suggests that the effective underutilisation is less than at first appears.

A further way of finding out how seriously the inactive wish to work is to ask them if they have in fact made an effort to look for work in the past three months. Our survey showed that between 80 and 85 per cent had not done so. Their desire or need to work was not enough to incite them to action, however slight. Moreover, between 60 and 75 per cent had never worked, and most of the others had not done so for a long time. This further reduces the likelihood that they were really considering entering the labour force.

Our analysis thus suggests that the effective availability (and hence underutilisation) of inactive persons is limited. This conclusion is reinforced by the fact that the majority are housewives, relatives helping with the household chores or students. Since the majority of these persons have worth-while work to do outside the labour market the above findings should not really be surprising. Moreover, it is worth noting that the income of the rest of the family generally proved to be higher in the case of inactive persons than in that of the economically active or even of the unemployed; this implies that their need to work was less urgent.

This is not in any way to minimise the significance of underutilisation among the inactive population: our aim is simply to determine the precise extent of the problem. We have therefore tried to rank the inactive according to their degree of underutilisation, using as criteria the intensity of their desire to work and the number of reasonable alternatives they possess outside the labour market.

From the foregoing we were able to define various categories of the inactive population with a desire to work. In the case of Santo Domingo, for example, we distinguished four categories in decreasing order of underutilisation. The first three consist of people who did something to look for work; the fourth, of those who did not. The groups are as follows:

(1) Those who have worked in the past, who have actively looked for work, and who have few effective alternatives outside the labour market. In

general such people are neither housewives nor students. They very closely resemble the openly unemployed and are similar in many ways to the occasional worker. Those most affected by this type of underutilisation belong to the primary population (i.e. heads of households).

(2) Those who have worked before, who have actively looked for work, but who have reasonable options outside the labour market (for example housework or study). Like those in the first category, they have a strong interest in working inasmuch as they have in fact looked for work in the recent past. Nevertheless, this form of underutilisation is somewhat less serious than the first case since these persons do perform important functions outside the labour market. This group is made up principally of males of the secondary population.

(3) Those who have never worked before but who have actively looked for work, and who possess reasonable alternatives outside the labour market. The majority of those desiring to work belong to this group. They resemble new workers looking for work for the first time, even though, because they do have other options outside the labour market, principally housework, their interest in working and their real possibility of doing so are considerably less. For this reason their degree of underutilisation is far less serious than in the former cases.

(4) Inactive persons desirous of working but who have done nothing in the recent past to look for work. Undoubtedly some of those who did not look for work failed to do so because they were convinced there was no work to be had, but the majority are housewives who, though they would like to work to supplement their families' low incomes, must devote themselves to housework for the bulk of the day. Their real possibility of taking on a regular job throughout most of the year is therefore severely restricted and their effective underutilisation quite small.

These categories suggest that there is great diversity in the situation of inactive persons wanting to work. From an employment standpoint, the really seriously underutilised group is the first of the four, since they really are not voluntarily inactive. However, in Santo Domingo and Asunción, where we drew these distinctions, only 3-4 per cent of the inactive belonged to this group, i.e. about 10 per cent of all inactive persons desiring to work.

The second group likewise suffers from extensive underutilisation, although to a lesser degree, for such persons do have alternatives outside the labour market. In any case, while somewhat larger than the first category, this group also accounts for only a small fraction of all inactive persons wishing to work.

Three-quarters of the inactive belong to the third and fourth categories. For the reasons already given, their degree of underutilisation is much less than in the two former cases, so that they represent a problem of much lower priority.

Implications

These experimental surveys grew out of dissatisfaction with the rate of open unemployment as the main indicator of the employment situation in developing countries. Open unemployment is only one of the ways in which an unfavourable employment situation reveals itself.

The chief purpose of this article has been to show that important forms of underemployment can be empirically detected and to a certain extent quantified. The survey reveals that underemployment is far more pervasive in developing countries than open unemployment, and may be equally or more serious in its total impact. This suggests that changes in the employment situation in such countries may take the form of variations in the extent and intensity of underemployment, and only secondarily, if at all, in the rate of open unemployment.

If this is so, it may go a long way towards explaining why sustained rates of economic growth in recent years have apparently had little if any positive effect in reducing rates of open unemployment, at least in Latin America. The hypothesis might thus be formulated that open unemployment will decline only after the bulk of underemployment has been absorbed.

The surveys further suggest that emphasis must be placed on analysing underemployment among the employed, especially the self-employed and occasional workers, since it affects a far greater proportion of the primary labour force than does " involuntary " inactivity. The scale of the latter seems to have been greatly overestimated, not to mention the fact that it almost exclusively affects persons belonging to the secondary population with important alternatives outside the market.

All of this has convinced us that if we really wish to understand the employment situation in developing countries, we must study the essential characteristics and evolution of the principal forms of underemployment—occasional work, work yielding a highly fluctuating income, and involuntary inactivity. It has been the purpose of these surveys and of this article to show not only that such an enterprise can be fruitful but that it is feasible as well. It goes without saying that the results of our surveys are at best no more than a first approximation, but we hope they are sufficiently exciting to stimulate others to further, if not similar, experiments.