

6-1986

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Recommended Citation

Ajani, H. A. & Okonta, H. N. (1986). Problems of Measuring Unemployment in Nigeria. *CBN Economic and Financial Review*. 24(2), 46-51.

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PROBLEMS OF MEASURING UNEMPLOYMENT IN NIGERIA

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Abstract

Much as unemployment is dreaded in all market economies, the problems associated with its measurement in Nigeria are sometimes not addressed, if ever appreciated. To facilitate international comparison, uniform measurement methods have considerably narrowed down the difference in the concept of unemployment. Nevertheless, unemployment index seems to disguise the extent of the problem in Nigeria. Unless the desire to work for a wage is explicitly expressed, it is difficult to identify the unemployed. In other words, if the job-seeker is regarded as someone actively seeking wage employment, the concept of unemployment becomes less relevant in the context of a developing economy characterised by structural deficiencies.

Available statistics from the labour registries are inadequate even for measuring the number of persons seeking wage employment, how much more the substantial unemployment/underemployment which exists outside the organised sector. Although this shortcoming is being overcome by the results of labour force sample surveys, the coverage remains, however, limited. Thrown into focus, therefore, is the urgent need to broaden the base and integrate the sources of labour statistics with a view to determining not only the amount of idle human resources but also the extent of labour underutilisation. It is only when these problems are well articulated that prescribed solutions can be enduring.

Introduction

Unemployment problem is not a new phenomenon in Nigeria. However, it has assumed a greater dimension in the past few years. Just as it is important to find a solution to the problem, it is equally necessary to understand the nature and dimension of the problem. Although the term 'unemployment', as universally defined, may be applicable to all economies for comparability purposes, the peculiarities of the social and economic arrangements in developing countries may lead to a serious underestimation of the problem.

The definition of unemployment determines the way it is measured and it also delimits the choice as well as the effectiveness of policy instruments designed to solve the problem. This paper, therefore, tries to examine the concept of unemployment and the problems associated with its measurement in Nigeria with a view to highlighting the implications of data inadequacies for the effectiveness of policy measures. For this purpose, the paper is divided into three parts. Part I examines the definition and types of unemployment. Part II discusses measurement methods and problems while Part III concludes the paper.

I. CONCEPT OF UNEMPLOYMENT

There is no precise definition of unemployment. In Britain, for instance, the Department of Employment (the former

Ministry of Labour) accepts as unemployed any school-leaver who is not in paid employment but who is available for work and is capable of working. The Census Bureau of the United States of America which organises monthly household sample survey accepts Lloyd G. Reynolds' definition of unemployment as "the difference between the amount of labour offered at present wage levels and working conditions and the amount of labour hired at those levels".³

In his own contribution, A. C. Pigou classified a person as unemployed if the following two conditions exist; first, he must not be employed and, secondly, there must be the desire to be employed.⁴ The above definitions are fairly similar although in Pigou's definition, the second condition of expressed desire to be employed is based on three basic assumptions:

- (a) there are given standard hours of work per day;
- (b) the wages are given; and
- (c) the individual is healthy enough to work.

The essence of the first assumption is that, if a man desires to work for ten hours a day but the number of official working hours in his place of work is eight, he cannot be said to be unemployed for two hours, since his offer of service exceeds the official working hours. But if a company, for one reason or the other operates at half capacity the workers will be regarded as unemployed for those hours they are idle.

Secondly, the desire to be employed must be seen as willingness to be employed at the current wage rate in that particular establishment. If a man refuses to work in an establishment with lower pay because he is expecting a better paid job elsewhere he cannot be said to be unemployed.

Thirdly, the desire to be employed must be subject to the individual's physical condition. If a man is not employed due to ill-health, he cannot be said to be unemployed. It can, therefore, be said that those unemployed in any country at any given time are jobless persons who are willing and ready to work. This implies that the unemployment concept is limited to involuntary idleness due to lack of work but excludes idleness due, for example, to labour disputes, illness and vacation and in the same way excludes all those not in paid employment such as independent workers.

Types of Unemployment

In the economic literature, three major types of unemployment have been identified. These are frictional, structural and deficit demand unemployment.

(a) Frictional Unemployment

Frictional or search unemployment exists when a worker spends some time searching for a new job. Some amount of this short period of unemployment is necessary in an economy because it helps to stimulate the labour market. It is through this means that people secure better jobs which enhance their earnings and offer greater job satisfaction. Under this type of unemployment, a worker may quit his job voluntarily to enable

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³See Reynolds (9).

⁴See Pigou (7).

him to search for a better one; he may be laid off temporarily because of one problem or the other in his company or because of seasonal factors often experienced in agriculture and construction works. He may also be sacked if the employer is not satisfied with his performance.

(b) **Structural Unemployment**

This type of unemployment occurs because, instead of a single labour market, there are many sub-markets in which there exist either job opportunities in excess of job-seekers or excess supply of labour relative to job openings. This may occur as a result of many factors which include:

- (i) the rapidity of shifts in labour demand;
- (ii) the speed and accuracy of supply adjustment, that is, the rate at which the skill requirements of jobs are being met by new entrants into the labour market; and
- (iii) the transferability of skills. For instance, the time required by an adult to learn a new skill which is currently in active demand, will depend on whether his old skill has any relevance to the new skill, whether his educational and training background is broad or specialised and whether the new job requires a long or short training period, etc.

Structural maladjustments will be high if the geographical location of new jobs shifts quickly, if market information is imperfect with respect to various labour market segments, and also if transportation cost is high.

(c) **Unemployment Due to Deficit Aggregate Demand**

Unemployment occurs when an economy experiences a long period of sluggishness. During this period, there is a Gross National Product (GNP) gap which arises as the economy's actual output lags behind its productive capacity. This phenomenon comes about when the total spending of a nation declines as a result of reduced government injection of purchasing power into the economy. If, for instance, there is an increase in the labour force following the rapid growth in population or a rise in productivity resulting from the acquisition of additional capital equipment, improvement of production techniques or an increase in the stock of skills and knowledge, there should also be a commensurate increase in the GNP. But if the growth in the GNP is not at least equal to the increase in the labour force plus the increase in productivity, it is expected that unemployment will increase. Some of the employed workers will be laid off while new entrants will not be absorbed.

The first two types of unemployment mentioned above are prevalent in all market economies because of the presence of excess supply of labour and most especially the frustration of being unemployed due to unfulfilled expectations of new entrants into the labour market. Frictional unemployment exists in Nigeria although to a lesser degree when compared with the labour market of developed countries. This is due largely to the non-pervasiveness of wage employment. Nevertheless, the present unemployment situation in Nigeria is structural, to a large extent. Much of it can be traced to the effects of government policies with respect to urban development, growth in the labour force, rapid expansion in education, wage hikes and, above all, to the relative decline in the role of government as the prime mover of economic activities.

Both in terms of social costs and policy responses, the concept of open unemployment resulting from deficiency of aggregate demand may not adequately describe the chronic unemployment problem which developing countries face. First, in Nigeria where strong traditional obligations to family

members are maintained, work opportunities in family business and under the work- and income-sharing arrangement (mostly in agriculture and service trades) provide alternative avenues to wage employment. Thus, the decline in national output below its potential level may not necessarily be translated into open unemployment.

Secondly, the level of effective demand alone can determine the volume of employment only in the short run. Other fundamental factors such as population growth, technological change and capital accumulation do exert a strong influence on output in the long run. Thirdly, such an economy-wide model is not capable of explaining sector specific unemployment often experienced in developing countries. Since the model presumes the direction of change in aggregate demand to be the same in every sector of the economy, the coexistence of urban surplus labour and scarcity of farm labour in the rural areas may seem inconsistent and unrealistic within the framework of the demand deficiency model.

II. MEASUREMENT METHODS AND PROBLEMS

Open unemployment and underutilisation of manpower resources are some of the labour market inefficiencies in Nigeria. The former is mostly an urban phenomenon while the latter, which embraces disguised unemployment and low productivity, is characteristic of both the urban centres and the rural areas. The major question, therefore, is whether open unemployment as defined and measured in developed economies could adequately capture the peculiarities of the economies of less developed countries such as Nigeria.

(a) **Measurement**

Unlike in developed economies, the size of the wage employment sector is relatively small in Nigeria such that, with the expansion of educational facilities and limited opportunities for self-employment, the demand for wage employment has grown tremendously in recent times far in excess of available job openings. Secondly, the absence of unemployment support programmes has made it a luxury for any person to remain without a job for longer than necessary. Under these circumstances, it is difficult to identify the unemployed.

It is pertinent at this point to distinguish between voluntary and involuntary unemployment. A person may not actively seek employment for a number of reasons. He may be sick, temporarily laid off, waiting to resume on a new job or frustrated altogether as the possibility of securing a job of his choice becomes very slim. In addition, where the totality of transfer incomes obtained from relations which forms his reservation wage exceeds the working wage, the unemployed may voluntarily withdraw from job search. However, unemployment is involuntary for new entrants into the labour market as well as those who lost their jobs and are willing to pick up another at the going wage rates.

In order to identify the unemployed, we can unmask the general term 'involuntary unemployment' by considering some basic conventional criteria. One could possibly consider the totality of man-hours available to each individual and examine how that person allocates the time between leisure (i.e. non-economic activities) and job search. In the absence of personal savings or direct transfers from relations and friends, a healthy but unemployed person will be willing to earn a living and will, therefore, intensify his search for work. On the other hand, imperfect labour market information and the futility of job search may, after a while, discourage the jobless from

further seeking employment. The willingness to work can be inferred from the proportion of the job seeker's time which is devoted to job hunting. It is not enough to express the fervent desire to work but an unemployed person should be seen as a potential worker, given the opportunity. In other words, he should not only be willing to work but must also be capable of working.

A second option is to regard as unemployed any person within the active labour force who earns no income from his job. Presumably, work is not desired for its own sake but rather in expectation of some financial reward in form of either a working wage or claims on a share of the output (as in agricultural production). For any type of work, therefore, the utility of physical effort or application of specific skills in performing a certain productive task is expected to confer some benefit on the worker. There are exceptions though which make such a definition ambiguous and these relate to the activities of unpaid family and volunteer workers whose contributions to total output are not financially rewarded. This group of persons cannot be classified as employed if the definition is strictly administered. This approach will also tend to limit unemployment only to those seeking jobs in the wage-employment sector. However, it will facilitate the estimation of income loss to the economy resulting from unemployment.

Thirdly, an unemployed person could be taken as that individual who does not contribute to the output of goods and services. It is possible for employed persons to contribute nothing to output either because of ill-health, protracted industrial dispute, vacation or temporary shut down of factory arising from operational problems such as the scarcity of inputs. Conversely, an unemployed person can contribute to output in a family business without receiving a defined wage either on a permanent basis or temporarily pending his securing the job he actually desires. Unemployment so defined represents the number of idle hands at a given time. Thus, when total output is related to the number of persons at work from time to time, the impact of productivity on changes in aggregate output is revealed.

(b) The Rate of Unemployment

Whichever way an unemployed person is classified will also affect the computation of the overall rate of unemployment in an economy. This social indicator will, in turn, have different implications for policy formulation. Conventionally, the unemployment rate is computed by relating the number of unemployed persons to the economically active civilian population aged between 15 and 65. i.e.

$$\text{Unemployment Rate} = \frac{\text{Number of unemployed persons}}{\text{Civilian labour force aged 15-65}} \times 100$$

In Nigeria, some inconsistency is created by the denominator of this ratio which limits the active civilian labour force to age 15-59 although the compulsory retirement age for a segment of the labour force (e.g. University professors and judges) extends beyond 59.

For the purpose of international comparison, however, the ratio is important to policy makers as an indicator of growth and development, the likely underestimation caused by inadequate data notwithstanding. The key issue is whether such a simple indicator can adequately measure the social costs of unemployment, an economic phenomenon as important as other aggregates such as prices and industrial or agricultural production. If the number of unemployed persons is simply related to the active population, it is questionable whether one unemployed person can be safely regarded as being equal to

another irrespective of skills possessed. This becomes more pertinent in a labour market characterised by structural maladjustment. If the impact on the economy of an unemployed person is better measured in terms of income or output foregone, it is unlikely that the economic costs will be the same in a situation where most unemployed persons are highly skilled as against another situation in which unskilled workers constitute the bulk of the unemployed people. It may be more useful, therefore, to disaggregate the unemployed by occupation or skill and devise a weighting system to reflect the economic significance of each group. For example, if the relative wage rates are used as weights, we would be measuring the total loss of wages consequent on the idleness of some members of the labour force.

Alternatively, if unemployment is taken as the amount of unutilised manpower resources, it is possible to compare the number of hours actually devoted to work with the totality of labour resources available, i.e. total number of man-hours over a given period. This approach yields a better estimate of the labour resources which are not actually in use. In addition to involuntary unemployment, it also captures the unutilised resources of those in part-time employment. The amount of unemployment and under-employment being measured will, therefore, represent the potential but unused manpower resources available. Consequently, the difficulty of regarding the unemployed as a person who earns no income or contributes nothing to output will be overcome. In fact, taking cognisance of the existence of substantial under-employment, this method of measuring unemployment will minimise the risk of underestimating the magnitude of the problem and facilitate the choice of appropriate policy instruments for solving the problem.

(c) Sources of Unemployment Data

Within this framework, therefore, it is necessary to assess the availability and adequacy of unemployment statistics which would ensure the achievement of these objectives. Generally, the main sources of unemployment statistics include:

- (i) compulsory unemployment insurance statistics;
- (ii) unemployment relief statistics;
- (iii) trade union and trade union benefit fund statistics;
- (iv) the census of population;
- (v) employment office (labour registry) statistics; and
- (vi) labour force sample surveys.

Although the first three form reliable sources of unemployment data in a developed country like Britain, the last three sources combine to yield similar, though less detailed and coherent information in Nigeria.

(i) Compulsory Unemployment Insurance Statistics

Under this scheme, all salary earners of all grades are forced to save some proportion of their salary as an insurance against the possibility of future unemployment. If, for any reason, any worker in the group is declared redundant, the insurance benefits help such workers to tide-over bad periods, thereby preventing his standard of living from falling drastically. Statistics from this source provide reliable unemployment data since anyone who becomes jobless will necessarily make claims.

(ii) Unemployment Relief Statistics

This scheme records the number of persons receiving unemployment benefits at the national level. It is available for all workers made redundant as a result of lay-offs. Fewer people may be recorded through this process than the actual number of unemployed if eligibility conditions for the benefits are

restrictive or if the amount to be collected as benefit is so small that those who are eligible refuse to make claims. On the other hand, the unemployment statistics collected from this medium might be exaggerated as a result of 'voluntary' unemployment. It is possible, that some people may prefer living on social benefits to having a job, especially if unemployment benefit is close to or higher than their expected wage from paid employment.

(iii) Trade Union and Trade Union Benefit Fund Statistics

This source is useful, where trade unionism is fully developed. The unions keep statistics of members who are out of a job as well as unemployed persons who are paid from the trade union benefit fund and render such returns to the labour registry. The degree of development of trade unionism and the rules governing the admission of members into the unions as well as access to the fund constitute limiting factors.

Statistics of types (i), (ii) and (iii) arise as by-products of the administration of unemployment insurance, benefits or relief schemes. They are criticised for yielding only information on unemployment resulting from redundancy disregarding new entrants into the labour market and non-wage employment. In addition, they reflect the changing administrative procedures and regulations which govern a person's right to unemployment assistance.

(iv) Population Census

The census of population is a primary source of manpower statistics in any country. It has the distinctive feature of covering everybody in the population and gives a detailed and complete analysis of employers, employees, and the unemployed by occupation, age, marital as well as industrial and social status. Another feature of the census of population is that it is available for a longer period of time in the past than any other source. Its disadvantage lies in the fact that it provides this valuable information only once in ten or more years. Moreover, its reliability depends on the accuracy with which the census forms were completed and collated.

The census of population is inadequate as a source of unemployment data in Nigeria. First, employment data collected through this medium is usually limited to occupation and skill since the questionnaire will be too bulky to accommodate questions on work experience, earnings and duration of unemployment. Secondly, the 1973 head-count in Nigeria was fraught with suspected inaccuracies and was subsequently nullified. Since then, population projections have been based on the 1963 census figures. However, the rapid socio-economic transformation in the last two decades have significantly changed the structure of the population, especially the skill composition. Therefore, the absence of a census over twenty years would make employment data estimated on the basis of the 1963 census very much unreliable.

(v) Employment Office (registered unemployment) Statistics

The Federal Ministry of Employment, Labour and Productivity makes available, on a regular basis, statistics of registered unemployment in Nigeria. It is a monthly collation of statistics of job-seekers who registered with the employment registry in any of the thirty six (36) Labour Exchange Offices located all over the country. This source records the amount of 'involuntary unemployment' and not the 'potential' supply of labour. The returns from the registries are compiled and classified into two categories.

- registered unemployment and vacancies declared for lower grade workers and school-leavers; and

- registered unemployment and vacancies declared for professionals and executives.

In respect of each group, unemployment data is collated to indicate new entrants into the labour market, expired or renewed registration and placements of registered applicants through the exchange and other outlets. Also compiled are data on job openings notified, filled, unfilled or cancelled vacancies.

The completeness and reliability of registered unemployment statistics will depend on how far those in need of jobs actually registered at employment exchanges. Since there is no incentive by way of unemployment benefit or guaranteed placement or punishment to deter non-registration, fewer persons are likely to be covered through this medium and the unemployment rate may, therefore, be under estimated. This is true of the Nigerian situation where it is not compulsory for the jobless to register. Apart from the fact that many Nigerians are probably not aware of the existence of the labour registries, many job-seekers become apathetic to registration as only a few of them eventually secure jobs through labour exchange offices after prolonged waiting. For unemployment data from this source to be more useful, it should provide information on persons desiring wage employment by occupation, sex and skill acquired. It should also make available information on the previous work experience of the applicant and the duration of unemployment.

(vi) Labour Force Sample Surveys

Labour force sample surveys are designed to collect from a selected number of households information on the size, status and distribution of the labour force, i.e. the totality of all persons capable of supplying labour for productive activities. This method is widely used in most countries to complement manpower statistics from other sources. The first of these sample surveys in Nigeria was conducted in 1966/67 but was discontinued until 1983, when a new series of labour force sample surveys was organised by the Federal Office of Statistics (FOS) within the framework of the National Integrated Surveys of Households (NISH). The second in the series was conducted in 1984, but the pattern changed in 1985 from annual to half-yearly surveys.

Specifically, the data collected in the surveys cover the following areas:

- socio-demographic characteristics of household members such as age, sex and level of education;
- activity and employment status of the population;
- industry and occupation of employed and unemployed population;
- work experience of employed population; and
- income.

In order to select a sample of households nation-wide, each state was stratified by size into urban and rural, with the urban consisting of all towns containing 20 or more enumerating areas (EAs) while towns with anything less were taken as rural. On the average, ten EAs were selected in the urban centres while seven EAs were chosen in the rural areas of each state of the Federation. The scope has been broadened as the number of households participating in the various surveys steadily increased from a total of 1,920 in December 1983 to 5,634 in June 1985.

However, experience has shown that unemployed persons constitute the most difficult group to identify in any sample survey. Thus, the size and distribution of the sample, the structure of the questionnaire and the interview method have significant influence on the accuracy and reliability of the survey results. For instance, when based on estimated

population figures of 51.9 and 53.2 million, the samples investigated represented 0.004 and 0.011 per cent of the population aged 15 and over in 1983 and 1984, respectively. These rather small sampling fractions may not adequately capture the prevalence of unemployment in the various sectors of the Nigerian economy. A survey based on at least 1 per cent of the population is likely to yield a more reliable estimate.

Secondly, unemployment is likely to be more prevalent in economically less developed areas or high density suburbs of urban centres than in the low density residential areas where the upper middle class live. An estimate based on a random sample within each selected Enumeration Area may be biased compared with the result of a selection procedure which ensures that the coverage is adequately representative. Thirdly, unemployment phenomenon is such a sensitive matter that the jobless person is the best respondent in the circumstance. As the labour force survey is conducted within the framework of the National Integrated Household Survey, the head of the household or any available adult in the family is usually taken as the respondent in view of the difficulty of catching all members at home. If the household size is sufficiently large, the respondent may not be able to supply all the necessary information about each household member either because of memory failure or lack of information on the employment status of household members. No doubt, the jobless person in the family is in the best position to resolve the sometimes conflicting interpretation of 'desire to work' and 'ability to work' since unemployment may sometimes be voluntary, involuntary or temporary as indicated earlier.

Nevertheless, the labour force survey within a multi-subject household sample survey gives a relatively more detailed information on the employment and unemployment situation among the population than the registration through the Employment Exchange Offices. It facilitates the computation of inter-censal estimates and, when enlarged to cover more households, enables the size and broad characteristics of the labour force to be more accurately determined. More than anything else, this source of employment data is complementary and can provide useful information on underutilisation of labour resources as well as earnings from employment.

III. SUMMARY AND CONCLUSION

Unemployment problem is no doubt a phenomenon of all market economies but the solution is not confined to the choice of policy actions but should start with an accurate assessment of the nature of the problem. Hence, the difference in the socio-economic arrangement and inadequacy or lack of employment data make both the measurement of and solution to unemployment problem an arduous task in most developing countries. In Nigeria, for example, the wage employment sector is relatively small while the absence of unemployment benefit forces many jobless persons into family business and non-wage or self-employment. The problem, therefore, takes the form of 'open' as well as 'disguised' unemployment, i.e. surplus and underutilisation of labour.

In an economy where the wage sector is predominant, the standard definition of unemployment will characteristically be limited to open involuntary unemployment. This would cover all able-bodied job-seekers who are ready to resume work at the prevailing wage rates. But this definition will partially describe the nature of unemployment problem in a developing

country like Nigeria where substantial underemployment coexists with unemployment of school-leavers and college graduates. Although some level of unemployment arises in most economies because of frictions in the labour market, much of the open unemployment experienced in developed countries is attributable to demand deficiency especially during periods of recession. However, unemployment in Nigeria arises from the structural deficiency as well as maladjustments of the labour market. Thus, the nature of the problem in the latter case makes it more difficult to measure.

Whether unemployment is perceived as excess supply of labour in terms of sheer number of persons looking for work or in terms of unutilised man-hours, the crucial thing in the process of data collection is the identification of the unemployed person. It has been shown that an unemployed person in Nigeria may not necessarily be a job-seeker only within the relatively small wage employment sector. Therefore, in order to capture the mass unemployment outside the organised wage sector, the various sources of unemployment statistics should be strengthened and integrated. Also, it has been argued that except for the purpose of international comparison, the rate of unemployment as generally computed is rather too aggregative to be meaningful in determining the social and economic costs of unemployment. For these important objectives to be realised therefore, we would recommend that:

- (a) Since the work force is regarded as the population aged 15-65, all able bodied but idle persons within the same age range who express the desire and are ready to work should be regarded as unemployed for consistency purposes.
- (b) Unemployment should be measured not only in terms of numbers but also in terms of the proportion of utilised working time (e.g. 40 man-hours per week). This would facilitate the determination of the extent of labour underutilisation. This also presupposes the availability of employment data as a complementary input.
- (c) Unemployment Exchange Centres should be extended to all local government areas while unemployment registration is made compulsory for all job-seekers. To make this more effective, all employers of labour should be required to demand labour cards from prospective employees and notify the Labour Registry when a vacancy is filled.
- (d) Registered unemployment should be complemented with other employment data emanating from a carefully executed national population census and regular but more comprehensive labour force sample surveys. If data from the three distinct sources are properly integrated the difficulties presently encountered with the measurement of unemployment will be surmounted.
- (e) There is the need to have basic information on the level of employment and earnings. From time to time, information should be made available on total number of employed persons, wage rates as well as labour turn-over in both the public and private sectors. This additional data will provide the necessary input in determining the rate of job expansion and the extent of labour underutilisation. It will also facilitate the assessment of the impact of economic policy measures ex ante or ex post.

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