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EMPLOYMENT AND THE BUILDING INDUSTRY IN THE PHILIPPINES: SOME CHARACTERISTICS OF THE BUILDING INDUSTRY LABOURER

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A. Introduction

It has long been commonplace in thinking about economic development in Asia that agriculture cannot be expected to generate employment for all the growth of the work force. In parallel, therefore, with efforts to induce agricultural growth by increasing the stock of rural infrastructure, attention has been focused on industrialisation. But industrialisation has tended to be interpreted narrowly; often as synonymous with manufacturing. Yet there are reasons to believe that a high share of the additional employment created by a broad-based process of development is to be found in ancillary industries such as trade, transport and construction.

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The construction industry has a dual role to play in growth - through its direct contribution to GDP (including potentially strong backward linkages) and through providing the investment goods necessary to induce growth in most other sectors of an economy. The duality of this role extends, of course, to the employment generated by the construction process itself and to subsequent employment streams arising from increases in the stock of assets and productive capacity. But we know very little about the construction sector. The pre-occupation of governments and economists directly with agriculture and manufacturing has led to a serious neglect of one of the most important ancillary industries, namely construction. In contrast to innumerable censuses and surveys of manufacturing, for example, there is in most Asian countries a dearth of statistics on the civil engineering and building industries, on building investment, on production and consumption of building materials, on the operation of labour markets for construction, or on the patterns of response adopted by the industry to changing patterns of effective demand.

As long as our knowledge is so limited it will not be possible to assess with any precision the role of

construction activity in development and employment. Meanwhile, the need to know more about the construction sector has been enhanced by the recently increased emphasis given to social welfare objectives in development policies. Mass housing is a typical example of how social welfare and employment creation can be simultaneously pursued. But what is the most appropriate mix of transferred and indigenous technologies in such schemes? Another example is given by road construction. Both ILO and IBRD have recently been exploring in minute detail the costs and benefits of labour substitution in the construction of feeder roads.[1/] Predictably enough, these studies argue that the viability of a given technique depends to a large extent on the quality and methods of management - i.e. on who implements the technique and how. Yet with hardly any information on the structure of the civil engineering contracting industry, let alone its human and material resource base, the conclusions of specific case studies are less likely to have a significant impact on policy.

[1/] The ILO studies in Iran, Nepal, Thailand and the Philippines have been carried out under the auspices of the Technology and Employment Research Project of the World Employment Programme. IBRD studies so far carried out in India and Indonesia have been reported in IBRD staff Working Paper No. 172, January 1974.

The sheer size of the deficiency - in statistics and in analysis of the operational characteristics of the construction industry - requires that a clear conceptual framework is developed for any research aimed at helping to fill gaps. In broad terms, however, it is useful to distinguish three main types of work that need to be undertaken. These are:

(i) identification of weaknesses in national and regional construction statistics and the introduction of improved collection systems;
(ii) development of appropriate technologies (in design) and techniques (of construction);
(iii) observation and analysis of the structure and operational characteristics of the industry with a view to developing a dynamic model of response mechanisms.

Improvements in the quality and coverage of construction industry statistics are probably best achieved by cooperation and action between government departments assisted by consultants as and when necessary. The development of appropriate techniques relies mainly on what IBRD calls 'intervention experiments' in the field backed by evaluations of the social costs and benefits of alternatives. The third type of work could most appropriately be university-based, whereby the objectivity of researchers may be useful in encouraging a good response

from the industry itself. This current study is intended as an initial offering in this type of research. But to achieve the necessary continuity, it would be preferable to see permanent construction economics research units established at a country level. Located in major universities these units could be staffed by interdisciplinary teams of economists, engineers and/or architects.

B. Scope of the Current Study

Given the lack of studies on the structure and operational characteristics of the construction industry, the first problem faced was how best to delimit the current study. To distinguish between building and civil engineering activities is to some extent spurious because many firms of all sizes are engaged in both activities, (either simultaneously or from time to time). However, as it was decided to limit the study to urban areas (in accordance with the interests of the researcher) this inevitably gave a bias towards building construction (hereafter referred to as the building industry). Consequently civil engineering works or heavy construction is discussed only when the use of macro data does not permit a distinction to be drawn between

the two sub-sectors, or when discussing the total workload patterns of individual firms. The topic has been further narrowed by focusing attention on the employment potential of the building industry in urban areas.

During the 1950's most development economists were of the opinion that the future growth of the urban labour force would be absorbed by the expected expansion of the manufacturing sector. However, the experience of the 1960's and 1970's has been that the amount of employment generated by manufacturing activity has been inadequate with the result that the expanding urban labour force has drifted into the tertiary sectors where a large number manage to survive on so-called "informal sector" activity. The tertiary sectors are usually thought of as comprising the transport, commerce and service industries. However, there is reason to believe that the building industry has played a role similar to these industries in providing employment to those unable to obtain jobs in the manufacturing sector. This study will attempt to describe and evaluate the role played by the building industry in providing employment opportunities in the urban centres. An attempt will be made to estimate the number of jobs (by skill level) that are created by building activity;

to examine the employment conditions within the industry; and to ascertain some of the characteristics (e.g. migration status) of those working in the industry.

When considering the amount of employment that is generated by the building industry it is necessary to remember that the number of persons employed by any given firm of contractors will vary from time to time (quite often from day to day) depending on:

(a) the number of projects or sites that the firm is currently working on; and

(b) the stage of completion that each of their projects has reached.

Secondly, not all buildings are constructed by a firm of contractors. Therefore in any survey of employment in the building industry it is necessary to use the building site as the basic unit of study and not the construction firms. To construct a series showing the amount of employment that is being generated by the building industry, it will be necessary to utilize data on the number, value, floor area and types of building under construction. It should be possible to obtain information on the labour flows associated with the different types of buildings (where

labour flows refer to the number of workers and their skills, and the periods for which they are employed). This information could be standardized either by cost (e.g. man hours employed per ₱1000) or floor area (e.g. man hours employed per square metre) for each different type of building. This information could then be combined with the data on the number, value, floor area and types of byilding under construction to give an estimate of the amount of employment being generated by the level of building activity.

The methodology that was used to obtain information on the labour flows will be discussed briefly. Because of time limitations the survey was conducted only in the Greater Manila Area (GMA). As the building site was the unit of study a stratified random sample of building sites in the GMA was needed. The sample was to be stratified into three layers by type of building:

(a) Type A Buildings: buildings of more than three stories and costing at least ₱1,000,000.

(b) Type B Buildings: residential buildings not included in Type A.

(c) Type C Buildings: non-residential buildings not included in Type A.

As there is no listing of buildings currently under construction, it was necessary to use the listing of building permits issued by the various city engineers. Given that buildings currently under construction should have obtained their permit a number of months earlier, it was hoped that the building permits issued over the last X months (where X =15 for Type A; X = 7 for Type B; X = 10 for Type C) would give a close approximation to the actual population of buildings under construction. Given the limitations of time and manpower it was decided to limit the study to building sites in the cities of Manila, Makati and Quezon City. As the three types of buildings are found in each of these cities, and the building methods and techniques used in these cities are unlikely to differ from those used in other parts of GMA, this limitation is not likely to prevent the results from being applied to the GMA as a whole.

A sample of 47 building sites was chosen. The breakdown according to Type of building is given in the table below.

	Type A	Type B	Type C	Tota
No. of permits issued over relevant time period*	72	689	387	114
Sample Size	7	21	19	4
Sample Size as a percentage of permits issued*	10%	3%	5%	

*In Manila, Makati and Quezon City.

The main problem faced during the fieldwork stage of the survey was that for Type B and Type C buildings the building permits were not a perfect match with buildings actually under construction. This was due to a variety of reasons. Some persons had obtained permits but had not commenced building - perhaps due to the uncertainty regarding the future prices of building materials. In a number of cases the permit to construct the building was obtained after the building was completed. There was also the problem that not all buildings constructed have permits, but this did not affect this study once the sample was chosen from the population of building permits. For Type B buildings seven of the 21 sites chosen from the permits were found not to be under construction, while for

Type C buildings the number was nine out of 19. The problem was particularly bad in Manila. The response to this problem was to replace the "non-existant" unit with another building site of the same type and approximate value and size and in the immediate neighbourhood of the chosen unit. For Type B buildings this was relatively easy as there were always residential buildings of the same approximate size and value being built in the same street or at least in the same block. However, for Type C it was not always possible fo find a building of the same type, (e.g. replacing a factory with a factory), so that emphasis had to be placed on size and value.

Once the building site was located the following information was obtained:

(a) The amount of labour being used. If possible this was obtained from the log books, but in most cases it involved questions regarding the number and type of labourers currently employed and the period for which this number had been employed, plus the number and type of labourers that had been employed when employment on the site was at its highest and lowest levels.

(b) The amount and type of equipment and the length of time over which it was used.

(c) If there was a main contractor in charge of the project then the manager of the firm was interviewed to obtain information on structure of the industry questions, such as size of the firm, source of demand, type of projects undertaken, main constraints to expansion etc.).

(d) What parts (if any) of the project had been let to sub-contractors. The aim was to determine to what extent direct employment generated by the industry was supplemented by the encouragement of a group of self-employed workers depending mainly on sub-contracts as their source of demand. Sub-contractors who were working on the site at the time of the interviews were interviewed. Those not working on the site at the time of the interviews were interviewed if they could be easily contacted (i.e. firms with a fixed address).

(e) The foreman and a number of labourers working on each site were also interviewed regarding their employment history, acquisition of skills, migration patterns, satisfaction with work on the building sites etc.

Of the 47 sites only three refused to cooperate at all, with the remainder cooperating to various degrees.

C. Scope of the Current Paper

Having given a brief outline of the scope and methodology of the overall study, the purpose of this paper is to present some preliminary results of the survey of labourers working on the building sites. The purpose of this survey was two fold. Firstly to obtain information on some of the characteristics of those working in the building industry in order to ascertain which section of the expanding urban labour force was finding employment in the industry. The second purpose was to define more precisely the conditions of employment provided by the building industry. This was thought necessary given the prevailing view that the building

industry offers unstable and "precarious" employment. Sylos-Labini has argued that employment in the building industry, as well as in many other sectors of a developing economy, is "precarious in the sense that persons engaged in (this) activity have no guarantee of stability either of their job or their income and hence have no definite prospects of improvement".[2/] He defines this concept further by suggesting that "wage earners are precariously employed when they have no stable labour contracts or no contracts at all; they may have to change their masters, or if they in fact remain with the same master, they are always in danger of losing their jobs."[3/]

In discussing the building industry in Sicily, Sylos-Labini suggests that although the employment units are relatively large (there are usually more than 10 persons employed on a building site) jobs in the industry are unst The industry is subject to strong seasonal fluctuations an therefore most workers are hired for only limited periods.

[2/] Sylos-Labini, P., "Precarious Employment in Sicily", International Labour Review, Vol. 89, 1964, p. 270.

[3/] Ibid., p. 271.

As a consequence when industrial development creates more jobs of a stable nature, the building industry is one of the first to experience a shortage of labour; "the workers abandon it as fast as they can." With high rural-urban migration the labour turnover in the industry is high. Those working in the industry leave as soon as more permanent jobs become available in manufacturing or modern services sectors, and their jobs on the building sites are taken by the new migrants to the urban centres.

He also mentions the possibility of a second type of worker on the building sites. In areas where agriculture gives an acceptable income, and hence the agricultural workers don't want to leave the rural areas permanently, they may undertake employment in the building industry during the slack agricultural season in order to supplement their income. In such areas Sylos-Labini argues that the employment in building has to be considered in conjunction with the agricultural activity and cannot really be defined as precarious.

Professor Turin has also argued that "... construction traditionally serves as a transitional stage between unskilled, rural agricultural employment and skilled, urban

industrial employment."[4/] Again the inference is that a large number of those working on the building and construction sites are recent migrants to the urban centers who are working in the industry only because they could not find a more stable and preferable job in manufacturing or the modern service sectors. As soon as these jobs become available the workers will leave their current jobs and move into the more stable environment of a factory or office building.

Two general hypotheses emerge from this discussion.

I. Employment in the building industry is a transitional stage between rural, agricultural employment and skilled, urban, industrial employment.

II. Employees within the building industry face precarious employment.

While these hypotheses may be closely interrelated, there are advantages in analyzing them separately, at least in the initial stages.

Consider the first hypothesis. To accept this hypothesis one would need to show that the labourers

[4/] UNIDO, "The Construction Industry", Monographs on Industrial Development, No. 2, p. 24.

currently working on the building sites: (a) were previously engaged in agricultural employment; (b) will work in the building industry for only a short period of time;[5/] (c) will move from the building industry to employment within the manufacturing or modern service sectors. While it is possible to obtain information on the employment history of those employed in the industry, it is rather difficult to obtain reliable information on future job mobility. One could ask the labourers whether they intend to continue working in the building industry, but this would not constitute a strong test of the hypothesis. Therefore the best test of the hypothesis may be to enumerate certain characteristics that one would expect to be exhibited by the labour force if the general hypothesis were correct. These characteristics (sub-hypotheses) could then be tested. The sub-hypotheses are:

I (a) Labourers on the building sites are recent migrants to the urban centre.

[5/] One might argue that workers who have been employed in the building industry for a reasonable period of time are still in the industry not because they are satisfied with their current job, but because they are still unable to get a job in the manufacturing or modern service sectors. Even if this is true, it implies that the "transitional stage" becomes a semi-permanet stage and could represent a sizeable period in the workers employment history. Hence the hypothesis, as stated, would have to be rejected.

I (b) Before migrating to the urban centre they were engaged in agricultural employment.

I (c) Labourers on the building sites have been working in the industry for only a short period of time.

I (d) The building industry labour force will reflect the fact that rural-urban migrants tend to be relatively young.

I (e) Labourers on the building sites are looking for employment outside the building industry.

Not all of these sub-hypotheses are of equal strength ((d) especially is rather weak) but once information is available on all five it should be possible to draw some conclusions about the general hypothesis.

Consider the second general hypothesis. The testing of this hypothesis requires a working definition of the term "precarious employment." Sylos-Labini's definition that those with "no stable labour contracts or no contracts at all" are precariously employed is inadequate because what may appear as precarious on the surface may not be so if examined more closely and within the context of Philippine society. Most workers on the building sites in the GMA have no written labour contracts, (and for those

who do have some form of written contract, it usually allows the employer to terminate employment at any given time). However for a large percentage of the labourers there is an unwritten bond between employer and employee based on kinship arising from family ties, friendship or a common hometown or barrio. Therefore a stronger test of the hypothesis would be to posit a number of sub-hypotheses which, if accepted, would imply that the general hypothesis could also be accepted. These sub-hypotheses are:

II (a) The labourers working on the building sites are not regular employees and are employed on each job for only a limited period.

II (b) As each job lasts for only a relatively short period, over a base period of one year the labourers will be forced to change jobs at least once. Alternatively, over a period of one year the labourers will have had more than one job.

II (c) The labourers working on the building sites are forced to change their employers at frequent intervals.

II (d) Members of the building labour force face periods of unemployment, or at least periods when they are not fully employed.

II (e) They earn a low and uncertain income and therefore may have a second source of income.

II (f) They have little or no prospects of improvement within the industry.

The methodology used to test these hypotheses was discussed briefly above. However the following points need to be added. Firstly the sample of building labourers was not chosen randomly. This was not possible given the fact that there is no population listing available. It was hoped that by choosing the building sites at random, and then choosing the labourers to be interviewed on each site at random, a degree of quasi-randomness might be obtained. The problems involved in matching actual building sites with those chosen randomly have already been discussed. It was also found to be impossible to choose at random which labourers to interview on each site. While most sites did have a list of the labourers working on the site, paying too much attention to specific names on the list tended to arouse suspicion as to the real purpose of the interview. Consequently, it was thought best to allow the foremen to choose

who would be interviewed. It was feared that this may result in a sample consisting of only those who are regular employees of the foremen. However this was not the case; usually the respondents were those who were less busy, or at least engaged in less critical tasks, at the time of the interviews. Therefore while actual percentages obtained from the sample cannot be applied to the population, one is relatively confident that the trends and profiles which emerge from the survey are also valid for the population.

The composition of the sample according to occupation and type of building is given in the tables below.

Composition of Sample by Occupation

Occupation	Carpenter	Mason	Unskilled Helper	Others[a]	Total
Number of respondents	24	21	42	4	91

Note: (a) Electricians, steelmen, welders.

Composition of Sample by Type of Building

Type of Building	A	B	C	Total
Number of respondents	30	30	31	91

The breakdown of the sample as shown above was made intentionally so as to reflect certain characteristics of the population. While it is not possible to accurately estimate the number of people employed on each of the three types of buildings until after the data gathered from the survey have been analysed, a rough estimate made at the beginning of the survey suggests that, in total, approximately the same number are employed on each. Also on most sites the number of unskilled labourers is approximately equal to the number of skilled labourers, and within the skilled labourer class carpenters slightly outnumber masons. Of course this will vary depending on the stage of completion of the building, but in terms of man-days worked the approximation is usually valid. Therefore before entering each site the number and occupation of the labourers to be interviewed was known.

D. Migration Patterns

Ninety percent of the workers interviewed were born outside of the GMA, and of the 82 respondents who migrated to the metropolis, six did so while very young and hence on the decision of the respondents' parents. Therefore 83 percent actually made the decision to migrate to the

GMA, presumably in search of better job opportunities. Before discussing the number ofyears since migrating, it is interesting to note that migration to the GMA does not imply that the respondent has decided to take up permanent residence within the city. This is shown in Table I.

TABLE I

Tenure of Residence in the GMA

Permanent Resident of GMA	29
Transient Resident of GMA	46
Permanent Resident of Provinces Adjacent to GMA	16
Total	91

Those who regard themselves as permanent residents of the provinces adjacent to the GMA, (Rizal, Bulacan, Cavite and Laguna), were given a separate category as it was thought that they may commute daily from the province to

the building site. However only one labourer did this. The remaining 15 respondents can be regarded as transient residents. Of the 16 respondents who have their permanent residence in the adjacent provinces, 11 were born in these provinces while five were born in more distant provinces and migrated to the adjacent province before actually moving to the metropolis in search of employment. When asking the respondent whether he was a permanent or temporary resident of the GMA, no definitions of "permanent" or "temporary" were given. However to the respondents the terms appear to coincide with whether his family are living in the GMA or the provinces, as all those who claim to be permanent residents had their families living in the GMA.

Most of the transient residents return to their home provinces regularly as is shown in Table II.

TABLE II

Frequency with which Transient Residents Return to Home To

Daily	1
At least once a week	19
At least once a month	28
Less than once a month	14
Total	62

Therefore 52 percent of those interviewed are transient residents of the GMA and maintain close links with their home town. Their families still reside in the home town and the respondents visit them at least once a month. Another 15 percent of the respondents are transient residents maintaining their families in their home towns, but visiting them much less frequently. This group have migrated from the more distant provinces of the Visayas, Bicol and Northern Luzon. It may be argued that the transient residents have failed to take up permanent residence because they have yet to find what they consider to be permanent jobs in the GMA.

Table III shows that slightly over 40 percent of the sample had migrated to the GMA within the past two years, and slightly over 50 percent had migrated within the past five years. While this group is in accordance with sub-hypothesis I(a), there remains a group of approximately 35 percent of the sample who migrated to the GMA more than five years ago.

TABLE III

Number of Years since Migrating to the GMA[a]

Less than 2 years	2-5 years	6-10 years	11-15 years	More than 15 years	Live in Adjacent Provinces[b]	Born in GMA	Total
38	9	16	11	3	5	9	91

Notes (a) No distinction made between permanent and transient residents. If a temporary resident the respondent was asked when he first came to GMA to look for a job.

(b) For the respondents who live in the adjacent provinces: if it was known when they first moved to the GMA to look for a job, then included under the appropriate time period, if not then placed in a separate category.

As can be seen from Table IV the bulk of this latter group is made up of skilled labourers while most of the more recent migrants are the unskilled helpers.

TABLE IV

Number of Years since Migrating to GMA by Level of Skill of Labourers

	Skilled Labourers	Unskilled Helpers	Total
Less than 2 years	13	25	28
2-5 years	5	4	9
6-10 years	14	2	16
11-15 years	8	3	11
More than 15 years	2	1	3
Live in Adjacent Provinces	4	1	5
Born in GMA	3	6	9
Total	49	42	91

Table IV also shows that 70 percent of the unskilled helpers have migrated to the GMA within the last five years, while for the skilled labourers only 25 percent are more recent migrants.

The relationship between the time of migrating to the GMA and the time of first beginning work in the building industry is important because it gives some insight into the reasons why the labourer migrated to the metropolis. The first general hypothesis implies that the building labourer migrates from rural agricultural employment to the major urban areas in order to find employment in the industrial sector. On finding that jobs in this sector are not available he turns to the building industry as a temporary source of employment. An alternative explanation is that the labourer was working in the building industry before moving to the GMA. He migrated to the city because he believed that jobs in the building industry would be easier to find in the GMA than in the provinces. (i.e. The labourer migrated in order to obtain a higher and more secure income within the building industry. He did not migrate in order to get a job within the industrial sector).

Table V suggests that this alternative explanation maybe more important in the current Philippine situation.

TABLE V

Relation between Migrating to the GMA and Commencing Work in the Building Industry

Employed in building industry before migrated to GMA	Commenced working in building industry as the first job after migrating to GMA	Employed in an informal sector job in GMA before commencing work in building industry (b)	Employed in a formal sector job in GMA before commencing work in building industry (a)	Born in GMA or moved to GMA when very young and building industry was first job	Total
40	27	3	6	15	91

Notes: (a) A Formal Sector job was defined as one in which the labourer earned a fixed wage or salary.

(b) An Informal Sector job was defined as one in which the labourer did not earn a fixed wage or salary.

It may be possible to argue that the move from employment in the building industry in provincial towns to employment in the building industry in the GMA is only one step in a three step migration eventually leading to employment in the industrial sector. (This possibility will be tested at a later date). For the present, consider the implications of Table V for sub-hypothesis I(b).

Of the 27 respondents who began working in the building industry as their first job in the GMA, all but one had migrated from a farming or fishing job or from attending school in the provinces. This group is in accordance with sub-hypothesis I(b). The migrants who held an informal sector job in the GMA before commencing work on the building sites could also comply with the hypothesis; employment in the building industry is preferred to employment in the informal sector, but employment within the manufacturing sector is still the ultimate goal. However the labourers who shifted from formal sector employment to the building industry appear to contradict the hypothesis; five of the six who made this move were previously employed in the manufacturing sector.

Table VI shows that 82 percent of the respondents who were working in the building industry before migrating to the GMA were skilled labourers, (68 percent of all skilled labourers were working in the industry before migrating), while 83 percent of the respondents who began work in the indusry as their first job in the GMA or after working in the informal sector are unskilled helpers, (60 percent of all unskilled helpers began work

in the industry as the first job after migration or after an informal sector job).

TABLE VI

Relation between Migrating to the GMA and Commencing Work in the Building Industry by Level of Skill of Labourer

Employed in building industry before migrating to GMA	Commenced working in building industry as the first job after migrating to GMA	Employed in an informal sector job in GMA before commencing work in building industry	Employed in a formal sector job in GMA before commencing work in building industry	Born in GMA or moved to GMA when very young; building industry was first job	Total	
33	4	1	4	7	49	Skille Labou
7	23	2	2	8	42	Unski Helpe
40	27	3	6	15	91	Total

Sub-hypothesis I(c) states that labourers in the building industry remain in the industry for only a relatively short period of time. In the current study this can only be partially tested by examining the number of years that the labourers have already spent in the industry. Table VII shows again the need to distinguish between the skilled and unskilled workers in drawing conclusion about the migration patterns within the industry.

TABLE VII

Number of Years Experience in the Building Industry by Level of Skill of Labourer

	Less than 2 years	2-5 years	6-10 years	11-15 years	More than 15 years	Total
Skilled Labourers	3	5	23	13	5	49
Unskilled Helpers	32	6	2	1	1	42
Total	35	11	25	14	6	91

Because of the time taken to acquire their skills the skilled labourers are slightly older than the unskilled helpers, but the work force as a whole is a young one with 85 percent being less than 35 years old and approximately 43 percent being less than 25 years old. See Table VIII.

TABLE VIII

Age by Level of Skill of Labourer

	Less than 25 years old	23-34 years	35-44 years	45 years or older	Total
Skilled Labourers	8	32	8	1	49
Unskilled Helpers	31	7	3	1	42
Total	39	39	11	2	91

Finally, the general hypothesis implies that those working in the building industry are trying to find employment outside the industry. The respondents were asked whether they thought that their next job would be in the building industry, and whether they thought that they would be working in the building industry for the rest of their working lives. The results are presented in Table IX. However one feels that the answers to at least the second of these questions should be viewed with a certain amount of skepticism. Some of the respondents who answered this question in the affirmative may have done so because they thought that this was the answer the interviewer was seeking; or they may have been uncertain as to the purpose of the interview and the affirmative seemed the safest answer. Secondly, even if the respondents presently anticipate working in the industry for the remainder of their working lives, this does not mean that they actually will spend the rest of their lives working on the building sites.

TABLE IX

Expectations regarding future employment in the Building Industry

	Yes	No
Do you expect your next job to be in the building industry?	76	15
Do you expect to work in the building industry for the rest of your life?	65	26

Having tested the various sub-hypotheses what can be concluded about the general hypothesis? Only 24 of the 91 respondents (26 percent) had migrated to the GMA within the past five years; began working in the industry as their first job in the GMA or after an informal sector job; and have been employed in the industry for five years or less. Of these 24 respondents only 10 claimed that they did not expect to work on the building sites for the rest of their lives. As would be expected from the above discussion all but one of these respondents were unskilled helpers. Therefore only approximately 10 percent of the unskilled helpers possess the characteristics suggested by the general hypothesis, while only one (1) of the 49 skilled labourers possess these characteristics.

E. Stability of Employment

As stated earlier none of the labourers working in the industry have a written contract guaranteeing them employment for a certain period of time. All are employed on a daily basis and paid weekly according to the number of days actually worked. They can be dismissed without notice. By virtue of the output produced, the industry

offers employment at a given location for only the duration of construction (or a phase of the construction) on that site. The labourer must then move to a new site.

Referring to employment on each site as a different job, Table X shows the number of different jobs that the respondents had over a 12 month period. The information for this and many of the tables that follow, came from a question which asked the respondents to think back to the Easter Week of 1974, (approximately 12 months prior to the time the interviews were held), and relate the different jobs that they have had since that period. For each job information was obtained on the duration of employment, the type of work done, the location of the site, and the firm and foreman for which the labourer worked. Information on any periods of unemployment between jobs was also sought.

TABLE X

Number of Jobs Held Over the Past 12 months[a]

i = number of jobs held in past 12 months / i = 1 to 5	1	2	3	4	5
Number of respondents with i jobs	10	41	33	6	1
Number of respondents with i jobs who had all their jobs in the building industry	10	38	30	6	0
Number of respondents with i jobs who had periods of unemployment[b]	2	7	5	1	1

Notes: (a) The number of jobs held in the last 12 months includes the job the respondent was working on at Easter 1974 as well as his current job. It is not equivalent to the number of completed projects that the respondent worked on during the 12 month period.

(b) A period of unemployment is defined as a period of more than one week in which the respondent was not involved in an income earning activity.

/The table should be read in the following way: e.g. for i = 2 - There were 41 respondents who had two jobs over the 12 month period. Of these 41 respondents, 38 had both their jobs in the building industry (three had one job outside of the industry), and seven had periods of unemployment./7

Row I of the table shows that approximately 45 percent of the sample had two jobs over the twelve month period, while another 45 percent had three or more jobs. Of the 10 respondents who had only one job during the period, three were employed for the 12 months by one of the large construction firms working in Makati; one had contacted tuberculosis in 1972 while working for a large contractor and returned to that firm in March 1975; one was a migrant from the Visayas who had had a rather dismal employment history in the GMA and was working in the building industry for the first time in order to save enough money to return to his province; and the remaining five were working for the first time after leaving school. Therefore only three respondents had been fully employed on the one job over the 12 month period.

Comparing rows I and II of the table shows that seven of the respondents had been employed on jobs outside of the building industry over the past year. Of this seven, one was a rather mobile character who, in seven months in Pangasinan, managed to work as a mini bus conductor, a bakery delivery boy, as a helper on two building sites, spend one month unemployed and obtain

a police record before moving to the GMA and his present job; two had transferred from formal sector jobs to the building sites; and four were farmers or fishermen who had migrated to the GMA within the past 12 months.

Therefore the evidence presented in Table X is in accordance with sub-hypothesis II (b). However as a measure of the precariousness of employment this evidence is slightly misleading, as it implies that the labourer must search for employment a number of times a year. However in a number of cases the labourer does not actually do the searching for the job.

To give a clear account of how jobs are obtained within the industry and the relationship between the employee and his employer, it is necessary to give a brief discussion of the structure of the industry. From the sample of 47 building sites all seven of the Type A buildings were being constructed by a firm of contractors. However for Type B buildings only four (4) of the 21 were being built by contractors, while for Type C the figure was 11 out of 19. On the building sites where there was no contractor the supervision of the construction was left to the foreman with the owner or architect ordering the materials. While the foreman was only paid on a daily

basis and did not actually pay the labourers, he is given the responsibility of hiring and dismissing labourers as well as general supervision of their work. Therefore to all intents and purposes, to the labourer it is his foreman who is his employer and not the owner or architect of the building. Therefore if the labourer can become part of the foreman's regular work force he can then transfer from job to job with the foreman. It is left to the foreman to find the jobs, and stability of employment for the labourer depends on the ability of the foreman to get jobs.

A foreman's permanent work force (the size of which varies with the foreman) is usually comprised of relatives or persons from his hometown, with the result that there is a strong provincial bias among the workers on most building sites. The financial aspects of the relationship between foreman and labourer are quite varied. Some offer good wages, often higher than those given by the large construction firms, while others demand a payment from the labourer in return for their job. Some foremen also follow the practice of getting his labourers into his debt, so that he will be assured of their loyalty.

The relationship between foreman and labourer is less pronounced on the sites managed by the large construction firms. Persons arriving on the site looking for a job are sent to the main office of the firm where they are employed or rejected. All employees are assigned to particular sites by the main office, and some firms consciously attempt to prevent a strong relationship developing between the foremen and the labourers. The firms want the labourers to show loyalty to the firm and not to a particular foreman. To a certain extent this could be due to the current shortage of skilled labourers in the industry. The firms are trying to prevent a situation arising where one of their foremen is "pirated" by another firm and when he leaves he also takes a number of the firm's skilled labourers with him. While the employees of construction firms are employed daily, if their standard of work is acceptable then at the completion of one project they will be transferred to another site (if one is available).

Therefore while most labourers in the building industry will change jobs frequently, this need not be equivalent to changing employers, nor does it necessarily imply that they must search for new employment at the end

of each job. For some it simply means that they are transferred from one site to another by the construction firm or foreman for whom they work. This implies that sub-hypothesis II(c) may be a stronger test of the general hypothesis than sub-hypothesis II(b).

Table XI shows that slightly more than 50 percent of the respondents had all their jobs on the building sites over the past 12 months with the same employer, while only 18 percent worked under a different employer on each of his jobs in the industry.

TABLE XI

Number of Employers on Building Site Jobs

All jobs on the building sites were with the same employer	At least two jobs on the building sites were with the same employer	Each job on the building sites was with a different employer	The current job is the respondents first job in the building industry	Total
47	16	17	11	91

Table XII shows that it is not only the skilled labourers who have the type of stability of employment coming from having only one employer. Approximately 50 percent of both skilled and unskilled labourers had only one employer on the building sites, but a

slightly higher percentage of the skilled labourers had a different employer on each site.

TABLE XII

Number of Employers on the Building Sites by Level of Skill of Labourer

	All jobs on the building sites were with the one employer	At least two jobs on the building sites were with the same employer	Each job on the building sites was with a different employer	The current job is the respondents first in the building industry	Total
Skilled Labourers	26	11	11	1	49
Unskilled Labourers Helpers	21	5	6	10	42
Total	47	16	17	11	91

Over the 12 month period 16 of the 91 respondents faced periods of more than one week when they were not earning income. Table XIII gives the breakdown by the number of weeks unemployed.

TABLE XIII

Number of weeks spent unemployed over the 12 month period

Number of Weeks unemployed	No unemployment	1-4 weeks	5-8 weeks	9-12 weeks	13-16 weeks	17 weeks or more
Number of respondents	75	6	3	1	1	5

Of the 16 who faced unemployment, eight returned to the provinces and helped their families with farm work, while the remainder "stayed at home and helped with the household chores". In fourteen cases other members of the respondent's family were earning income; eight from informal sector sources, four from formal sector sources, one from both sectors and one from farming. Eight of the unemployed were skilled and eight unskilled labourers.

Sub-hypothesis II(e) states that labourers on the building sites earn a low and uncertain income. The degree of uncertainty regarding income is dependent on the degree of uncertainty regarding employment. The labourer knows how much he will earn for each day he works. For the unskilled labourer the daily wage is ₱8 to ₱10, while for the skilled labourer it will lie between ₱12 and ₱18. The wage structure within the industry will be discussed at a later stage of the study, but it is interesting to note that very few of the labourers have a second source of income. This is due to the high number of hours worked per day on the building sites. However the information obtained from those who faced periods of unemployment suggests that in a large number of cases members of the labourer's family are engaged in income earning activities, hence providing some form of insurance

against the possible uncertain income of the labourer.

The fact that most skills are obtained by on-the-job training suggests that there is scope for the unskilled labourer to improve his position within the industry. Provided that the labourer can find a group which will accept him as a "permanent" member, then the passing on of carpentry and/or masonry skills would be a normal part of the relationships within that group.

A stronger test of the general hypothesis can be obtained by combining two of the sub-hypotheses (e.g. those labourers who had only one employer and no unemployment over the past 12 months would appear, "expost", to have had fairly non-precarious employment). Table XIV combines sub-hypotheses II(c) and II(d). Approximately 95 percent of those who had only one employer also experienced no unemployment; while 50 percent of those who had a different employer on each job faced periods of unemployment. More importantly, 50 percent of the respondents fell within the relatively stable category of having only one employer while working on the building sites and no unemployment. This figure may be artificially high for a number of reasons.

TABLE XIV

Number of Employers on the Building Sites by Number of Weeks Unemployed

Number of Employers on the Building Sites \ Number of weeks unemployed	No Unemployment	1-4 weeks	5-8 weeks	More than 8 weeks	Total
All jobs on the building sites were with the one employer	44	1	0	2	47
At least two jobs on the building sites were with the same employer	12	1	1	2	16
Each job on the building sites was with a different employer	9	4	2	2	17
The current job is the respondents first in the building industry	10	0	0	1	11
Total	75	6	3	7	91

As stated earlier the means of choosing the sample may have resulted in an unproportionally high percentage of the respondents being members of the foreman's regular work force. Secondly, because of the current shortage of experienced labourers it is possible that the incidence of unemployment over the past 12 months has been lower than in previous years. This of course is a limitation of the type of study undertaken; it is examining conditions mainly

as they exist at the current time. Some incomplete information is available on the periods of unemployment experienced by the respondents in previous years, but this will be analyzed at a later date.

Given these limitations one can tentatively conclude that a large section of the building industry labour force (perhaps as high as 50 percent), experience fairly non-precarious employment. The other major sections include those who face precarious employment, in that they do not have the same employer on each building site and face periods of unemployment, (approximately 10 percent of the sample), and an in-between group who do not have the same employer on each building site but do not face periods of unemployment (approximately 25 percent of the sample).

E. Profiles of the Building Industry Labourer

So far the data collected has been used in a cross-sectional manner in order to test specific characteristics of the building industry labour force. However, it can also be used to draw profiles of the labourers working on the building sites. Most of this analysis will be attempted at a later date when the data have been computerized. How-

ever some tentative results of direct interest to this paper will be briefly discussed.

The analysis presented above suggests a number of possible profiles. Only two will be discussed at the present time.

Profile I (Drawn from the two hypotheses). The building industry labourer is a recent rural-urban migrant attracted to the city by the prospect of obtaining employment in the manufacturing sector. Unable to obtain a job in this sector he is forced to seek work on the building sites. In the building industry he faces precarious employment and income and for this and other reasons he will soon leave the industry and obtain employment in the manufacturing sector.

Profile II. The labourer working on the building sites in the GMA was previously employed on building sites in the provincial towns. He began work in the industry at a relatively young age and his initial jobs were in the larger towns of his home province or neighbouring provinces. He heard from friends who had recently returned from the GMA that there was a building boom in Manila and that jobs on the building sites were easy to obtain.

Therefore he migrated to the GMA specifically to continue employment in the building industry. In the GMA he has found a relatively secure job and is likely to continue working in the industry.

Only six (6) of the 91 respondents actually exhibited all of the characteristics of Profile I. (i.e. They: (a) migrated to the GMA within the last five years;

(b) began work in the industry as their first job in the GMA, or after an informal sector job in the GMA;

(c) have been working in the industry for no more than five years;

(d) did not have the same employer on all of their building industry jobs; or if they did have only the one employer they still faced periods of unemployment. (Those working on the building sites for the first time are not included).

On the other hand 20 of the 91 respondents exhibited all of the characteristics of Profile II. (i.e. They: (a) began working in the building industry before they migrated to the GMA;

(b) began work in the industry at an early age, with 15 of the 20 starting work in the industry before they reached the age of 20 years and the remaining five before the age of 23 years;

(c) had the same employer on all of their jobs on the building sites and faced no periods of unemployment).

These profiles are important because they give some insight into the role played by the building industry in the current urban problems. Profile I suggests that the industry plays a relatively passive role. It plays no part in attracting migrants to the city, but when they arrive and are unable to find employment in the manufacturing sector, it offers them temporary, if precarious, employment. In other words the industry acts as a sponge in absorbing some of the recent migrants unable to obtain jobs in the manufacturing sector. Profile II on the other hand suggests that the building industry is actively encouraging rural-urban migration by offering a higher and more secure income in the GMA to those already employed in the industry in the provincial towns. In this case the building boom is not so much helping to solve some of the employment problems of urbanization, but is actually encouraging this phenomena.

While Profile II seems more relevant to the current Philippine situation, the two profiles combined only account for 28 percent of the sample. Therefore it will be necessary to examine the profiles of the remaining respondents, who will have characteristics of both these extreme profiles, before any definite conclusions can be drawn.